

**REPUBLIC OF TÜRKİYE  
DÜZCE MUNICIPALITY**

**Türkiye Earthquake, Floods and Wildfires Emergency Reconstruction  
Project (TEFWER)**

**TERMS OF REFERENCE**

**Consultancy Services for Construction Supervision Services for Düzce  
(Centrum) Water Supply Project – Phase 1**

**1 Introduction and Background**

ILBANK has received financing in the amount of US\$ 449.25 Million (EUR 420.00 million equivalent) from the World Bank toward the cost of the Türkiye Earthquake, Floods and Wildfires Emergency Reconstruction (TEFWER) Project, and it intends to apply part of the proceeds to payments for goods, works, non-consulting services and consulting services to be procured under this project.

More information on the Project can be obtained through the following link:

<https://documents.worldbank.org/en/publication/documents-reports/documentdetail/416471656371823533/t%c3%bcrkiye-t%c3%bcrkiye-earthquake-floods-and-wildfires-reconstruction-project>

**1.1 Sub-Project Description**

TEFWER will be financing the following Sub-project in Düzce Municipality, which the Consultant shall be responsible for

**Construction Supervision of Düzce (Centrum) Water Supply Project – Phase 1:**

**In the scope of Phase 1, it is planned to construct 87.017 m of drinking water network pipes diameter between Ø140 mm and Ø1800 mm (including construction of auxiliary structures like valves, flowmeters etc. and reinstatement works), 12.500 m house connections with pipes diameter between Ø32 mm and Ø63 mm.**

**1.2 Institutional Roles:**

ILBANK will act as the Financial Intermediary (FI) who receives a Loan from the World Bank, of which it will allocate a part to Düzce Municipality for financing environmental infrastructure investments (Sub-Project).

Düzce Municipality is responsible for the construction and maintenance of water/wastewater treatment plants and water and sewerage networks of all settlements in its service area. Within the scope of Düzce (Centrum) Water Supply Project – Phase 1, Düzce Municipality will be the Client for the sub-project to be carried out by the Consultant.

Düzce Municipality will be responsible for sub-project investment implementation and will set up municipal project implementation unit (PIU) at local level to ensure effective sub-project implementation. The procurement processes for the works and consultancy services within the scope of the Sub-Project will be under the responsibility of Düzce Municipality and under the coordination and monitoring of the ILBANK.

**1.3 Sub-Project Area:**

The scope of this Contract covers certain investments in Düzce Province as detailed in the further Sections of this Terms of Reference. The following figures shows Düzce Province as

the subject of this Terms of Reference.

The sub-project serves to Düzce Province Centrum. The sub-project will be implemented on the Center District of Düzce Province. The sub-project route and location is given in the figure below.



Figure 1 Project Route and Location

## 2 Objectives of the Assignment

**Consultancy services for supervision of the construction works of the below environmental infrastructure investments constitute the scope of Services of this Contract in general:**

- Düzce (Centrum) Water Supply Project – Phase 1

Further details of the Scope of Services shall be outlined in the proceeding sections of this Terms of Reference.

### 2.1 Sub-Project Description:

**The Consultant shall be responsible for the following sub-projects:**

- Construction of Düzce (Centrum) Water Supply Project – Phase 1

### 2.2 Information/Data to be provided to the Consultant:

The above-mentioned project has its own Project Information Document (PID) and have full set of drawings. The designs had been prepared by local consultant firms under the administration of Düzce Municipality. Both PIDs and drawings will be provided to the Consultant as part of this Terms of Reference in electronic format.

As a part of the Environmental and Social Assessment, the Environmental and Social Impact Assessment (ESIA) and/or Environmental and Social Management Plan (ESMP), Stakeholder Engagement Plan (SEP), Resettlement Plan (RP) (if any) and Ex-post Social Audit (EPSA) (if any) of these sub-projects are being prepared according to project specifications in full compliance with the World Bank's Environmental and Social Framework and its standards. If any land acquisition related issues and needs emerge within the scope of the subproject during implementation, the Client and the Supervision Consultant are responsible for informing ILBANK immediately. The Supervision

Consultant will clearly identify these and will provide support to the Client for the preparation of a RP/EPISA (if/where relevant). The Supervision Consultant should ensure that the Client take necessary actions such as preparation or updating of RP or EPISA. Moreover, Labor Management Procedures (LMP) (including Code of Conduct) for TEFWER Project is prepared by ILBANK to be adopted by the awarded contractors/their subcontractors.

### **3 Scope of the Services:**

**The Scope of Services of the Consultant under this Contract is as follows:**

#### **3.1 TASK: TO PROVIDE SUPERVISION SERVICES DURING THE CONSTRUCTION STAGE AND DEFECTS LIABILITY PERIOD**

The Consultant shall be responsible to carry out all the duties and responsibilities attributed to the "Project Manager" or "Engineer" in the General Conditions of Contract (GCC), Particular Conditions of Contract and Part 2 – Work's Requirements Sections of the World Bank's Standard Procurement Document -**Request for Bids Small Works** (If needed as a result of the cost estimates, the Standard Procurement Document could change). The Supervision responsibility of the Consultant shall be for the Works Contracts referred to under this Terms of Reference, namely Construction of Düzce (Centrum) Water Supply Project – Phase 1 and shall continue until the expiration of the Defects Liability Period/Warranty Period. Significant issues shall be subject to approval of the Client as indicated in the terms and conditions of the General Conditions of Contract (GCC) and Special Conditions of Contract (PCC) of the respective works contract.

**As an addition to these tasks as the Project Manager, the Consultant shall:**

- a. Follow-up and inform the Client about progress of the work and activities, attend any meetings reasonably convened by the Client and provide any information or evidence reasonably required by the Client at any public meetings or inquiries that might be held in connection with the sub-project.
- b. Follow-up and inform the Client about the cost and time impact and any other consequences of any sort of his proposals (such as revisions, recommendations, etc.). In case of an arbitration in the Works Contract named under this ToR, to assist the Client in the preparation of the documents needed by the Client.
- c. As in compliance with the format and ingredients determined by the Client, prepare monthly and quarterly progress reports in comparative with Contractor's original(initial) work schedules and inform the Client in written for delays.
- d. Based on the approved work schedule and cash flows of the Contractor; monitor the progress compared to the initially envisaged plan/s and inform the Client about the failures in advance and propose mitigation measures to prevent further failures.
- e. During all kinds of material approval process: establishment and acceptance of factory and material acceptances, determination and approval of the institutions or organizations (laboratories, universities, etc.) where the tests are to be conducted, approval or rejection of the materials, manage the use of approved materials at site and removal of unauthorized materials from the site and follow.
- f. Randomly collect material samples and perform relevant tests and analyzes at specified intervals without waiting the written mandate of the Client.
- g. Keep accurate and detailed site records.
- h. For construction works, conduct conformity monitoring of environmental and social liabilities including Occupational Health and Safety (OHS) issues mentioned in the Environmental and Social Impact Assessment (ESIA) and/or Environmental and Social Management Plan (ESMP). All regular reporting obligations mentioned in these documents shall be followed for the construction activities.
- i. If any land acquisition related issues and needs emerge within the scope of the subproject during implementation, the Client and the Supervision Consultant are responsible for informing ILBANK immediately. The Supervision Consultant will clearly identify these and will provide support to the Client for the preparation of a RP/EPISA (if/where relevant).

- j. To observe that the employees working in the sub-project area act in accordance with the laws, regulations and instructions related to OHS and to ensure that non-conformities and deficiencies are remedied. Follow up on OHS near misses and incidents (ESIRT reporting, discussion, agreement on and supervision of implementation of corrective action plan.)
- k. Ensure implementation of ESIA and/or ESMP, LMP, RP (if any), EPSA (if any) and SEP as required, in a manner acceptable to the World Bank and make sure that no construction activity shall commence before the land acquisition process completed for the privately-owned land and permits/licenses received to use/transfer rights of public lands.
- l. Resettlement Framework (RF) and Resettlement Plan (RP) (if any) in addition to supporting preparation of the biannual Resettlement Plan Progress Report (if needed) and following up the grievance mechanism for Kastamonu Municipality. These mentioned reports and responsibilities will be submitted by Client to the ILBANK/World Bank. Reporting format is given in Resettlement Framework (RF) document.
- m. Follow up the grievance mechanism mentioned in TEFWER Environmental and Social Management Framework (ESMF)<sup>1</sup> and Stakeholder Engagement Plan (SEP)<sup>2</sup> and also these issues should be included in the prepared progress reports.

**The Services will be carried out under the following Parts:**

**3.1.1 Part 1: Tasks prior to start of construction works will include but not be limited to:**

- a. Review the qualifications of the proposed key management personnel of the Contractor and make appropriate recommendations to the Client,
- b. Ensuring submission of the Quality Assurance (QA) Plan submitted by the Contractor, checking and approving its compliance with the contract requirements,
- c. Receive from the Contractor, check for compliance with contract requirements and advise the Client on all performance securities, insurance certificates or policies and guarantees relating to the contract before submitting to the Client for acceptance,
- d. Before the start of the works and during the works, facilitate any communication and attend any meeting between Contractor and the owners of facilities (water, telephone, electricity, gas) sharing the road right-of-way; in particular, give advice on proposed modifications by the owners of facilities,
- e. Before the start of works review and approval of mobilization plan, including OHS Risk Assessment and Emergency management Plan for the mobilization construction works
- f. Before the start of works review and approval of construction methodology and material procurement schedule,
- g. Before the start of works review and approval of Contractor's Health & Safety Plan, Site Risk Assessment and Emergency Preparedness and Response Plan for both Project and Camp Sites
- h. Ensuring the submission of site mobilization and layout plans by the Contractor, checking and approving their compliance with the contract requirements,
- i. Ensuring the submission of method of statements and work schedule by the Contractor, checking and approving their compliance with contract requirements,
- j. Ensure that Environmental and Social (ES) provisions and OHS provision set out in the contract documents are respected including to check if the necessary E&S capacity (including OHS) is provided by the contractor – e.g. one full time environmental specialist, one full time social specialist, one full time A class OHS specialists, etc.
- k. Ensuring preparation and submission of all sub-management plans addressed in

<sup>1</sup> [https://www.ilbank.gov.tr/storage/uploads/pagefiles/rev3\\_esmf\\_tefwer\\_draft\\_ilbank\\_25052023\\_clean\\_1685431185.pdf](https://www.ilbank.gov.tr/storage/uploads/pagefiles/rev3_esmf_tefwer_draft_ilbank_25052023_clean_1685431185.pdf)  
<sup>2</sup> [https://www.ilbank.gov.tr/storage/uploads/pagefiles/p176608\\_sep\\_turkey\\_earthquake\\_floods\\_wildfires\\_1659354968.pdf](https://www.ilbank.gov.tr/storage/uploads/pagefiles/p176608_sep_turkey_earthquake_floods_wildfires_1659354968.pdf)

sub-project specific E&S assessment reports submitted to ILBANK for approval by the Contractor, reviewing, and approving their compliance with the contract requirements before commencing the works,

- i. Ensuring the submission of material and equipment procurement program submitted by the Contractor, checking and approving their compliance with the contract requirements,
- m. Check correctness of coordinates and levels of all survey reference markers and require the Contractor/s to make an independent check,
- n. Check the Contractor's setting out and levels of the designed works such as checking the professional qualification certificates of project employees,
- o. Verify estimated quantities in the Bills of Quantities and promptly advise the Client of any prospective Time and Cost effects and make appropriate recommendations,
- p. Ensure measures for the proper implementation of ESIA and/or ESMP, LMP, RP (if any), EPSA (if any) and SEP including the grievance mechanism are in place,
- q. If any land acquisition issues and needs emerge within the scope of the sub-project during implementation, the Supervision Consultant will identify these and will provide support to the Client for the preparation of a RP/EPSA (if/where relevant). The Client and the Supervision Consultant are responsible for informing ILBANK immediately if such a case emerges.
- r. The Supervision Consultant may be requested to support the municipality for the preparation of the RP/EPSA monitoring/progress reports, if there a subproject specific RP/EPSA is in place.
- s. Ensuring RP implementation (if relevant) is completed prior to commencement of any civil works on site.

### **3.1.2 Part 2: Tasks during construction will include but not be limited to:**

#### **3.1.2.1. Supervision tasks**

- a. Approve and monitor the Contractor's work program and the source of materials,
- b. Approve and monitor the implementation of the Contractor's Quality Assurance/Quality Control (QA/QC) Plan,
- c. Explain and/or adjust ambiguities and/or discrepancies in the Contract Documents in advance in order to avoid any dispute,
- d. Inspect for approval all shop drawings and as-built drawings prepared by the Contractor,
- e. Supervise inspection and testing of materials and works to ensure compliance with specifications, and/or removal and substitution of improper materials and/or work as required,
- f. Ensure the Contractor's compliance with the agreed Environmental and Social Impact Assessment (ESIA) and/or Environmental and Social Management Plan (ESMP); to control and appraise the progress of the works, to order suspension of works and to authorize, with the Client's approval, extensions of the period for completion of the works; The Consultant shall take necessary measures for environmental, social, and occupational health and safety aspects. In this context the most recent Turkish environmental and safety regulations as well as the Client and WB Environmental and Social Standards and WBG's General and Sector Specific Environment, Social, Health and Safety (ESHS) are required to be taken into consideration particularly during the supervision of the construction works. Within this scope, Consultant shall also be responsible for the supervision of the Contractor's environmental and social management practices/plans (grievance mechanism, stakeholder engagement, waste management, noise, occupational health and safety, resettlement plan, etc.) and ESHS obligations and report to the Client in its monthly and quarterly progress reports. The details of the ESHS



Management and the responsibilities of the "Consultant" shall also be detailed in the Contractor's contract. The Consultant shall have the responsibility for relevant supervision, oversight, and instruction of the applications to the Contractor.

- g. Make sure the following flow: in case of a significant work accident, loss of life, loss of limb, or injury requiring more than 3 days absence from work the Contractor will immediately inform the Consultant and the Municipality about the accident. The municipality will be responsible for notifying this accident to ILBANK within 24 hours and ILBANK will be responsible for informing World Bank about the accident within 48 hours after the accident occurred. Jointly, the Contractor, the consultant, the municipality and ILBANK will be responsible for complying with the World Bank requirements as shown in ESIRT, and undertake necessary actions including developing and implementing the Corrective Action Plan and reporting.
- h. If any land acquisition related issues and needs emerge within the scope of the subproject during implementation, the Client and the Supervision Consultant are responsible for informing ILBANK immediately and the construction works will be stopped in areas requiring land acquisition. The Supervision Consultant will clearly identify these and will provide support to the Client for the preparation of a RP/EPSA (if/where relevant). The Supervision Consultant should ensure that the Client take necessary actions such as preparation or updating of RP or EPSA.
- i. Provide assistance in administering and resolving grievances, in addition ensuring that grievances are recorded on the grievance form and grievance close-out forms,
- j. Issue interim certificates for payment to the Contractor on the basis of measured work items or to certify the completion of the works or parts thereof,
- k. Carryout generally all the duties of the Project Manager/Engineer as specified in the Contract, within the limitations specified therein,
- l. Advise the Client on all matters relating to additional works, scope change, variations and claims reported by the Contractor and make recommendations thereon,
- m. Attend to the work inspections carried out by the State Authorities in accordance with the Turkish Law,
- n. Organize taking over and performance certificate of works and submit all supervision documents to the taking-over committee according to the Contract and Applicable Law
- o. Issue the Certificates of Completion of the Works and Defects Liability Certificates,
- p. Assist the Client in taking over the site of the works,
- q. The Consultant will assist and provide the necessary technical information about the sub-project to the Client and ILBANK for their assessing the energy efficiency and Greenhouse Gas (GHG) Emissions and Calculations if requested by the Client and ILBANK.

#### **3.1.2.2. Administration of the Civil Works Contract**

**The responsibility of the Consultant shall include, but not limited to, the following tasks:**

- a. Financial management of the Civil Works Contract. Based on (i) the Contractor's program of works and cash-flow predictions which should be revised at required time intervals and, (ii) upon own judgement, the Project Manager shall prepare monthly, as part of monthly reports, disbursement tables showing the status of previous disbursements and a tentative prediction of future disbursements on a monthly basis,

- b. Monitor validity of the Contractor's insurance policies and guarantees and timely advise the Client on their expiry dates, necessity to request the extensions of the validity and where necessary change the amount of the insurance policies and guarantees,
- c. Provision and administration of the Project Management Information System (PMIS) for management of project correspondence and documents in accordance with the approved PMIS plan and procedures, and timely updates of the records and reports thereof,
- d. Continuous follow-up of the Contractor work programs and monitoring cash-flow in relation to the planned schedules and alert immediately the Client if any change occurs in the progress of disbursements,
- e. Day-to-day measurement and recording of quantities of works carried out by Contractor,
- f. Daily recording of work site events in a worksite logbook,
- g. Recapitulation of quantities of work carried out monthly for each contractual item of work,
- h. Monthly comparison of actual progress against progress as scheduled,
- i. Review Contractor's Monthly Statements and issue the corresponding Payment Certificates as appropriate,
- j. Attendance at periodic site meetings including monthly OHS safety committee meetings and monthly progress meetings and ensuring minutes signed by all parties are recorded.

The required procedures to carry out the site supervision and contract administration tasks shall be prepared by the Consultant and submitted for the approval of the Client in a Consultant's Site Supervision Procedures Manual.

### **3.1.2.3. Administration of Environmental, Social, Health and Safety (ESHS)**

The Consultant shall ensure that the Contractor's Environmental and Social (E&S) performance is in accordance with good international industry practice and delivers the Contractor's E&S obligations.

The ES related services include those of the Project Manager's as referred in the World Bank's Standard Procurement Document -Request for Bids Small Works (If needed as a result of the cost estimates, the Standard Procurement Document could change). **Services to be provided by the Consultant will include but are not limited to the following:**

- a. Review of the Contractor's Environmental and Social Management Plan (C-ESMP) including all updates and revisions, as well as sub-management plans (if any) (not less than once every 6 months),
- b. Review and approve ESHS provisions of method statements, implementation plans, drawings, proposals, schedules and all relevant Contractor's documents,
- c. Review and approve ESHG provisions of any design change proposals and the implications for compliance with project specific ESIA and/or ESMP, RP (if any)/EPSA (if any)/SEP, LMP and GM, consent/permits and other relevant project requirements,
- d. Undertake audits, supervisions and/or inspections of any sites where the Contractor is undertaking activities related to the Works, in order to ensure and verify the Contractor's compliance with ES requirements, OHS requirements with and without Contractor and/or Client relevant representatives, as necessary,
- e. Undertake audits and inspections of Contractor's Occupational Health and Safety (OHS) provisions (including mitigation/preventive actions related to communicable diseases), OHS logs and safe working environments,

construction site and campsite risk assessments, contracts and qualification certificates of OHS unit (OHS experts, workplace physicians, other health staff etc.), work permit, records of all environmental and social practices specified in the ESIA and/or ESMP, stakeholder engagement activities carried, community liaison records including all grievances received, managed and resolved (Grievance Logs), monitoring findings and other ESHS related documentation, as necessary, to confirm the Contractor's compliance with ESIA and/or ESMP requirements.

**The duties and responsibilities of the consultant regarding OHS management will include the following:**

- 1) Checking the compliance of the Contractor's OHS documents (including work permits, daily OHS reports, site checklists, toolbox trainings etc.) and the OHS legislation and requirements within the framework of the ESIA and/or ESMP on a daily basis, ensuring that daily regular site OHS reporting is carried out, informing the Contractor and the Employer in case of non-compliance,
  - 2) Ensuring work permit system implementation for high-risk works such as excavation, working at height, confined space entries, hot work,
  - 3) Ensuring that workers' health reports and personal files are complete and all relevant OHS trainings are completed, emergency drills are conducted, restricting workers' access to the field in case of detecting inappropriate working environments,
  - 4) Presence of a full time OHS specialist in areas where high-risk work is carried out (e.g., excavation, indoor work, crane work, etc.), OHS specialist shall develop and implement work permit system.
  - 5) Ensuring that the construction machinery and equipment used, and their operators are in compliance with the legal legislation and preventing their use in case of non-compliance,
  - 6) Notifying the Employer within 24 hours of any damage or accident related to the sub-project, including serious health and safety injuries and road accidents, that has or may have a serious adverse impact on the environment, affected communities, the public or employees, and provide adequate information on the relevant and immediate measures and measures to be taken and to be involved in the analysis of accidents,
  - 7) Participating in regular OHS meetings (including monthly board meeting) of the contractor and contributing when necessary.
- f. Agree on corrective action/s to be taken for minor; level 1 level 2 and level 3 non-compliances and their timeframe for implementation in the event of a noncompliance with the Contractor's ESHS obligations set out in the ESIA and/or ESMP,
  - g. Attend meetings including site meetings, consultation meetings, progress meetings to discuss and agree appropriate actions to ensure compliance with ES obligations,
  - h. Check that the Contractor's actual reporting (content and timeliness) is in accordance with the Contractor's contractual obligations,
  - i. Review and critique, in a timely manner, the Contractor's ES documentation (including regular reports and incident reports) submitted to Project Manager and to provide advice to ensure the accuracy and efficacy of the documentation,
  - j. Ensure the follow-up of the activities specified in the Stakeholder Engagement Plan (SEP) and Resettlement Framework (RF) (if land acquisition required) documents and the regular follow-up of the grievance mechanism, through grievances registers providing support to the Administration for resolving the grievances,



- k. If any land acquisition issues and needs emerge within the scope of the subproject during implementation, the Supervision Consultant will clearly identify these and will provide support to the Client for the preparation of a RP/EPISA (if/where relevant). The Client and the Supervision Consultant are responsible for informing ILBANK immediately if such a case emerges.
- l. Undertake liaison, from time to time and as necessary, with project stakeholders to identify and discuss any actual or potential ESHS issues, and report to the Client,
- m. Ensure no construction activity is initiated before the implementation of the Resettlement Plan (land acquisition process, compensation/supports, permits/licenses for use/transfer rights of public lands, etc.) to be prepared in accordance with the Resettlement Framework (ILBANK, 2023) is completed in case of legal or illegal users are identified on private and/or public lands; and,
- n. Prepare a monthly and quarterly E&S&OHS monitoring reports that describes the work that the Project Manager's ES Key Expert/s have undertaken, the issues (including any Contractor's ES noncompliance) identified and the actions taken to address the issues.

#### **3.1.2.4. Limitations of the Consultant's Authority**

- a. The Consultant shall have no authority to relieve the Contractor of any of their duties and obligations under the Works Contract.
- b. The Consultant shall note that the Client is under obligation to seek the ILBANK's concurrence before agreeing to or implementing any modification or waiver of the terms and conditions of the Contract including granting an extension of the stipulated time for performance.
- c. **The Consultant will seek prior written approval of the Client for the following:**
  - 1) Issuing / approving any Payment Certificates (PC) for the Contractor's Advance Payments,
  - 2) Agreeing/instructing any changes in the sub-project design,
  - 3) Approving or issuing of any Contract Variation, except in an emergency as determined by "Project Manager" in accordance with the Conditions of Contract,
  - 4) In the event of additional work, the Consultant shall report on the relative merits of tendering vis-a-vis issuing a variation for such additional works,
  - 5) Approving a proposal for Variation submitted by the Contractor,
  - 6) Making variations in work quantities which bring the total cost in excess of the value of the Contract Price specified in the relevant contract provisions,
  - 7) Determining any new rate or price with respect to any Variation,
  - 8) Approving any extension of the Intended Completion Date,
  - 9) Approving any compensation event for any additional cost including any cost associated with extension of the Intended Completion Date,
  - 10) Suspending the Works in accordance with the Conditions of Contract,
  - 11) Approval of the subcontracting of any part of the works,
  - 12) Approval of equipment manufacturers and models to be used within the scope of work.

Any response by the Project Manager/Engineer which requires Client's approval, except as otherwise expressly specified, shall be notified in writing to the Contractor within 28 days of receipt. (14 days for the Project Manager, 7

days for the Client, then 7 days for the Project Manager to consider Client's comments).

### **3.1.2.5. Supervision during the Commissioning, Defects Liability and Maintenance Period**

- a. The Consultant shall continue to be responsible for the supervision and inspection of the construction and completion of the Works during the Defects Liability Period as defined in the construction contract. The level of supervision shall be appropriate to the scale of the works being carried out. These inspections and supervision are to ensure that works, agreed to be carried out during the Defects Liability Period, are properly carried out and have been completed and that any failure of any part of the Works has been rectified. If any defect is discovered, during this period, the Consultant shall promptly investigate the reason for it, report to the Client and take required actions to rectify the defect.
- b. A report of these inspections shall be submitted to the Client, which shall include all details of any defects, faults, accidents, or breakdowns, which have occurred together with the estimated costs of repair and the time scales within which they will be completed. Moreover, the Consultant shall submit quarterly report/s summarizing all the activities during subject quarter of Defects Liability. A final report shall be submitted at the end of the Defects Liability Period giving full details of all works carried out during that period. This report shall be submitted by the Consultant to the Client at least 30 days prior to the Consultant's issuing Defects Liability Certificate for the completed Works. The Consultant will provide minimum number of technical staff acceptable to the Client during the Defects Liability Period. Defects are expected to be minimum for a competent Consultant Firm during defects liability period.
- c. The Consultant is required to provide perfect supervision/inspection services during the period, to preparation of defect lists and monitor correction on defects. If required, Consultant will instruct the Contractor and closely inspect the repair of works in the Defects Liability Period. Until finishing of Defects Liability Period, the Consultant shall execute all interim controls, inspections. In demand of Client, the Consultant shall deal with determined defect or failure. The Consultant will inform the Client and Contractor in case of finding defects in interim audit/controls.
- d. The Consultant should prepare and submit to the Client's approval a report providing all information about the "as-built-conditions" including calculations, drawings, specifications, final cost analysis etc.
- e. The Consultant should prepare demobilization of the contractor should be as per the mobilization plan and this process should be supervised and monitored.

## **4 General Obligations and Tasks of the Consultant:**

### **4.1 General**

- a. To carry out its duties and responsibilities by suitably qualified engineers and other professionals (experience of staff has been stated at Section-8 Key Expert Section) who are competent to carry out the duties described within this document.
- b. To co-operate with the other consultants and join the meetings whenever required by the Client.
- c. To carry out all the Services with all due diligence, care and in timely manner so as not to cause any delay. It is deemed that the Consultant familiarized himself with the nature of Project and is expected to take all sorts of precautions during the performance of Services to fulfil his tasks in a timely manner and to get the works completed by the Contractor on time.
- d. Assist/Support the PIU in updating the procurement plan of Projects as per the

approved/revised work schedules of the Contractor and his Contract.

## 5 Time Schedule:

Time schedule for the completion of the Consultant's services for the various parts of the work as mentioned below shall be submitted to the Client.

All activities under the Scope of Services shall be completed within 33 (Thirty-three) months (including the Defects Liability Period) from the signature date of the first works contract within the scope of consultancy services.

**Project Completion Schedule for the construction contract is drafted in the following table:**

### 5.1 Timetable

Total Duration		Months																	
W1	Construction of Düzce (Centrum) Water Supply Project – Construction Period	1	.	.	.	.	.	.	.	.	.	.	21						
	Construction of Düzce (Centrum) Water Supply Project – Defect Notification Period														22	.	.	.	.

	Supervision
	Defects Liability Period

Under normal conditions, the scheduled construction period is **21(Twenty-One) months for W1**. The defects liability period is 12 (twelve) months for all works.

## 6 Contract Type

The contract shall be time-based for the activities under this ToR.

## 7 Change in The Scope of Consultant's Services:

The Construction commencement dates of Works may vary due to the unexpected reasons. The Consultant shall wait for the finalization of the respective tender evaluation and commencement of the Construction Works and shall not request any payment or compensation for the tender in question. In any case, The Consultant Services Contract shall be commenced and become effective concurrently upon the signature of the Works Contract.

At every 6 months from the effectiveness of the Contract the Client and the Consultant shall review the staff input for the next 6 months and based on the agreed staff plan the Consultant shall mobilize its personnel.

## 8 Team Composition & Qualification Requirements for the Key Experts:

**The Consultant shall typically comprise a firm with experience in carrying out similar tasks, specifically to include the following minimum qualifications:**

- Experience as Consultancy company in the last 10 years in the projects financed by international financing institutions,
- Experience in the design and construction supervision services that are similar infrastructure (Preferably sewerage, stormwater, drinking water and WWTP projects) to the required services in size, similarity, and complexity in the last 10 years.

The Consultant's team shall include at least the following suitably qualified engineers and other professionals who are competent to carry out the duties described within this document.

The minimum required number and experience of proposed professional staff is:

<b>KEY STAFF MAIN CONSULTANT SITE OFFICE</b>	<b>Professional Experience (Years)</b>	<b>Specific Experience on the Related Assignment (Years)</b>
Project Manager (Civil/Environmental Engineer)	>15	>8
Site Manager / Senior Site Engineer (Civil Engineer)	>10	>5
Payment Certification Control and Cost Engineer (preferably Civil Engineer)	>8	>5
Quality Control Engineer	>10	>5
Mechanical Engineer	>10	>5
Electrical/Electronic Engineer (Having SCADA experience)	>10	>5
Survey Engineer	>8	>4
OHS Expert (preferably Civil Engineer /A class OHS certificate)	>8	>5
Social Expert	>5	>3
Environmental Expert	>5	>3
<b>For Construction Supervision of Defects Liability Period(*)</b>		
<b>Minimum Support Staff Requirement:</b>		
<b>In addition to the key staff, in order to ensure proper supervision, the non-key experts are:</b>		
<ul style="list-style-type: none"> <li>• <b>Technicians/Junior Engineers for Civil Works shall be assigned:</b> Two (2) Technician/Surveyor/Junior Engineer will be assigned for the site separately during the construction period.</li> <li>• Technicians/Surveyor/Junior Engineers will not be evaluated as key expert. The CVs of these staff will be submitted to the Client for approval after contract award.</li> <li>• Following the contract award, the Technicians experienced for at least 6(six) years, or the Junior Engineers experienced for at least 3 (three) years or Surveyors experienced for at least 2 (two) years in their respective fields shall be proposed.</li> </ul>		
<b>Defects Liability Period Staff Requirement:</b>		
(*) Staff-months for DLP shall be proposed as well and demonstrated in the Staffing Schedule. <b>Foresight:</b>		
<ul style="list-style-type: none"> <li>○ Project Manager</li> <li>○ Site Manager / Senior Site Engineer</li> <li>○ Payment Certification Control and Cost Engineer</li> <li>○ Mechanical Engineer</li> <li>○ Electrical Engineer</li> </ul>		
<ul style="list-style-type: none"> <li>• Administrative Personnel (Document Controller, Accountant, Driver, etc.) will be assigned as needed.</li> </ul>		

- **Project Manager (Civil / Environmental Engineer)** is expected to provide key technical inputs, conduct quality assurance, as certain consistency of results across individual tasks, and be the day-to-day single point of contact and party ultimately responsible to the Employer for the Tasks as defined in this ToR. Project Manager will be Civil or Environmental Engineer holding a suitable undergraduate degree (BS or above) and have at least 15 years professional experience. S/he shall have minimum 8 years of specific experience in supervision stage and 5 years of experience as Project Manager and/or equivalent position especially in the infrastructure projects, preferably in sewerage, stormwater, drinking water and WWTP sector. The Supervision Project Manager shall be preferably fluent in written and spoken English.
- **Site Manager / Senior Site Engineer (Civil Engineer)** holding a suitable undergraduate degree (BS or above) and have at least 10 years professional experience. S/he shall have minimum 5 years of specific experience in Supervision stage as Site Engineer or equivalent position in the supervision stage of projects, preferably in sewerage, stormwater, drinking water and WWTP sector. The Site Engineer shall be preferably fluent in written and spoken English.

- **Payment Certification Control and Cost Engineer (preferably Civil Engineer)** holding a suitable undergraduate degree (BS or above preferably Civil Engineer) and have at least 8 years professional experience. S/he shall have minimum 5 years of specific experience in Supervision stage as Payment Certification Control, Quality and Cost Engineer or equivalent position in the supervision stage of projects, preferably in sewerage, stormwater, drinking water and WWTP sector. The Payment Certification Control, Quality and Cost Engineer shall be preferably fluent in written and spoken English.
- **Quality Control Engineer** holding a suitable undergraduate degree (BS or above) and have at least 10 years professional experience. S/he shall have minimum 5 years of specific experience in Supervision stage as Quality Control Engineer or equivalent position in the Supervision stage of projects, preferably in sewerage, stormwater, drinking water and WWTP sector. The Quality Control Engineer shall be preferably fluent in written and spoken English.
- **Mechanical Engineer** holding a suitable undergraduate degree (BS or above) and have at least 10 years professional experience. S/he shall have minimum 5 years of specific experience in Supervision stage as Mechanical Engineer or equivalent position in the Supervision stage of projects, preferably in sewerage, stormwater, drinking water and WWTP sector. The Mechanical Engineer shall be preferably fluent in written and spoken English.
- **Electrical/Electrical Engineer** holding a suitable undergraduate degree (BS or above) and have at least 10 years professional experience. S/he shall have minimum 5 years of specific experience in Supervision stage as Electrical/Electrical Engineer or equivalent position in the Supervision stage of projects, preferably in sewerage, stormwater, drinking water and WWTP sector. The Electrical / Electrical Engineer shall be preferably fluent in written and spoken English.
- **Survey Engineer** holding a suitable undergraduate degree (BS or above) and have at least 8 years professional experience. S/he shall have minimum 4 years of specific experience in Supervision stage as Survey Engineer or equivalent position in the Supervision stage of projects, preferably in sewerage, stormwater, drinking water and WWTP sector. The Survey Engineer shall be preferably fluent in written and spoken English.
- **A Class Occupational Health and Safety (OHS) Expert** preferably engineer holding a suitable undergraduate degree (BS or above) and have at least 8 years professional experience. S/he shall have minimum 3 years of specific experience in Supervision review as Occupational Health and Safety (OHS) Expert or equivalent position in the Supervision stage of projects, preferably in sewerage, stormwater, drinking water and WWTP sector. The Occupational Health and Safety (OHS) Expert shall be preferably fluent in written and spoken English.
- **Social Expert** holding a suitable undergraduate degree (BS or above) in social sciences such as sociology, social development etc. and have at least 5 years professional experience. S/he shall have minimum 3 years of specific experience as Social Expert in the Supervision stage of projects, preferably in sewerage, stormwater, drinking water and WWTP sector. The Social Expert shall be preferably fluent in written and spoken English.
- **Environmental Expert** holding a suitable undergraduate degree (BS or above / preferably Environmental Engineer) and have at least 5 years professional experience. S/he shall have minimum 3 years of specific experience as Environmental Expert in the Supervision stage of projects, preferably in sewerage, stormwater, drinking water and WWTP sector. The Environmental Expert shall be preferably fluent in written and spoken English.

## 9 Reporting Requirements and Time Schedule for Deliverables:

### 9.1 Reports

The Consultant shall prepare and submit to the Client each calendar month a report satisfactory to the Client, including progress charts and photographs in color giving all information regarding the progress of the Works, actual extent and nature of the Works completed as well as details of any delay in the works, reason and remedial of the delay, any other problems relating to the Works and substantiating documentation if required. The Consultant shall also clearly indicate in the report whether the delay (if any) of any part of the Works will cause any delay in the completion of the whole Works. The Consultant should prepare an Inception Report including but limited with the Consultant's Site Supervision Procedures Manual within 3 weeks at the start of the sub-project.

The monthly reports shall include the percentages of the Work items completed and planned, and also the actual and planned cash-flows for each work item as of the reporting period prepared in the project planning tools (such as MS Project, Primavera, etc.) accepted by the Client.

The monthly reports shall also include records of materials, equipment and plant tested with copies of the test results and, statistical evaluation of the test results in table or graphical form. Action taken with regard to poor results shall be stated.

The said report shall give a detailed review of the Works to be performed during the following month and a general listing of the works to be performed during the following two months.

The report shall also give information about personnel employment status of the Consultant.

The report will also include the environmental and social (including grievance redress mechanism) and OHS management and ESMP compliance/non-compliances followed to mitigate the environmental and social impacts of construction works, and appropriate deadlines for the completion of such nonconformities and information on closing non-compliances from previous periods.

The report shall be submitted to the Client by the tenth day of following month. Any comment by the Client on the report shall be reviewed and the report shall be modified and re-submitted to the Client within a week.

Due to the urgent nature of the sub-project and short construction time, the Consultant shall also prepare a report in table form showing summary of cumulative progress in main work activities on weekly basis. The report shall be submitted to the Client in an acceptable format on Monday of each week via electronic mail and as hard copy.

In addition, the Consultant shall record views from at least 5 different points for the construction site, on a weekly basis, showing the progress on the site with dates and record them with acceptable format on CD and submit to the Client.

The requirements for the submission of reports, drawings and other documentation are given below. Reports shall be prepared in both the Turkish and English languages. The metric system of weights and measures shall be used.

**Submission shall be as follows,**

- **Format of Reports:** A4 or A3, including where appropriate drawings reduced to A3 size.
- **Format of Drawings:** A1 and/or A0 size.

A draft copy (Turkish 1, English 1) of all reports shall firstly be submitted to the Client for discussion purposes following which the Consultant shall be required to prepare the final copy, incorporating any amendments arising from such discussions.

## **9.2 Construction Supervision & Completion and Defects Liability Stages Reporting Requirements**

1. The Consultant shall prepare minutes of meetings, reports, documents, and several documents for the activities of the sub-project. Aim of these documents is to record the important milestones and activities of the sub-project. These documents will be used to support reports for the Client.
2. **Below documents shall be prepared:**
  - 2.1. Weekly minutes of meetings for the construction contract.
  - 2.2. Monthly report/s (contains summaries for the activities of construction site, including but not limited to physical progress, financial progress, 3 months – 6 months ahead physical and financial progress, cash-flow, and time schedule, etc. and the Consultant's Düzce office activities).



- 2.3. Quarterly reports for summarizing activities, including but not limited to project plan, cash-flow information, and environmental and social aspects covering the previous three months period. In terms of environmental and social aspects, the monthly and quarterly reports should cover the status of Environmental and Social performance in compliance with the ESMF, SEP and RF for TEFWER (including the subproject-specific ESAs, ESMPs, RPs, SEPs, and grievance mechanism).
- 2.4. Semi-annually progress reports to summarize previous six months covering the status of ESCP and compliance with ESMF, RF (including the performance related to subproject-specific ESAs, ESMPs and RPs), LMP, SEP, performance of grievance mechanism.
- 2.5. If any land acquisition issues and needs emerge within the scope of sub-project during implementation, the Supervision Consultant will identify these and will provide support to the Client for the preparation of a RP/EPSA (if/where relevant). The Client and the Supervision Consultant are responsible for informing ILBANK immediately if such a case emerges. Semi-annually progress reports to include brief information regarding RP implementation (if/where relevant) (for the subproject including land acquisition and having a RP).
- 2.6. Support the preparation of the quarterly progress reports by Utility's Project Implementation Unit (PIU) for all sub-project sites and monitor quality of reporting throughout the duration of works.
- 2.7. Construction Completion Reports.
- 2.8. Final Completion of Contract Report that combines sections of contract completion report in a single report also including additional information for completion of construction works.

**The Consultant shall submit reports in compliance with the below table:**

No	Report	Last Submission Date	English	Turkish
1	Monthly Progress Reports	In the first week of current month (for the past month activities) after signing of the construction contract	1	1
2	Quarterly Reports	Second week of the month after each quarter period of the works contract	1	1
3	Construction Completion Report	Four weeks upon the issue of a Certificate of Completion (Taking Over Certificate) of the works contract.	1	1
4	Interim Inspection Reports	Two weeks following up of each interim audit in Defects Liability Period of the works contract	1	1
5	Contract (Final) Completion Report	4 (four) weeks upon the issue of a Final Acceptance (Performance) Certificate of the works contract	1	1

The Consultant will also submit soft copies of all reports, projects and other documents following their approval.

Those of the documents and reports not mentioned above but either specified or implied in the contract related to the Construction Supervision Stage and Completion and Defects Liability Period shall be submitted in one (1) copy in Turkish and one (1) copy English languages each.

In relation to the ongoing stages of the Consultancy Services, the submission requirements given above should be followed by the Consultant as a guideline for the extent and type of documentation that will be required by the Client during the performance of the Services. However, the Consultant shall allow in its fee for the submission of all reports, drawings,

documents, etc. either specifically requested in these Terms of Reference or those that maybe implied there from and the Contractor's contract. The Client may however vary such requirements during the course of the Services to be performed.

Should additional copies be required extra over to those stated above or to be implied from these Terms of Reference, these shall be supplied by the Consultant(s) at the cost of reproduction of such documents, reports, or drawing. Additionally, after finalizing the reports and "as-built" drawings, which shall be prepared by the Contractor and approved by the Consultant, these documents shall be submitted to the Client in one (1) set of CD and in the software format acceptable by the Client. Each copy shall be durably bound in a volume or volumes depending on bulk, and the transparent copies shall have a suitable protective cover/box. All copies shall be labeled in accordance with the needs of the Client.

Upon the completion of Works, the Consultant shall submit all the original copies of correspondences, documents, test results, drawings etc., relating to the Services and Works, to the Client together with indices in acceptable files and forms by the Client.

## **10 Client's Input and Counterpart Personnel:**

The Client will timely provide to the Consultant the inputs and facilities, assist the firm in obtaining licenses and permits needed to carry out the services, and make available relevant project data and reports.

The following items shall be provided free of charge by the Client to the Consultant: The existing designs, maps, topographic plans, analysis results, relevant documents, and reports of the design drawings etc. The Consultant shall return all such drawings and documents received to the Client upon the completion of services.

In addition, the Client shall, where possible, assist the Consultant in obtaining approvals, permissions from the Municipalities and other State Authorities in respect of the Services to be performed.

The Civil Works Contractor's bidding documents shall be arranged to incorporate clauses to provide temporary office area to the Consultant at the construction site depending on the size and location of the construction site, the size and number of rooms shall be jointly determined by the Client and the Consultant considering the needs of the Client as well (at least basically one room for project manager, one room for site managers and engineers, one room for electric and mechanical engineers and technical office, one room for technicians and junior engineers and one meeting room should be organized). However, these will be constructed by the Contractor and will take some time. The Consultant will be fully responsible for providing their central office in Düzce until the contractor is in place to make these site offices available. The central office shall be furnished and equipped by the Consultant, whereas the site offices shall be furnished by the Contractor with furniture through which the office is ready for the usage of Consultant (including Tables, Chairs, Document Cabinets, A/C Units, Electrical Sockets, Internet Connection etc.). All sort of running expenses except water and electricity (to be provided by the Contractor) shall be under the Consultant's responsibility. The Consultant shall be required to deliver any equipment and materials provided by the reimbursable expenses and which have been used for the Services to the Client.

All local transport for the Consultant staff including the site supervisory staff shall be provided by the Consultant and shall be included in the proposal submitted.