**Republic of Türkiye**

**Ministry of Transport and Infrastructure**

**Rail Logistics Improvement Project (RLIP)**

**TERMS OF REFERENCE**

**For Consulting Services of the Preparation of Preliminary Site Environmental and Social Impact Assessments and the Preparation of Environmental and Social Impact Assessments, Resettlement Plans, Stakeholder Engagement Plans and Environmental and Social Management Plans**

1. Introduction and Background

The Republic of Türkiye achieved strong economic and social development performance since 2000, leading to increased employment and incomes. More recently, growing economic vulnerabilities and a more challenging external environment are threatening to undermine these achievements. Türkiye has maintained a long-term focus on implementing ambitious reforms in many areas, and government programs have targeted vulnerable groups and disadvantaged regions. The poverty incidence more than halved over 2002-15, and extreme poverty fell even faster. During this time, Türkiye urbanized dramatically, maintained strong macroeconomic and fiscal policy frameworks, opened to foreign trade and finance, harmonized many laws and regulations with European Union (EU) standards, and greatly expanded access to public services.

Türkiye, owing to her advantageous geostrategic positioning between Europe and Asia, has a strong potential in becoming a major regional logistics hub. Nevertheless, failure to develop the physical infrastructure of railways and maritime transport in a timely manner in response to the increased demand for transportation, inadequate institutional capacity and the current fact that highway transportation is the most efficient transportation mode for door-to-door transportation, have led to the intensification of freight and passenger transportation on the road network.

Türkiye’s global standing in logistics performance has steadily deteriorated over the past six years, signaling an urgent need to attain further improvements and reverse this negative trend. As early as 2012, Türkiye was ranked as the 27th best-performing economy in international logistics by the Logistics Performance Index (LPI), a position that has steadily weakened since—to 30th in 2014, 34th in 2016, and 47th today. Much of this deterioration stems from relative under-performance in infrastructure provision and small market scale as well as the quality of logistics services, particularly in the railways.

Improvements in containerized rail intermodal and other forms of rail-based logistics are expected to boost economic dynamism and support job creation in Türkiye. By enhancing access to domestic and international markets through improved connectivity, railway infrastructure investments are recognized as direct drivers of rail adoption and indirect drivers of sustainable economic growth.

The **Rail Logistics Improvement Project** (hereafter referred to, interchangeably, as “RLIP” or “the Project”), financed by the World Bank and implemented by the Ministry of Transport and Infrastructure (MoTI) through its Directorate-General of Infrastructure Investments (DGII), aims to increase rail freight efficiency in Türkiye by improving last-mile connectivity (LMC), enhancing the operational efficiency of logistics centers and strengthening institutional capacity. The project is developed around three main components:

1. **Component 1 – Construction of Railway Branch Lines and Multimodal Connections at Priority Network Nodes.** This component includes construction of two main branching lines, Çukurova Region and Iskenderun Bay railway connections, and Filyos Port/Industrial Zone connections, including construction supervision consulting services, as well as construction (and construction supervision) of two to three additional subprojects to be selected from a pre-identified list of 12 potential LMC sites;
2. **Component 2 – Feasibility Studies, Detailed Engineering Designs, and Construction Supervision for Rail Last-mile Connectivity Infrastructure at Additional Freight Generation Nodes.** This component includes survey, design, and feasibility studies for the 12 potential LMC locations pre-identified by the Ministry of Transport and Infrastructure (MoTI), plus detailed engineering designs, environmental and social impact assessment and impact management documents, and construction supervision for a subset of this initial list of potential LMCs; and
3. **Component 3 – Phase 2 Covid-19 Response Support, Institutional Strengthening, Capacity Building, and Project Implementation Support.** This component will provide technical assistance on key aspects of service delivery in rail freight logistics, such as standardization of railway network technical standards, preparation of a rail freight strategy document for MoTI, and support to MoTI on the management and planning of rail-enabled logistics centers owned by TCDD, the public railway infrastructure manager. Component 3 will also finance the provision of technical assistance to MoTI to assess the medium- and long-term impacts of the **Covid**-19 pandemic on Türkiye’s multimodal logistics system and to draw up policy measures to mitigate those impacts. Lastly, Component 3 will finance the operating costs of the Project Implementing Unit (PIU) within MoTI’s Directorate-General of Infrastructure Investments (DGII).
4. Objective of the Assignment

DGII will conduct two separate assignments other than the one defined under this Terms of Reference [ToR] to provide project preparation support from feasibility studies to detailed engineering designs for 6 LMC under each study and in total 12 pre-identified last-mile rail infrastructure connectivity subprojects to be considered under Component 2.

The Consultant of this assignment shall collaborate with the other two Consultants of these assignments to ensure the objective of providing a parallel environmental and social (E&S) impact assessment site studies with an output of a preliminary site E&S impact assessment reports, to ensure that all the projects within the scope of the other two assignments of “Preparation of Survey and Feasibility Studies, Preparation of Detailed Engineering Designs and Technical Specifications/Bills of Quantities” will be assessed at the feasibility level in accordance with the World Bank’s Environmental and Social Framework (ESF) and E&S Standards (ESSs), while preparing the environmental and social document package (E&S package) for disclosure, including the Environmental and Social Impact Assessment reports (ESIAs), Resettlement Plans (RPs), Stakeholder Engagement Plans (SEPs), Environmental and Social Management Plans (ESMPs) and revised version of Labour Management Procedures (LMPs) for the selected options as per the detailed engineering designs.

The scope of the other two assignments of “Preparation of Survey and Feasibility Studies, Preparation of Detailed Engineering Designs and Technical Specifications/Bills of Quantities” under separate ToRs will include the followings:

* + Tasks Required for Completion of Surveys and Feasibility Studies
* Review of existing studies and data, and fresh data collection and survey activities
* Transport Modeling/Planning
* Preliminary Engineering Design
* Economic, Financial, and Fiscal Analysis
* Sensitivity and Risk Analysis
* Key Performance Indicators and Recommendations
  + Tasks Required for Completion of Detailed Engineering Designs for Feasible Subprojects
* Topographic Surveys
* Geotechnical Surveys
* Materials Surveys
* Detailed Design Studies
* Unit Rates Analysis
* Cost Estimates
* Construction Schedules
* Bidding Documents
* Benchmark Survey

Preliminary site environmental and social impact assessment reports will be prepared to be evaluated within the scope of other assignments of **“Preparation of Survey and Feasibility Studies, Preparation of Detailed Engineering Designs and Technical Specifications/Bills of Quantities**”with the findings from the survey and feasibility studies, to prioritize the 12 subprojects based on multi-criteria analysis, including, but not necessarily limited to, 3 main factors: (i) expected economic returns (including the value of mitigating environmental and other non-market externalities); (ii) risk-adjusted technical feasibility (including environmental and social impact considerations); and (iii) magnitude of expected rail freight volume capture as a proxy for urgency of delivery. Based on these studies, those subprojects deemed feasible of implementation will move forward to the next stage in the project cycle, in which the design consultant will prepare detailed engineering designs, technical specifications/bills of quantities and tender documentation and the E&S Consultant will be working for detailed environmental and social impact and impact management documentation, in accordance with the World Bank’s Environmental and Social Framework (ESF). Consultation and disclosure of the feasible projects will be completed in accordance with the required disclosure periods in World Bank’s Environmental and Social (E&S) Framework and E&S Standards (ESSs).

The Consultant shall attend all bilateral meetings and studies conducted within the scope of assignments of **“Preparation of Survey and Feasibility Studies, Preparation of Detailed Engineering Designs and Technical Specifications/Bills of Quantities**”, to communicate and collaborate when needed.

The outputs of this contract will be used to prepare a supervision contract and a construction contract for the highest ranked LMCs that the remaining budget in the project allows construction under the project’s Component 1.

A brief description of the 12 sub-projects is presented in Table 1. This assignment will develop preliminary site E&S impact assessment reports for all subprojects 1 to 12 of Table 1.

Detailed engineering designs, technical specifications/bill of quantities, and construction supervision consulting services may subsequently be provided for all of the feasible subprojects.

**Table 1. List of Priority Sites for Last-Mile Rail Infrastructure Provision**



This ToR is prepared to obtain a parallel E&S impact assessment site studies with an output of a preliminary site E&S impact assessment reports. A parallel study will ensure that the site environmental and social studies are arranged in a way to follow the most up to date route, which is being prepared by the engineers based on the site surveys and it will form an input to the feasibility studies comprising economic, financial, technical/engineering, environmental and social feasibility assessments. Preliminary maps of the proposed alignment of these subprojects are shown in **Annex 1**.

For the environmental and social component of the feasibility studies, the feasibility studies will include a parallel E&S impact assessment site studies with an output of a preliminary site E&S impact assessment reports of all the subprojects considering both construction and operation phases of the projects and including any associated facilities (e.g. access roads, quarries, borrow pits, energy transmission lines etc.) based on the World Bank ESF. The ESF comprises Environmental and Social Standards (ESS) together with their Annexes, which set out the mandatory requirements that apply to the subprojects:

**Environmental and Social Standard 1:** Assessment and Management of Environmental and Social Risks and Impacts;

**Environmental and Social Standard 2:** Labor and Working Conditions;

**Environmental and Social Standard 3:** Resource Efficiency and Pollution Prevention and Management;

**Environmental and Social Standard 4:** Community Health and Safety;

**Environmental and Social Standard 5:** Land Acquisition, Restrictions on Land Use and Involuntary Resettlement;

**Environmental and Social Standard 6:** Biodiversity Conservation and Sustainable Management of Living Natural Resources;

**Environmental and Social Standard 8:** Cultural Heritage;

**Environmental and Social Standard 10: Stakeholder Engagement and Information Disclosure**.

The potential environmental and social risk and impacts could include but not be limited to the following:

* **Potential impacts on environment** covering impacts on air, water resources, soil, biodiversity values including natural, modified and critical habitats, cultural resources, water and wastewater management, waste management, resource and energy utilization including the associated facilities,
* **Potential impacts on public and private assets in the vicinity of the alignment**, such as access limitations, usage restrictions or even temporary or permanent loss due to project implementation,
* **Potential impacts on land-based livelihoods and any other income generating businesses** located along the route or in the footprint of other project components in addition to the prevalence, migration patterns and livelihoods of owners and users of land, potential seasonal migrant workers and other defined vulnerable groups in project affected lands,
* **Potential extent and** anticipated **cost of land acquisition** at current market rates,
* **Risks related to Occupational Health and Safety (OHS),** Labor Management and handling of grievances of contracted workers,
* **Preliminary assessment of the potential project-affected persons (PAPs) and households** (including informal users), and the likely order-of-magnitude cost of compensation of these PAPs as to any impact on their assets (land, dwellings, sources of income) and need for additional support to sustain land-based livelihoods for a set period of time after project impact,
* **Potential impact on tangible and intangible cultural heritage**, including any potential impact on 1st, 2nd, and 3rd degree culturally protected area sites and artifacts,
* **Potential impacts on biodiversity, natural habitats** and resources that can also be related to ecosystem services, groundwater, water bodies, air pollution, and other environmental protection dimensions, including in protected areas,
* **Potential impacts on nearby communities and other sensitive receptors** with respect to noise, air pollution, visual impacts, increased level of traffic, any other community health and safety, labor influx etc. related issues that may emerge from project activities, and
* **Potential cumulative impacts** that may occur due to the multiplying effects of other recently completed, ongoing or planned projects in the project region.

The feasibility studies will provide an initial assessment of the extent to which the above impacts can be avoided, mitigated and the likely mitigation measures that could be deployed, based on mitigation hierarchy adopted under the World Bank’s ESF, including a justification of same based on good domestic and international practice, cost effectiveness, international experience, and the like. This initial assessment will be a parallel E&S impact assessment site studies with an output of the preliminary environmental and social impact assessment reports.

However, it should be noted that any subproject that is classified as ***High Risk,*** likely to generate a wide range of significant adverse risks and impacts on human populations or the environment, which have the majority or all of the following characteristics: (i) long term, permanent and/or irreversible (e.g., loss of major natural habitat or conversion of wetland), and impossible to avoid entirely due to the nature of the Project; (ii) high in magnitude and/or in spatial extent (the geographical area or size of the population likely to be affected is large to very large); (iii) significant adverse cumulative impacts; (iv) significant adverse transboundary impacts; and (v) a high probability of serious adverse effects to human health and/or the environment (e.g., due to accidents, toxic waste disposal, etc.); (vi) sensitive and valuable ecosystems and habitats (legally protected and internationally recognized areas of high biodiversity value), (vii) impacts to lands belong to or rights of Indigenous Peoples, Local Communities and ethnic minorities, or other vulnerable groups (viii) intensive or complex involuntary resettlement or land acquisition, impacts on cultural heritage or densely populated urban areas; (ix) significant concerns that the adverse social impacts of the subproject activity; and (x) the associated mitigation measures, may give rise to significant social conflict or harm or significant risks to human security **should not be selected to move on to the** detailed design and detailed E&S documentation phase.

In assessment of environmental and social implications within the scope of the parallel E&S impact assessment site studies with an output of the preliminary environmental and social impact assessment reports, Turkish laws and requirements and the following World Bank documents should be taken into consideration as applicable but not limited to:

* World Bank’s Environmental and Social Framework (ESF) and Borrower’s Guidance Notes,
* World Bank Group’s Environmental, Health, and Safety (EHS) General Guidelines,
* World Bank Group’s Environmental, Health, and Safety Guidelines for Railways,
* World Bank Group’s Environmental, Health, and Safety Guidelines for Toll Roads, and
* World Bank Group’s Environmental, Health, and Safety Guidelines for Electric Power Transmission and Distribution.

It should be noted the project will apply the relevant requirements of the EHS Guidelines. When the Turkish requirements differ from the levels and measures presented in the EHS Guidelines, the more stringent ones (such as the most stringent discharge and emission standards) will be applied in the project specifications as per Environmental and Social Standards (ESSs) of the World Bank’s ESF. The Consultant will fully comply with the requirements of the relevant ESSs in assessment of the environmental and social impacts within the scope of the feasibility studies.

1. Scope of Work of E&S Preliminary Site Assessment and E&S Document Preparation Studies

The scope of work of the feasibility study for each subproject must be in compliance with the guidelines and procedures of the Government of Türkiye (GT) and the World Bank. The studies shall present, evaluate, and justify alternatives; and feature clear tables, graphs, drawings, maps, and other supporting material for technical and general descriptions. The Feasibility Consultants’ tasks will include:

* + Review of existing past demand-supply, feasibility, market research, engineering, and other studies, if any
  + Review of other existing data and studies
  + Data collection and market surveys
  + Review of institutional frameworks
  + Definition of key performance indicators and their baseline values
  + Technical analyses
  + Preliminary design with assessment of alternatives
  + Financial and fiscal impact analyses
  + Economic and stakeholder analyses
  + Sensitivity and risk analyses

Considering the above scope of work of the Feasibility Consultants;

* + A parallel environmental impact assessment of subproject alternatives in light of the requirements of the ESF and relevant national laws covering impacts on air, water resources, soil, biodiversity values including natural, modified and critical habitats, cultural resources, as well as impacts on nearby communities and other sensitive receptors in terms of noise, dust and other air pollutants, traffic impacts and safety, water and wastewater management, waste management, resource and energy utilization including the associated facilities (e.g. access roads, quarries, borrow pits, energy transmission lines etc.), considering both construction and operation phases among other potential issues;
  + A parallel social impact assessments of the studied alternatives in light of the requirements of the ESF and relevant national laws covering land acquisition, potential land requirements including any physical resettlement needs, potential impacts on private and public lands and landowners, anticipated costs related to compensation needs for economic and physical resettlement-if any-, identification of the need to have any livelihood restoration measures, investigation and identification of any vulnerable groups (such as but not limited to poor, elderly, disabled, seasonal migrant workers, minorities, refugees, people subject to multiple impacts of other projects etc.), community health and safety assessment (including gender-based violence, sexual exploitation and abuse [SEA] and sexual harassment [SH] risks, communicable disease risks etc.), and occupational health and safety risk for workers and risk of labor influx and its impacts on the communities that will host them; and among other potential issues; and
  + Preliminary Stakeholder consultations will be completed by the Consultant.

Findings provided in the preliminary environmental and social impact assessment reports will be used to identify possible alternative solutions for the last mile rail structures’ options and should be criteria for comparative analysis of options, adopting the mitigation hierarchy for adverse environmental and social impacts, as well as identification of mitigation measures and establishment of baseline data which will serve as the basis of preliminary inputs into the detailed engineering design studies as well as further environmental and social assessment documents (e.g. ESIA, ESMP, RP, other sub-management plans as relevant/needed) to be developed for feasible subprojects.

Detailed engineering design will be prepared only for Subprojects that are deemed to be of ***Low, Moderate*** or ***Substantial environmental and/or social risk***s in light of the parallel environmental and social impact assessments site studies and the preliminary E&S impact assessment reports to support the feasibility studies and support the ranking process. However, this process will be an iterative environmental and social baseline analysis with an associated impact assessment process to produce the E&S document package for disclosure at the end of the detailed engineering design phase.

For each of the subprojects deemed feasible of implementation, with the ranking less than **high**, the consultant will develop a full suite of detailed E&S document package to be incorporated into the bidding documents for civil works, including an Environmental and Social Impact Assessment (ESIA) Report, an Environmental and Social Management Plan (ESMP), a Stakeholder Engagement Plan (SEP), a Resettlement Plan (RP) and revise the existing Labour Management Procedures (LMP) of DGII referring to the final detailed design documents. For those subprojects ultimately selected to move forward with construction, the consultant will conduct public consultation meetings on these E&S document package. A disclosure process will be carried out in accordance with World Bank ESF and ESSs. Therefore, the timeline for the completion of the finalization of the full E&S package will comply with the timeline of the preparation of the bidding documentation for civil works.

In addition, for all subprojects for which detailed engineering designs are prepared, the consultant will prepare relevant ESF instruments as an E&S document package, including an Environmental and Social Impact Assessment (ESIA) Report, an Environmental and Social Management Plan (ESMP), a Stakeholder Engagement Plan (SEP), a Resettlement Plan (RP) and revise the existing Labour Management Procedures (LMP) of DGII based on this ToR. The project will not start construction of any subproject prior to the Bank’s approval of corresponding ESF instruments, as well as the completion of the compensation payments of the sub-projects as per national legislation and ESS5. The details of the tasks for E&S document package for disclosure are presented in Annex 2.

1. Consultant Inputs

It is anticipated that key professional staff of the consultant’s team to undertake the preliminary site environmental and social impact assessments and the **detailed environmental and social documentation portions of these Terms of Reference** will include professionals, as follows:

The consultant shall assemble a team capable of implementing an integrated approach with the other Consultant both for the feasibility studies and detailed design The team shall have **at least** the following positions (or equivalent):

Key-expert positions:

* Project Manager (Senior Environmental Engineer/ESIA Expert)
* Hydrobiologist
* Biologist (Botanist-Terrestrial Flora & Vegetation Expert)
* Biologist (Mammal Expert)
* Biologist (Enthomologist)
* Biologist (Herpethologist)
* Biologist (Ornitologist)
* Senior Geological Engineer
* Noise/Acoustics Expert
* GIS Expert
* Soil Expert
* Archaeologist
* Social Specialist
* RAP Expert
* RAP Valuation Expert

Non-key positions:

* Junior Environmental Engineer
* Statistician/Analyst
* Survey Engineer
* Occupational Health and Safety Specialist

This **core team** shall be supported by other professionals (such as Interviewer(s), documentation expert(s), translator(s), and any other engineer(s)/expert(s) in relevant fields) as proposed by the Consultant. The list below provides further details on the required qualifications of the core team positions.

Project Manager (Senior Environmental Engineer/ESIA Expert);

General professional experience

* Preferably more than 15 years of general professional experience with a bachelor’s degree or master’s degree in environmental engineering or any relevant engineering such as civil engineering, geological engineering, and mechanical engineering.

Specific professional experience

* Preferably at least 15 years of experience in ESIA preparation with full experience on the international standards of International Finance Institutions/Export Credit Agencies (IFIs/ECAs) such as Equator Principles, IFC Guidelines and Performance Standards, World Bank ESF&ESSs, EBRD Performance Requirements (PRs);
* Eight (8) years’ environmental impact assessment management experience in linear projects is required.

Junior Environmental Engineer;

General professional experience

* At least five (5) years of general professional experience with a bachelor’s degree or master’s degree in environmental engineering.

Specific professional experience

* At least five (5) years of experience in ESIA preparation, including baseline analysis studies. At least one (1) assignment completed that included similar tasks in the linear projects with full experience on the international standards of IFIs/ECAs such as Equator Principles, IFC Guidelines and Performance Standards, World Bank ESF&ESSs, EBRD PRs.

Hydrobiologist;

General professional experience

* Preferably at least 10 years of professional experience with a bachelor’s degree in biology, higher degrees such as master’s, PhD or above.

Specific professional experience

* At least 10 years of experience in preparing baseline analysis reports and ESIA studies, critical habitat assessments, biodiversity management plans, biodiversity action plans, biodiversity offsetting with full experience on the international standards of IFIs/ECAs such as Equator Principles, IFC Guidelines and Performance Standards, World Bank ESF&ESSs, EBRD PRs.

Biologist (Botanist-Terrestrial Flora & Vegetation Expert);

General professional experience

* Preferably at least 10 years of experience in with a bachelor’s degree in biology, higher degrees such as master’s, PhD or above.

Specific professional experience

* At least 10 years of experience in preparing baseline analysis reports and ESIA studies, critical habitat assessments, biodiversity management plans, biodiversity action plans, biodiversity offsetting with full experience on the international standards of IFIs/ECAs such as Equator Principles, IFC Guidelines and Performance Standards, World Bank ESF&ESSs, EBRD PRs.

Biologist (Mammal Expert);

General professional experience

* Preferably at least 10 years of experience in with a bachelor’s degree in biology, higher degrees such as master’s, PhD or above.

Specific professional experience

* At least 10 years of experience in preparing baseline analysis reports and ESIA studies, critical habitat assessments, biodiversity management plans, biodiversity action plans, biodiversity offsetting with full experience on the international standards of IFIs/ECAs such as Equator Principles, IFC Guidelines and Performance Standards, World Bank ESF&ESSs, EBRD PRs.

Biologist (Enthomologist);

General professional experience

* Preferably at least 10 years of experience in with a bachelor’s degree in biology, higher degrees such as master’s, PhD or above.

Specific professional experience

* At least 10 years of experience in preparing baseline analysis reports and ESIA studies, critical habitat assessments, biodiversity management plans, biodiversity action plans, biodiversity offsetting with full experience on the international standards of IFIs/ECAs such as Equator Principles, IFC Guidelines and Performance Standards, World Bank ESF&ESSs, EBRD PRs.

Biologist (Herpethologist);

General professional experience

* Preferably at least 10 years of experience in with a bachelor’s degree in biology, higher degrees such as master’s, PhD or above.

Specific professional experience

* At least 10 years of experience in preparing baseline analysis reports and ESIA studies, critical habitat assessments, biodiversity management plans, biodiversity action plans, biodiversity offsetting with full experience on the international standards of IFIs/ECAs such as Equator Principles, IFC Guidelines and Performance Standards, World Bank ESF&ESSs, EBRD PRs.

Biologist (Ornitologist);

General professional experience

* Preferably at least 10 years of experience in with a bachelor’s degree in biology, higher degrees such as master’s, PhD or above.

Specific professional experience

* At least 10 years of experience in preparing baseline analysis reports and ESIA studies, critical habitat assessments, biodiversity management plans, biodiversity action plans, biodiversity offsetting with full experience on the international standards of IFIs/ECAs such as Equator Principles, IFC Guidelines and Performance Standards, World Bank ESF&ESSs, EBRD PRs.

Senior Geological Engineer;

General professional experience

* Preferably at least 10 years of experience with a bachelor’s degree or master’s degree in a geological engineering or hydrogeology engineering, environmental engineering, civil engineering.

Specific professional experience

* At least 10 years of experience in ESIA preparation with full experience on the international standards of IFIs/ECAs such as Equator Principles, IFC Guidelines and Performance Standards, World Bank ESF&ESSs, EBRD PRs. 10 years of ESIA management experience in linear projects is a must.

Noise/Acoustics Expert;

General professional experience

* Preferably at least 10 years of experience with a bachelor’s degree or master’s degree in mechanical engineering or other relevant engineering background such as environmental engineering, civil engineering, geological engineering etc..

Specific professional experience

* At least five (5) years of experience in ESIA preparation with full experience on the international standards of IFIs/ECAs such as Equator Principles, IFC Guidelines and Performance Standards, World Bank ESF&ESSs, EBRD PRs.
* With specific expertise on noise, especially having competency and experience in noise modelling of linear projects successfully accepted by IFIs/ECAs.

GIS Expert;

General professional experience

* Preferably at least 10 years of experience with a bachelor’s degree or master’s degree in a geological, environmental engineering, geodesy engineer or any other relevant subject.

Specific professional experience

* At least 10 years of experience in ESIA preparation with full experience on the international standards of IFIs/ECAs such as Equator Principles, IFC Guidelines and Performance Standards, World Bank ESF&ESSs, EBRD PRs.
* 10 years’ Environmental impact assessment management experience in linear projects is a must.

Soil Expert;

General professional experience

* Preferably at least 10 years of experience with a bachelor’s degree or master’s degree in geological engineering, environmental engineering, agricultural engineer, civil engineering, mining engineering or any other relevant subject.

Specific professional experience

* At least 10 years of experience in ESIA preparation with full experience on the international standards of IFIs/ECAs such as Equator Principles, IFC Guidelines and Performance Standards, World Bank ESF&ESSs, EBRD PRs. 10 years’ Environmental impact assessment management experience in linear projects is a must.
* Experience in rehabilitation of contaminated sites is an asset.

Archaeologist:

General professional experience

* Preferably at least 10 years of experience with a bachelor’s degree in archeology is required.

Specific professional experience

* At least 10 years of experience in preparing baseline analysis reports and ESIA with full experience on the international standards of IFIs/ECAs such as Equator Principles, IFC Guidelines and Performance Standards, World Bank ESF&ESSs, EBRD PRs. Experience in linear infrastructure projects is a must.

Social Specialist;

General professional experience

* Preferably at least 10 years of experience with a bachelor’s degree or master’s degree in social science subject such as sociology, anthropology etc.

Specific professional experience

* At least 10 years in the fields of social impact and risk assessment, stakeholder consultation, organizing and conducting social surveys and reporting, preparing, and implementing resettlement plans, livelihood restoration plans and stakeholder engagement plans.
* At least two (2) assignments completed that included similar tasks in the related fields with full experience on the international standards of IFIs/ECAs such as Equator Principles, IFC Guidelines and Performance Standards, World Bank ESF&ESSs, EBRD PRs.

RAP Expert;

General professional experience

* Preferably at least 10 years of experience with a bachelor’s degree or Master’s degree in the social science, e.g. sociology, anthropology, human geography, development economics, or related fields.

Specific professional experience

* 10 years’ experience in preparation and implementation of resettlement plans, development of livelihood restoration plans and measures.
* Experience in preparation and implementation of land acquisition, and knowledge of national legislation and IFIs’ standards.
* Planning, implementing and interpreting social surveys. Fundamental knowledge of construction projects and their social and environmental impacts and risks. Understanding of environmental and social safeguard of IFIs.

Statistician/Analyst;

General professional experience

* With a bachelor’s degree or master’s degree in statistics, mathematics, or econometrics. 5+ years' experience as a statistical analyst.

Specific professional experience

* In-depth knowledge of statistical data modeling software(s).
* Ability to spot data trends.
* Knowledge of data mining and scrubbing.
* Experience with data visualization tools. Excellent report writing skills.

Survey Engineer;

General professional experience

* With a bachelor’s degree in geomatic, topographical engineering, quantity surveying, civil engineering, or a related field with a focus on infrastructure..

Specific professional experience

* 5+ years’ experience in the infrastructure sector, covering design, supervision, project planning, implementation, settlement of contractual. Prior experience on railway infrastructure projects or programs.

RAP Valuation Expert;

General professional experience

* With a bachelor’s degree or master’s degree in law, agriculture engineering, civil engineering, surveying engineering or master’s degree in real estate development and management and real estate valuation licence..

Specific professional experience

* 10 years’ experience in the infrastructure sector, and national requirement and IFIs standards. Valuation of all assets in the project impact area, based on national legislation, WB ESSs and breakdowns in Project's RAP.

Occupational Health and Safety Specialist (OHS);

General professional experience

* The OHS Specialist is expected to have at least 10 years of general experience with a bachelor’s degree or master’s degree in engineering or health and safety graduate degree.

Specific professional experience

* At least eight (8) years of general experience, in health and safety issues of E&S Consultancy business and experienced in the infrastructure projects, of which have to comply with national requirements, IFIs’ standards, WBG ESF, ESSs and EHS guidelines.
* Knowledge of international best OHS practices and standards will be preferable. National certificate on Safety or NEBOSH certificate is a must.

All staff proposed must be independent and free from conflicts of interest in the responsibilities accorded to them. As the final reports will be produced in both English and Turkish, the consultant may wish to consider having translators on the team or propose a viable alternative for reliable and high-quality translation.

1. Timing

The detailed E&S documents shall be completed within a period of 12 months from contract signing in parallel with the 12 feasibility studies, the detailed engineering designs and sets of technical specifications/bills of quantities, tender documents.

1. Reporting and Deliverables

The Consultant will be expected to produce the following deliverables as hard and soft copy formats in English, including the GIS spatial data, drawings, analysis, modelling results, surveys, questionnaires, raw data such as forms etc., whereas only the full ESIA package will be submitted both in English and Turkish.

All deliverables will be subject to comments and feedback by the PIU, DGII and the World Bank, as required.

All data obtained during the execution of the study, from surveys to final report, shall be reported to the PIU in appropriate electronic formats proposed by the Consultant and agreed by the PIU, including partially or wholly detailed description/instructions of any survey methodologies.

The Consultant shall include in their reports detailed annexes explaining all assumptions and showing all calculations. Electronic copies of spreadsheets showing all calculations and raw data inputs should also be submitted.

**Inception Report.** The Consultant will prepare an inception report to demonstrate how the tasks will be managed throughout this Consultancy Services, including the overall planning and schedule of the tasks foreseen, formats of the site surveys and formats of method statements etc. Inception report shall be submitted to the review and approval of DGII within 15 days from the commencement.

**Method statement.** The Consultant will prepare a ***method statement*** that defines each task to be completed and their potential risks/impacts and relevant mitigation measures to be taken and shall submit this ***method statement*** to the approval of DGII 15 days before each site visit. The ***Method Statement*** should also include specific mitigation measures for Covid-19.

**Overall Schedule.** The Consultant should prepare and submit an overall schedule for the tasks to the DGII’s review and approval within 15 days from the commencement.

**Daily Reports.** The Consultant shall prepare ***daily reports*** (including daily site survey forms in compliance with WB ESF and ESSs) during the site visits as per the approved schedule and submit these reports to the DGII-PIU on a daily basis. The ***daily reports*** shall include detailed ***site survey forms*** in compliance with WB ESF and ESSs. The ***site survey forms*** should define the name of the surveyor, date and coordinates of the site surveyed, as well as other technical details, which might be required for further critical habitat assessment and to identify biodiversity offsetting requirements. In addition, for the further social studies. The ***daily reports*** will be subject to review and approval of the DGII.

**Site Survey Reports.** The Consultant shall prepare ***site survey reports***, which will represent the data for the baseline reports and preliminary site environmental and social impact assessments. The Consultant shall submit these reports to the review and approval of the DGII-PIU.

**Monthly Reports.** The Consultant shall prepare ***monthly reports*** to present the monthly progress achieved (activities carried out, achievements, risks and concerns, schedule update-if required) for each of the tasks of this ToR. The ***monthly reports*** will be subject to review of the DGII-PIU. (Within 7 days following the end of each month)

**Preliminary Site Environmental and Social Impact Assessment Reports**. The Consultant shall prepare the preliminary site E&S impact assessment reports of each 12 subprojects to support the feasibility studies in English and Turkish including the seasonal biodiversity site survey data as well as identification of mitigation measures and establishment of E&S baseline data, which will serve as the basis of preliminary inputs into the detailed engineering design studies and the further environmental and social assessment documents (e.g. ESIA, ESMP, RP, other sub-management plans as relevant/needed) to be developed for feasible sub projects. Once the decision making is completed referring to the feasibility studies, technical data and parallel E&S impact assessment site studies and these preliminary site ESIA Reports, the full E&S document package shall be prepared. The Consultant shall prepare the draft preliminary site E&S impact assessment reports of each 12 subproject within 4 months starting from the commencement to the review and approval of DGII PIU E&S Specialists. After the comments and feedback given by DGII PIU E&S Specialists, the final preliminary site E&S impact assessment reports of each 12 subproject shall be prepared and delivered within the 6th month after the commnecement.

**ESIA Reports, ESMPs, RPs, SEPs, LMPs, Non-technical summaries, Guide to Land Acquisition (GLACs), Frequently Asked Questions (FAQs), Project Leaflets, Posters, Disclosure video presentation**[[1]](#footnote-2)**, COVID-19 Precautions Instruction Brochures for the PAPs.**

**Draft Versions of the Deliverables.** The draft version of the reports/documents shall be submitted to the review and approval of DGII PIU E&S Specialists within the 10th month at the latest after the commencement.

The Consultant shall submit the full ESIA package of each sub-project found feasible consisting of the below listed materials for the review and approval of DGII PIU E&S team:

* ESIA Reports of the sub-projects,
* RPs of the sub-projects,
* SEPs of the sub-projects,
* ESMPs of the sub-projects,
* Revise the LMP of the RLIP considering the sub-projects,
* Non-technical summaries (NTSs),
* Guide to Land Acquisition (GLACs),
* Frequently Asked Questions (FAQs),
* Project Leaflets to be used during the physical disclosure of the ESIA package,
* Project Posters to be used during physical disclosure of the ESIA package,
* Disclosure video presentations4,
* Covid-19 Precautions Instruction Brochures for the PAPs.

Within the scope of this deliverable, whole ESIA and RP package baseline data etc. shall be submitted by the Consultant, such as,

1. Full asset inventory data and analysis,
2. The valuation report to be prepared within the scope of this asset inventory. This valuation report includes data on shareholder and user status of assets, national acquisition costs and replacement costs and livelihood restoration costs for each asset and related PAPs,
3. Photos from fieldwork and consultations,
4. Implemented survey questionnaires and their database/raw data (i.e. SPSS or etc. data),
5. Reports of focus group meetings with community members, women and vulnerable groups etc.,
6. Attendance list and consultation forms, feedbacks, questions, requests, complaints etc. gathered from stakeholders throughout fieldwork activities,
7. Field forms and notes for each aspect of the ESIA and RPs, and
8. Photos from site drive through and fieldwork activities for each aspect of the ESIA and RPs for each feasible subproject.

Within the scope of this deliverable, EIA process including obtaining exemption documents within the scope of Environmental Impact Assessment Regulation dated 29.07.2022 and Official Gazette numbered 31907 will be managed and followed by the Consultant for each feasible subproject.

**Draft Final Versions of the Deliverables.** This is the approved version of the reports/documents that will be disclosed on the DGII website and to the stakeholders. This version is also open to revision, if there are any comments received during disclosure. In line with the comments and feedback received after the draft versions, the Consultant shall prepare the ***draft final versions*** within the 11th month at the latest after the commencement***.***

The ***draft final version*** of these reports/documents shall be prepared in alignment with the final detailed design andshall be submitted to the review and approval of DGII PIU E&S Specialists.

**Final Versions of the Deliverables.** In line with the comments and feedback received after the draft final versions, the Consultant shall submit the final versions to DGII so that the reports/documents will be disclosed again on the DGII website as the final version within the 12th month after the commencement.

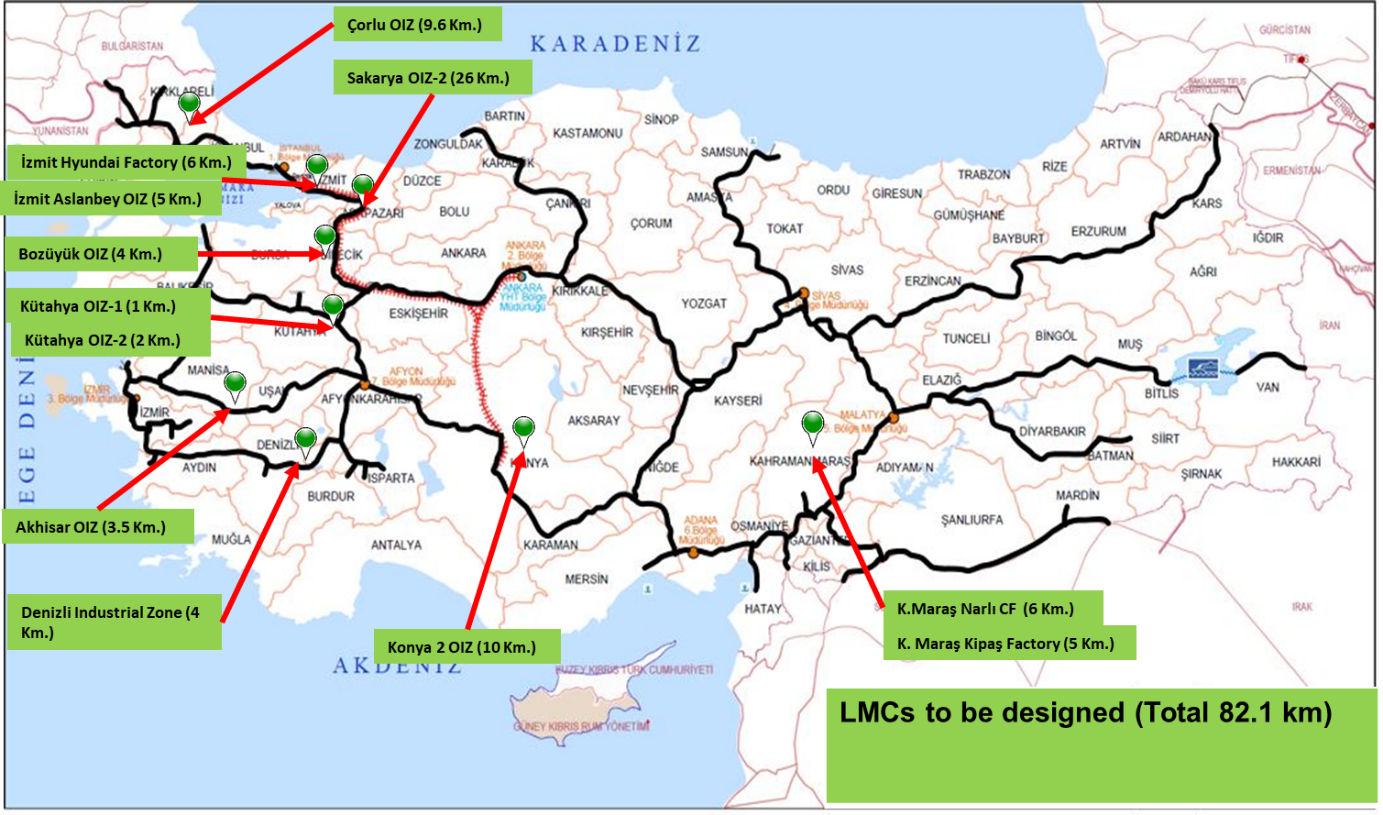
1. Copyright and Use of Documents and Publications

Copyright in all drawings, reports, specifications, bills of quantities, calculations, software, models, source code and object code and other documents provided by the consultant in connection with the assignment shall vest in DGII. The consultant shall indemnify DGII against any claims associated with any action, claim, suit or demand arising out of or in respect of any breach of any intellectual property rights relating to the provision of the consulting services. The consultant may with the prior consent of DGII publish, either alone or in conjunction with others, articles, photographs and other illustrations relating to the project.

1. Professional Standard of Care

In performing the services, the Consultant shall exercise the degree of skill, care, and diligence normally exercised by members of the Consultant’s profession performing services of a similar nature, in accordance with the ethics of the Consultant’s profession.

Annex 1. Preliminary Maps of 12 Pre-identified LMC Sub-projects



Annex 2. Details of the tasks for E&S document package for disclosure

TASK 1: Preliminary Site Environmental and Social Impact Assessment

The objective of the environmental and social impact assessment at the feasibility study stage is to:

* Identify potential negative and positive environmental and social impacts of the different alternatives considered for each subproject;
* Determine how significant – or acceptable – these impacts are by comparing against standards of acceptability criteria;
* Recommend ways of preventing, minimizing, reducing, compensating, managing and monitoring unacceptable impacts;
* Provide technical information and recommendations for selection and design of the best alternative;
* Prepare a set of recommendations to mitigate environmental and social impacts under the preferred alternative. The mitigation measures should be able to reduce or eliminate negative impacts, and can include monitoring and institutional arrangements

The goal ultimately is to promote a harmonious integration of the project components and associated facilities as described in the ESF with the environment and the human needs, following a sustainable development approach. The impact assessment study will be based on the requirements of the WB ESF and its corresponding ESSs as well as relevant World Bank Group Environmental Health and Safety Guidelines (EHSGs) including general and sector specific.

The consultant will be responsible for gathering, reviewing, and analyzing all necessary data and information. Where these are insufficient, the consultant shall make all practical efforts to produce the missing information/data including site sampling, professional estimates and predictions based on the most likely conditions at the project area, reliable information and data from similar situations and conditions, etc.

The consultant shall characterize the extent and quality of available data and describe the key-data gaps and the uncertainties associated with estimates, predictions, and data used from similar situations. The methods of accommodating these gaps and uncertainties should be well stated and presented by the consultant. Topics and areas, which do not need further attention, should be specified with the supporting rationale. When estimated values are used in place of data, the consultant will be required to provide the uncertainty limits associated with these values and perform an appropriate sensitivity analysis.

The consultant will carry out the following sub-tasks at a level of depth appropriate with a Feasibility Study report:

1. **Description of the subproject.** Provide a brief description of the subproject, using maps (at appropriate scale), including main and ancillary facilities; national, provincial, and local roads in the subproject area; identification of sensitive areas, such as protected zones; pre-construction activities, construction activities; planned on-site works, elements, components; locations; general layout; off-site works; etc.
2. **Description of the environment.** The consultant shall assemble, evaluate, and present baseline data on the relevant environmental characteristics of the project area (including any changes that can be anticipated before the commencement of the subproject and expected trends if the proposed works of the subproject are not implemented), including but not limited to the following elements:

* **Physical environment.** geology; topography; soil; climate and meteorology; surface and ground water hydrology; coastal and oceanic parameters; existing water pollution discharges; and receiving water quality.
* **Biological environment.** flora; fauna; sensitive habitats; protected areas and significant natural sites. Special attention must be given to landscape.
* **Socio-economic environment.** Present and projected population; land use; planned and recently completed development activities; employment; sources of income; land tenure; human settlements; community and cultural patterns; health conditions; economic activities (including agriculture, fisheries, commerce, industries, power station, and any economic activity carried out under ecosystem services etc.); infrastructures; archaeological; historic and cultural sites (tangible/intangible); and present and projected traffic.
* **Pollution.** Sources; levels, and impacts of existing air, water, soil, nature, and noise pollution in the study area.
* **Infrastructure.** existing and projected infrastructure, including road and waterway network, landing stages system, public construction, medical and educational centers.

1. **Determination of potential impacts.** The consultant will identify and evaluate all significant potential impacts of each proposed subproject together with the associated facilities (AF) that meet the criteria defined in accordance with the World Bank’s ESF. A clear distinction is to be made between positive and negative impacts, direct and indirect induced impacts, short-term and long-term impacts, single and likely/expected cumulative impacts, and avoidable and unavoidable impacts. Impacts are to be assessed for each alternative and according to each phase (i.e. construction, operation, and maintenance). The consultant must describe impacts quantitatively as much as possible, in terms of environmental costs and benefits, but qualitative data is also acceptable where quantification is not feasible or data is not available and/or cannot be measured. Special attention should be given to:
   1. Likely direct impacts on water, soil, air quality during construction and operation
   2. Induced effects on air, water and soil qualities;
   3. Deterioration or loss of ecologically sensitive areas;
   4. Deterioration or loss of aquatic species, important fishery production areas
   5. Management of materials, wastes and products of dredge during construction;
   6. Loss of used land (from direct and induced impacts);
   7. Impacts on cultural heritage
   8. Temporary traffic plans during construction;
   9. Temporary or permanent access ways to be built;
   10. Social issues including resettlement; and
   11. Broad assessment, at a preliminary stage, of potential cumulative impacts.

In conjunction with the environmental and social analysis of subproject alternatives, the consultant shall carry out a preliminary land acquisition and resettlement analysis of subproject alternatives, to identify land to be temporarily or permanently acquired, a preliminary or order-of-magnitude number of affected persons, their economic status and likely impact of loss of assets estimated cost of compensation. The preliminary list of stakeholders to be impacted or influential to the projects will be identified by the consultant. The “preferred alternative” should include both **environmental and social** considerations to minimize impact and yield a cost-effective and operationally responsive investment.

If data is available, the consultant shall estimate land acquisition and resettlement costs for each alternative, and for the preferred alternative, a budget and implementation schedule for land acquisition and resettlement activities to inform the economic and financial analyses. Data presented on the potential land requirements of the projects should take into consideration both Turkish law and the provisions under the Environmental and Social Standard 5- Land Acquisition, Restrictions on Land Use and Involuntary Resettlement of The World Bank’s ESF while addressing potential land-based impacts.

1. **Analysis of subproject alternatives.** The consultant shall describe briefly the main alternatives considered in the course of developing each proposed subproject (as per the preliminary design work above) and indicate reasons for their rejection or selection. The concept of alternatives extends to siting, design, technology selection, construction techniques and phasing, and operating and maintenance procedures. The consultant shall compare these alternatives in terms of their potential environmental and social impacts; capital and operating costs; and suitability to local needs and requirements.

The consultant shall also review and analyze possibilities for other alternatives, which would achieve the same objectives and yield better environmental and social results. All alternatives should be compared to the without-project alternative. Alternatives are to be considered and analyzed in evaluating and comparing the merits of the sites and alignments. The consultants shall, to the extent possible, quantify, on a preliminary basis, the costs and benefits of each alternative and incorporate the estimated cost of any associated mitigating measures.

1. **Mitigation of environmental and social impacts.** For each subproject and preferred alternative, the consultant shall recommend feasible and cost-effective measures to prevent or reduce significant negative impacts to acceptable levels, and estimate, preliminarily, the likely result and cost of those measures.

TASK 2: Detailed Tasks Required for Environmental and Social Document Package for Disclosure

Once the iterative steps of parallel environmental and social impact assessment site studies with the detailed design studies are completed, the Consultant will prepare the final version of the E&S document package to include ESIA report, ESMP, SEP, the revised LMP including gender-based violence (GBV) management strategies and RP; and in the case of subprojects selected for construction phase, at least one (1) public consultation meeting will be carried. For this purpose, the consultant will conduct all necessary studies, surveys, and measurements to fulfill the requirements within the scope of work.

In the preparation of the E&S document package, including an Environmental and Social Impact Assessment (ESIA) Report, an Environmental and Social Management Plan (ESMP), a Stakeholder Engagement Plan (SEP), a Resettlement Plan (RP) and the revised Labour Management Procedure (LMP), applicable Turkish laws and requirements and the following World Bank documents should be taken into consideration as applicable but not limited to:

* World Bank’s Environmental and Social Framework (ESF) and Borrower’s Guidance Notes;
* World Bank Group’s Environmental, Health, and Safety (EHS) General Guidelines;
* World Bank Group’s Environmental, Health, and Safety Guidelines for Railways;
* World Bank Group’s Environmental, Health, and Safety Guidelines for Toll Roads;
* World Bank Group’s Environmental, Health, and Safety Guidelines for Electric Power Transmission and Distribution;

It should be noted the project will apply the relevant requirements of the EHS Guidelines. When the Turkish requirements differ from the levels and measures presented in the EHS Guidelines, more stringent one (such as the most stringent discharge and emission standards) will be applied in the project specifications as per Environmental and Social Standards (ESSs) of the World Bank’s ESF.

The Consultant will fully comply with the requirements of ESSs in the preparation of ESIAs, ESMPs, and sub-management plans listed above including SEPs, LMPs and RPs, by also considering the scale of the sub-projects. ESSs that will apply for the sub-projects and would be taken into account in E&S assessments are summarized below.

**ESS1 Assessment and Management of Environmental and Social Risks and Impacts**

The potential environmental and social risks are expected to be civil works related environmental disturbances, habitat degradation and land acquisition and resettlement as well as contextual risks such as security to contractors and community safety. E&S risks are anticipated to be limited to the impacts associated with railway construction and operation phases such as: (i) air pollution and noise from construction machinery and quarries and operation phase noise and vibration impacts, (ii) soil disturbance and loss during earthmoving, (iii) tree-cutting and loss of vegetation, pest management, (iv) waste generation and management (including hazardous waste), and (v) construction camp management, (vi) community health and safety (traffic safety, earthquakes, avalanches etc.), (vii) labor and working conditions (including occupational health and safety), (viii) land acquisition induced economic displacement for individuals and businesses, (ix) potential impacts on culturally and naturally protected areas. Associated facilities (including electricity transmission lines, access roads, quarries etc.) will be taken into account in the assessments, as applicable, as well as cumulative impacts.

Social risks and impacts including and beyond land take requirements will also be considered in the E&S assessments, such as impacts on disadvantaged and vulnerable groups, community health and safety risks during construction, labor influx risks to communities (women and girls specifically), any discrimination towards groups in providing access to project benefits, impacts on health, safety, and well-being of workers and risks to any sites with cultural heritage importance.

Indicative outline of ESIA, ESMP are presented in **Annex 3** and **Annex** **4**, respectively.

**ESS2 Labor and Working Conditions**

Project workers include the direct workers, contracted workers and primary supply workers. Primary supply workers will be evaluated under ESA studies, including migrant workers. Türkiye is party to a multitude of ILO conventions (e.g.), which is in line with ESS2 requirements. National Labor Law includes provisions on non-discrimination, freedom of association, minimum employment age and wage, child and forced labor, occupational health and safety and dispute resolution. Risks related to child/forced labor are not foreseen. Although not anticipated in the railway sector, potential risks related to child and forced labor of the primary suppliers (i.e. supply of stone for the rails, steel manufacturers) will be evaluated by the consultant. According to the preliminary gender risk assessment which is assessing risks that may occur due to labor influx to a community (ie. Gender based violence-GBV, risk of harassment etc); both sub-projects are rated ‘low’ in terms of GBV risk. However, social assessments carried out within ESIA will aim to define any risks such as sexual harassments in work place or violation of equal opportunity in the work place. ESIA will set measures that are commensurate to this risk category, such as, mapping GBV service providers in the project-affected and adjoining communities, enhancing the project GRM to integrate specific procedures for GBV, undertaking GBV-sensitive consultations with the project-affected communities, and strengthening contractor obligations to address GBV risks, e.g. adopting a Code of Conduct by the contractors that defines obligations for all their staff regarding policies related to GBV, particularly SEA and workplace sexual harassment.

Additionally, OHS management system will be analyzed by the consultant. For the operation phase OHS issues, MoTI has a separate regulation on railway safety which defines risk management including measures to minimize the risks in railway operation as well as regulates significant accidents. An Occupational Health and Safety Management Plan (for construction and operation phases) will be prepared and included in the ESMP in line with World Bank Group Environment, Health and Safety (EHS) Guidelines.

ESS2 will be applied to the sub-projects and the existing Labor Management Procedure (LMP) of DGII will be revised within this scope.

**ESS3 Resource Efficiency and Pollution Prevention and Management**

The subprojects in question are not considered water intensive. For material supply, the existing and/or nearby quarries will be utilized to the extent possible. Any railway electrification, if any, will be supplied from the closest possible existing ETLs. The major pollution related risks of the planned projects are improper waste and soil management, adverse impacts of construction activities on nearby water bodies, air quality impacts of construction and operation phases. In addition, transport of hazardous wastes during operation phase is a relevant issue. These anticipated impacts will be analyzed and assessed in detail within the scope of the ESIA and the relevant management plans. Water, air quality and soil mitigation and monitoring plans will be part of the ESIA. During operational phase of the subprojects, use of pesticides can be required for railway vegetation clearing in the scope of maintenance works. More information on pest application practices will be evaluated within the scope of the ESIA studies, and if necessary, an integrated pest management plan will be prepared as a part of the ESIA.

**ESS4 Community Health and Safety**

Community related impacts of railways and roads are associated with operational phase noise and air emissions, traffic management and temporary blockades, and labor influx associated disturbance to local communities and labor camps management. The ESIA studies and relevant management plans (including stakeholder engagement) will identify stakeholders and the likely impacts of construction and operational phase community health and safety issues, mitigation measures, monitoring and reporting requirements. With these studies, site specific risks regarding the potential scale and risk due to natural hazards associated with floods, earthquakes, landslides, and avalanches and emergency preparedness and response plans (EPRPs) for both construction and operation phases will be addressed. Further, as appropriate, a separate Community Health and Safety (CHS) plan will also be prepared (as a part of the ESIAs and relevant management plans) to address impacts/risks on: (i) human and livestock; (ii) HIV/AIDS; Gender Based Violence (GBV), sexual exploitation and abuse (SEA) and sexual harassment (SH). The site-specific Traffic Management Plans (TMP) to be prepared will cover management of traffic safety risks, accident prevention, training programs, relevant stakeholder engagement activities and site safety awareness and access restrictions.

It is foreseen that a minimum of 100 workers will be employed in the ‘average’ subproject, and will use the camp site accommodation. The labor influx risks and details will be assessed within the scope of ESIA studies. No utilization of designated security personnel is foreseen for road and railway construction and operation phases, but should also be discussed with the Borrower in preparation of ESIA.

**ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement**

The physical relocation of households and/or businesses may be required under the subprojects. The anticipated physical displacement of any such facility will require a RP to be prepared. The RP will include information on the regulatory framework on resettlement and provide means and actions to bridge the gaps between national law and Bank standards. An entitlement matrix which covers physical displacement actions and compensation measure will be included in the RP along with a corresponding budget. The number and profile of affected land users and amount of land required is not known at this stage but will have to be determined under this task. Other possible components of the subprojects that may require land acquisition are the electrification systems and access roads. The reports will look into multiple land impacts and undertake socio-economic baseline studies with the affected communities and assess the potential vulnerabilities specific to the projects. RPs will use the same outline provided in **Annex 5**.

**ESS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources**

Sub-project sites will be assessed by considering the KBAs, IBA, nationally protected areas, critical habitats, and IUCN lists. The first preference will be avoiding all types of sensitive habitats. The site-specific E&S assessments will include a detailed analysis of flora & fauna species, habitats and the significance of impacts on those. If any of the sub-projects have significant impacts on biodiversity values, a separate biodiversity management plan, including mitigation and monitoring measures will be prepared. Existence of critical natural habitats, natural habitats and modified habitats will be determined (according to the definitions of ESS6).

**ESS7 Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities**

N/A

**ESS8 Cultural Heritage**

Existence of any culturally important resources (tangible and/or intangible cultural heritage) in the subproject affected areas will be evaluated. Consultation process will also identify the existence of intangible cultural heritage which may be affected by the subprojects. The results will be reflected in the ESIA study for the subprojects. A cultural heritage management plan may be established as necessary. The results will reflect the official opinion of the Provincial Directorate of Culture and Tourism.

As the subprojects involve construction works, there is a risk of chance finds during excavation works. Therefore, the subproject specific E&S assessments will need to include chance find procedures at a minimum.

**ESS10 Stakeholder Engagement and Information Disclosure**

The objectives of the Stakeholder Engagement Plan (SEP) is to establish a systematic approach to stakeholder engagement that will help the implementing entity identify key stakeholders – project affected parties and other interested parties – and build and maintain constructive relationships with them, in particular the project-affected parties. The SEP will assess the level of stakeholder interest and support for the project, enable stakeholder views to be taken into account in project design, and environmental and social performance, promote and provide means for inclusive engagement throughout the project life-cycle, ensure that appropriate project information is disclosed to stakeholders in a timely, understandable, accessible, and appropriate manner and format, provide citizens with accessible and inclusive means to raise issues and grievances and enable the project implementing entity to respond to and manage such grievances.

The Consultant will prepare Stakeholder Engagement Plans for both of the sub-projects and conduct required public consultation meetings as described in Objective section. SEPs will include the following key elements (see detailed outline in **Annex 6**):

* Introduction / Project Description
* Regulations and Requirements
* Brief Summary of Previous Stakeholder Engagement Activities
* Stakeholder Identification and Analysis
* Stakeholder Engagement Program
* Roles, Responsibilities, and Resources for Stakeholder Engagement
* Grievance Redress Mechanism
* Monitoring and Reporting
* References

Annexes may include: Sample minutes form/s from interviews and consultations conducted; Grievance Submission Form; Stakeholder Mapping or Diagram; documentation from correspondence or minutes of other consultations conducted, e.g., workshops, roundtables, regional events, etc.

Apart from the requirements of the ESSs described above, the ESIAs and ESMPs that will be prepared will also include the assessment of a cross cutting issue: the gender aspect. As touched upon under ESS2, GBV, SEA/SH related risks in the workplace will be assessed under labor and working conditions whereas other gender based impacts such as vulnerability of women due to social status, or risks imposed by labor influx during construction etc. will be considered under the topics dealt in ESS1, ESS4, ESS5, and ESS10. The Labor Management Procedures that PIU will prepare, will ensure that contractors have code of conduct for its workers in order to promote good behavior in construction site and take preventive measures in case of any violation of the code.

The full disclosure E&S document package will comprise the following;

* ESIA Reports of the sub-projects,
* RPs of the sub-projects,
* SEPs of the sub-projects,
* Non-technical summaries (NTSs),
* Guide to Land Acquisition (GLACs),
* Frequently Asked Questions (FAQs),
* Project Leaflets to be used during the physical disclosure of the ESIA package,
* Project Posters to be used during physical disclosure of the ESIA package,
* Disclosure video presentations[[2]](#footnote-3),
* Covid-19 Precautions Instruction Brochures for the PAPs.

**Annex 3. Indicative Environmental and Social Impact Assessment (ESIA) Outline**

(a) Executive Summary

* Concisely discusses significant findings and recommended actions.

(b) Legal and Institutional Framework[[3]](#footnote-4)

* Analyzes the legal and institutional framework for the project, within which the environmental and social assessment is carried out, including the issues set out in ESS1, paragraph 26.
* Compares the Borrower’s existing environmental and social framework and the ESSs and identify the gaps between them.
* Identifies and assesses the environmental and social requirements of any co-financiers.

(c) Project Description

* Concisely describes the proposed project and its geographic, environmental, social, and temporal context, including any offsite investments that may be required (e.g., dedicated pipelines, access roads, power supply, water supply, housing, and raw material and product storage facilities), as well as the project’s primary suppliers.
* Through consideration of the details of the project, indicates the need for any plan to meet the requirements of ESS 1 through 10.
* Includes a map of sufficient detail, showing the project site and the area that may be affected by the project’s direct, indirect, and cumulative impacts.

(d) Baseline Data

* Sets out in detail the baseline data that is relevant to decisions about project location, design, operation, or mitigation measures. This should include a discussion of the accuracy, reliability, and sources of the data as well as information about dates surrounding project identification, planning and implementation.
* Identifies and estimates the extent and quality of available data, key data gaps, and uncertainties associated with predictions.
* Based on current information, assesses the scope of the area to be studied and describes relevant physical, biological, demographic, and socioeconomic conditions, including any changes anticipated before the project commences.
* Takes into account current and proposed development activities within the project area but not directly connected to the project.

(e) Environmental and Social Risks and Impacts

* Takes into account all relevant environmental and social risks and impacts of the project. This will include the environmental and social risks and impacts specifically identified in ESS2 – 8, and any other environmental and social risks and impacts arising as a consequence of the specific nature and context of the project, including the risks and impacts identified in ESS1, paragraph 28.

(f) Mitigation Measures

* Identifies mitigation measures and significant residual negative impacts that cannot be mitigated and, to the extent possible, assesses the acceptability of those residual negative impacts.
* Identifies differentiated measures so that adverse impacts do not fall disproportionately on the disadvantaged or vulnerable.
* Assesses the feasibility of mitigating the environmental and social impacts; the capital and recurrent costs of proposed mitigation measures, and their suitability under local conditions; the institutional, training, and monitoring requirements for the proposed mitigation measures.
* Specifies issues that do not require further attention, providing the basis for this determination.

(g) Analysis of Alternatives

* Systematically compares feasible alternatives to the proposed project site, technology, design, and operation -including the "without project" situation- in terms of their potential environmental and social impacts.
* Assesses the alternatives’ feasibility of mitigating the environmental and social impacts; the capital and recurrent costs of alternative mitigation measures, and their suitability under local conditions; the institutional, training, and monitoring requirements for the alternative mitigation measures.
* For each of the alternatives, quantifies the environmental and social impacts to the extent possible, and attaches economic values where feasible.

(h) Design Measures

* Sets out the basis for selecting the particular project design proposed and specifies the applicable EHSGs or if the EHSGs are determined to be inapplicable, justifies recommended emission levels and approaches to pollution prevention and abatement that are consistent with GIIP.

(i) Key measures and Actions for the Environmental and Social Commitment Plan (ESCP)

* Summarizes key measures and actions and the timeframe required for the project to meet the requirements of the ESSs. This will be used in developing the Environmental and Social Commitment Plan (ESCP).

(j) Appendices

* List of the individuals or organizations that prepared or contributed to the environmental and social assessment.
* References-setting out the written materials both published and unpublished, that have been used.
* Record of meetings, consultations and surveys with stakeholders, including those with affected people and other interested parties. The record specifies the means of such stakeholder engagement that were used to obtain the views of affected people and other interested parties.
* Tables presenting the relevant data referred to or summarized in the main text.
* List of associated reports or plans.
* Official letters obtained from the relevant Ministries and Provincial Directorates and other public institutions.

**Annex 4. Indicative Environmental and Social Management Plan Outline**

An ESMP consists of the set of mitigation, monitoring, and institutional measures to be taken during implementation and operation of a project to eliminate adverse environmental and social risks and impacts, offset them, or reduce them to acceptable levels. The ESMP also includes the measures and actions needed to implement these measures. The Borrower will (a) identify the set of responses to potentially adverse impacts; (b) determine requirements for ensuring that those responses are made effectively and in a timely manner; and (c) describe the means for meeting those requirements.

ESMPs will be prepared as a stand-alone document. The content of the ESMP will include the following:

(a) Mitigation

* The ESMP identifies measures and actions in accordance with the mitigation hierarchy that reduce potentially adverse environmental and social impacts to acceptable levels. The plan will include compensatory measures, if applicable. Specifically, the ESMP:

1. identifies and summarizes all anticipated adverse environmental and social impacts (including those involving land acquisition, involuntary resettlement workers and community health and safety, vulnerable groups and cultural heritage or);
2. describes -with technical details- each mitigation measure, including the type of impact to which it relates and the conditions under which it is required (e.g., continuously or in the event of contingencies), together with designs, equipment descriptions, and operating procedures, as appropriate;
3. estimates any potential environmental and social impacts of these measures; and
4. takes into account, and is consistent with, other mitigation plans required for the project (e.g., for involuntary resettlement, labor, stakeholder engagement, or cultural heritage).

(b) Monitoring

* The ESMP identifies monitoring objectives and specifies the type of monitoring, with linkages to the impacts assessed in the environmental and social assessment and the mitigation measures described in the ESMP. Specifically, the monitoring section of the ESMP provides (a) a specific description, and technical details, of monitoring measures, including the parameters to be measured, methods to be used, sampling locations, frequency of measurements, detection limits (where appropriate), and definition of thresholds that will signal the need for corrective actions; and (b) monitoring and reporting procedures to (i) ensure early detection of conditions that necessitate particular mitigation measures, and (ii) furnish information on the progress and results of mitigation.

(c) Capacity development and training

* To support timely and effective implementation of environmental and social project components and mitigation measures, the ESMP draws on the environmental and social assessment of the existence, role, and capability of responsible parties on site or at the agency and ministry level.
* Specifically, the ESMP provides a specific description of institutional arrangements, identifying which party is responsible for carrying out the mitigation and monitoring measures (e.g. for operation, supervision, enforcement, monitoring of implementation, remedial action, financing, reporting, and staff training).
* To strengthen environmental and social management capability in the agencies responsible for implementation, the ESMP recommends the establishment or expansion of the parties responsible, the training of staff and any additional measures that may be necessary to support implementation of mitigation measures and any other recommendations of the environmental and social assessment.

(d) Implementation schedule and cost estimates

* For all three aspects (mitigation, monitoring, and capacity development), the ESMP provides (a) an implementation schedule for measures that must be carried out as part of the project, showing phasing and coordination with overall project implementation plans; and (b) the capital and recurrent cost estimates and sources of funds for implementing the ESMP. These figures are also integrated into the total project cost tables.

**Annex 5. Minimum elements of a Resettlement Plan (Please see The World Bank Environmental and Social Framework)**

**The scope of requirements and level of detail of the resettlement plan vary with the magnitude and complexity of resettlement. The plan is based on up-to-date and reliable information about (a) the proposed project and its potential impacts on the displaced persons and other adversely affected groups, (b) appropriate and feasible mitigation measures, and (c) the legal and institutional arrangements required for effective implementation of resettlement measures.**

**- Description of the project**

**- Potential impacts**

**- Objectives**

**- Census survey and baseline socioeconomic studies**

**- Legal framework**

**- Institutional framework**

**- Eligibility**

**- Valuation of and compensation for losses**

**- Community participation**

**- Implementation schedule**

**- Costs and budget**

**- Grievance redress mechanism**

**- Monitoring and evaluation**

**- Arrangements for adaptive management**

**When project circumstances require the physical relocation of residents (or businesses), resettlement plans require additional information and planning elements. Additional requirements include:**

**- Transitional assistance**

**- Site selection, site preparation, and relocation**

**- Housing, infrastructure, and social services**

**- Environmental protection and management**

**- Consultation on relocation arrangements**

**- Integration with host populations**

**If land acquisition or restrictions on use of, or access to, land or natural resources may cause significant economic displacement, arrangements to provide displaced persons with sufficient opportunity to improve, or at least restore, their livelihoods are also incorporated into the resettlement plan, or into a separate livelihoods improvement plan. These include:**

**- Direct land replacement**

**- Loss of access to land or resources**

**- Support for alternative livelihoods**

**- Consideration of economic development opportunities**

**- Transitional support**

Annex 6: Indicative Stakeholder Engagement Plan (SEP) Outline

Acronyms and Abbreviations

1. Introduction / Project Description
   1. Introduction
   2. Project Overview
   3. Purpose and objectives of SEP
2. Regulations and Requirements
   1. Turkish requirements
   2. World Bank requirements
3. Brief Summary of Previous Stakeholder Engagement Activities
   1. *Ex.: Consultations conducted prior to SEP*
   2. *Ex.: Consultations conducted as part of prior project which are relevant to SEP activities in the current project*
   3. *Ex.: Communications with NGOs, etc.*
   4. *Ex.: Lessons from previous projects*
   5. *Ex. Other documented forms of engagement – interviews, workshops, etc. where feedback from relevant stakeholders has been collected.*
4. Stakeholder Identification and Analysis
   1. Project-affected parties
   2. Other interested parties
   3. Disadvantaged/vulnerable individuals or groups
   4. Summary of stakeholder interest in and influence over the project
5. Stakeholder Engagement Program
   1. Purpose and timing of stakeholder engagement program (main goals of the stakeholder engagement program and the envisaged schedule for the various stakeholder engagement activities)
   2. Proposed strategy for information disclosure (what information will be disclosed, in what formats, and the types of methods that will be used to communicate this information to each of the stakeholder groups)
   3. Proposed strategy for consultation (methods that will be used to consult with each of the stakeholder groups)
   4. Proposed strategy to incorporate the view of disadvantaged/vulnerable groups
   5. Timelines (Provide information on timelines for project phases and key decisions. Provide deadlines for comments)
   6. Review of Comments
   7. Future Phases of Project (Explain that people will be kept informed as the project develops, including reporting on project environmental and social performance and implementation of the stakeholder engagement plan and grievance mechanism)
6. Resources and Responsibilities for implementing stakeholder engagement activities
   1. Implementation Arrangements
   2. Timeframe
   3. Roles and Responsibilities
   4. Estimated budget
7. Grievance Redress Mechanism
   1. Grievance process (intake, processing and referral, resolution and response, monitoring and reporting)
   2. GRM contact information
8. Monitoring and Reporting
   1. Monitoring reports in the course of the project (by component, as relevant)
   2. Involvement of stakeholders in monitoring activities
   3. Reporting back to stakeholder groups
9. References

Annexes: records of meetings or consultations, stakeholder mapping analysis or diagrams, detailed budget, grievance submission form, etc.

1. ## “**Projelere Ait Tanıtım Videosu”**

   https://aygm.uab.gov.tr/dunya-bankasi-turkiye-de-demiryolu-lojistigini-gelistirme-projesi [↑](#footnote-ref-2)
2. ## “**Projelere Ait Tanıtım Videosu”**

   https://aygm.uab.gov.tr/dunya-bankasi-turkiye-de-demiryolu-lojistigini-gelistirme-projesi [↑](#footnote-ref-3)
3. This analysis will also include labor, health, and safety laws. [↑](#footnote-ref-4)