



REPUBLIC OF TURKEY
MINISTRY OF TRANSPORT
AND INFRASTRUCTURE



TÜRKİYE EMERGENCY ROAD REHABILITATION AND RECONSTRUCTION PROJECT



ENVIRONMENTAL AND SOCIAL DUE DILIGENCE REPORT
CNR-KGM-TERRRP-ESDD-001
Final

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DOCUMENT REVISION HISTORY

Rev.	Date	Prepared by	Checked by	Approved by	Description
00	March 2024	Müge YENİCELİ Emre ERCİYAS Canan ERKOÇOĞLU Özlem ERSAVAŞ Levent BİLER	Müge YENİCELİ Emre ERCİYAS	Ayşe CANBAZ AKKURT	Draft
01	May 2024	Müge YENİCELİ Emre ERCİYAS Canan ERKOÇOĞLU Özlem ERSAVAŞ Levent BİLER	Müge YENİCELİ Emre ERCİYAS	Ayşe CANBAZ AKKURT	First Revision
02	June 2024	Müge YENİCELİ Emre ERCİYAS Canan ERKOÇOĞLU Özlem ERSAVAŞ Levent BİLER	Müge YENİCELİ Emre ERCİYAS	Ayşe CANBAZ AKKURT	Second Revision
03	July 2024	Müge YENİCELİ Emre ERCİYAS Canan ERKOÇOĞLU Özlem ERSAVAŞ Levent BİLER	Müge YENİCELİ Emre ERCİYAS	Ayşe CANBAZ AKKURT	Third Revision
04	July 2024	Müge YENİCELİ Emre ERCİYAS Canan ERKOÇOĞLU Özlem ERSAVAŞ Levent BİLER	Müge YENİCELİ Emre ERCİYAS	Ayşe CANBAZ AKKURT	Fourth Revision
F	July 2024	Müge YENİCELİ Emre ERCİYAS Canan ERKOÇOĞLU Özlem ERSAVAŞ Levent BİLER	Müge YENİCELİ Emre ERCİYAS	Ayşe CANBAZ AKKURT	Final



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ABBREVIATIONS AND DEFINITIONS

AIIB	Asian Infrastructure Investment Bank
AVT	Anti-Vandalism Tubes
CCTV	Closed Circuit Television System
CHPRBD	Cultural Heritage Preservation Regional Board Directorate
CHS	Community Health and Safety
ÇINAR	Çınar Engineering Consultancy Inc.
CLO	Community Liaison Officer
DEHA	Deha Altyapı A.Ş. (Contractor Company)
DSM	Deep Soil Mixing
E&S	Environmental and Social
EÇBS	Integrated Environmental Information System
EHS	Environmental, Health and Safety
EIA	Environmental Impact Assessment
ENKON	Enkon İnşaat A.Ş. (Contractor Company)
ESAP	Environmental and Social Action Plan
ESDD	Environmental and Social Due Diligence
ESEL	Environmental and Social Exclusion List
ESF	Environmental and Social Framework
ESHS	Environmental, Social, Health and Safety
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
ESMS	Environmental and Social Management System
ESP	Environmental and Social Policy
EU	European Union
FEZA	Feza Taahhüt A.Ş. (Contractor Company)
FWT	Formwork Tubes
GBVH	Gender Based Violence and Harassment
ILM	Incremental Launch Method
ILO	International Labor Organization
INA	Important Nature Area
KBA	Key Biodiversity Area
KGM	General Directorate of Highways
LAP	Land Acquisition Plan
LARP	Land Acquisition and Resettlement Plan
LRP	Livelihood Restoration Plan
MKE	Machinery and Chemical Industry
MoEUCC	Ministry of Environment, Urbanization and Climate Change
MoTI	Ministry of Transport and Infrastructure
N/A	Not Applicable
OHS	Occupational Health and Safety
OIZ	Organized Industrial Zone
PIF	Project Introduction File
PPE	Personal Protective Equipment



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RP	Resettlement Plan
SEA/SH	Sexual Exploitation and Abuse/Sexual Harassment
SEP	Stakeholder Engagement Plan
SNH	SNH İnşaat A.Ş. (Contractor Company)
TAG Highway	Tarsus Adana Gaziantep Highway
The Project	Türkiye Emergency Road Rehabilitation and Reconstruction Project
WBG	World Bank Group



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1 INTRODUCTION

The Türkiye Emergency Road Rehabilitation and Reconstruction Project (the Project) has been planned to be prepared and implemented by General Directorate of Highways (KGM) under the Ministry of Transport and Infrastructure (MoTI) to ensure efficient execution and compliance with national regulations and Asian Infrastructure Investment Bank (AIIB) policies.

The Project will rehabilitate and reconstruct roads, tunnels, and bridges damaged by the February 2023 earthquakes that occurred in the southeast of Türkiye. The Project activities will be implemented through five (5) subprojects which will entail rehabilitation and enhancement of transportation infrastructure to meet required safety and capacity standards, as well as integration of climate-resilient measures to mitigate and withstand the impacts of seismic events in the future. The subprojects are located within the jurisdictions of the 5th Regional Directorate of Highways (Mersin) and 8th Regional Directorate of Highways (Elazığ).

The phased approach on environmental and social (E&S) assessment will be utilized for the proposed Project given the urgent need of assistance because of the earthquakes. In this context, a contract was signed between 5th Regional Directorate of Highways and Çınar Engineering Consultancy Inc. (ÇINAR) on 14.02.2024 for the preparation of Environmental and Social Documentation in accordance with the AIIB standards and national legislation.

1.1 Scope

This E&S due diligence (ESDD) has been conducted for the sub-projects within the scope of the Project, where the construction works are ongoing, to verify the compliance of ES issues with national legislation and AIIB's ESP, and identify any possible legacy ES issues and related unsolved grievances and corrective actions to bring the Project into compliance with national legislation and AIIB's ESP.

This report assesses the status of each sub-project with respect to documentation, procurement of contractors, compliance with both AIIB Environmental and Social Framework¹ (ESF) and national legislation requirements, findings and recommendations with respect to environmental and social issues.

1.2 Methodology

The approach towards preparation of the ESDD report includes the following steps:

- Understanding the project components, progress and current status,
- Identifying of the applicable national legislation and international standards for the project,
- Reviewing the existing Environmental, Social, Health and Safety (ESHS) documentation regarding the project,
- Conducting site visit observations,
- Reviewing the results of the interviews held with the internal and external stakeholders,
- Performing a Gap Analysis to compare national requirements with AIIB requirements that need to be complied with,
- Identifying the actions required to be taken for full compliance,
- Identification of the responsible party or parties for the required actions, and
- Estimating a time schedule for the required actions.

¹ <https://www.aiib.org/en/policies-strategies/framework-agreements/environmental-social-framework.html>



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Media Search

Media news control was carried out for the general KGM activities, for the Project, for KGM 5th Region and KGM 8th Region.

The following topics were identified among the prominent media news headlines;

After the earthquakes, a controlled demolition of the Highways 53rd Branch Chief Office building, which was damaged in Hatay, was carried out (<https://www.aa.com.tr/tr/asrin-felaketi/hatayda-depremlerde-hasar-alan-karayollari-53-subesi-chief-building-controlled-demolished/3081429>).

News and information about the trainings carried out jointly by AFAD and KGM have been disclosed to the public (<https://van.afad.gov.tr/karayollari-11-bolge-mdurlugu-personellerime-afet-farkindalik-ve-yangin-farkindalik-egitimi-verilmistir>).

KGM's post-earthquake road rehabilitation works continue (<https://www.haber46.com.tr/kahramanmaras-depremlerini-hasar-alan-yollar-icin-12-milyar-liralik-ek-butce-ayrildi>) and KGM's 's collaborations and meetings with relevant institutions continue.

During the project-specific scans, the following findings were found regarding the social and environmental impacts of the Project:

It has been observed that the effects on agricultural activities, which were identified and reported in stakeholder consultations conducted during the Project's field studies and interviews with local people, were reflected in media news. It prevented the ongoing construction activities in Demirköprü District on the Antakya-Reyhanlı Highway from passing to agricultural lands, and the Project provided an alternative way to solve this problem, which was also revealed in the ESDD report. Due to the inadequacy of the culverts built under this alternative road, floods occurred on the agricultural lands of farmers in the region. In this regard, news of farmers being victimized appeared in the media (<https://www.hataysoz.com/gundem/karayollarindan-ciftcilere-darbe>).

In general, in the first half of 2023, damage to the roads after the earthquake, roads and routes closed to traffic due to the earthquake constitute almost all of the media news about KGM and highways.

As of the second half of 2023, news about the repairs made on highways and the roads that have been put into service and repaired are predominant.

During the media searches, it was observed that complaints such as the continuation of the highways construction working hours in the evening hours, calculation errors regarding automatic pass system and fast pass system and the lack of directional signs on the roads were reflected in the media.

Site Visits

The site visits were conducted by ÇINAR's experts in March 2024 with the participation of the Environmental Experts, an Occupational Health and Safety Expert, a Biodiversity Expert and Social Experts. All sub-project construction areas and the associated facilities were visited respectively, and the site visit observations and findings are presented in Section 4.



2 REGULATORY FRAMEWORK

2.1 National Legislation

Turkish Environmental Law No. 2872, which was issued in the Official Gazette No. 18132 on August 11, 1983, describes the fundamental principles required to protect the environment in accordance with sustainable development and sustainable environmental goals. The Environmental Law provides a legal framework for the development of environmental regulations in accordance with national and international standards.

In addition to Environmental Law and associated regulations, several laws in relation with environmental protection, pollution prevention and control, the human rights and safety are listed below.

Table 1. Highlighted Laws Covered by National Legislation

Law	Law Number
Agricultural Reform Law on Land Rearrangement in Irrigated Areas	3083
Electricity Market Law	6446
Energy Efficiency Law	5627
Expropriation Law	2942
Forestry Law	6831
Groundwater Law	167
Highway Traffic Law	2918
Labor Law	4857
Law on Conservation of Cultural and Natural Assets	2863
Law on Measures to be taken and Aids to be provided for the Disasters Effective in Public Life	7269
Law on Right to Information	4982
Law on Soil Conservation and Land Use	5403
Mining Law	3213
Municipality Law	5393
National Parks Law	2873
Occupational Health and Safety Law	6331
Pasture Law	4342
Public Health Law	1593
Resettlement Law	5543

Environmental, social and OHS-related regulations that are valid for the project within the above-mentioned laws are listed in Table 2. The details of relevance of the respective legislation with the project are provided in ESIA – Chapter 2 of the project.

Table 2. Prominent Regulations Covered by National Legislation

Regulation Name	Official Gazette Date	Issue
Environmental Permits and Licenses (General)		
Regulation on Environmental Impact Assessment	29.07.2022	31907
Regulation on Environmental Permits and Licenses	10.09.2014	29115
Regulation on Environmental Audit	12.06.2021	31509
Regulation Concerning Environmental Management Services	01.11.2022	32000
Climate Change		



Regulation Name	Official Gazette Date	Issue
Regulation on Minimization of Ozone Depleting Substances	07.04.2017	30031
Regulation on Monitoring of Greenhouse Gas Emissions	17.05.2014	29003
Land Use and Soils		
Regulation on Control of Soil Pollution and Point Source Contaminated Sites	08.06.2010	27605
Regulation on Protection, Use and Planning of Agricultural Lands	09.12.2017	30265
Regulation on the implementation of articles 17 and 18 of the Forest Law No. 6831	30.11.2021	31675
Regulation Concerning the rehabilitation of the Lands Disturbed by Mining Activities	23.01.2010	27471
Regulation on Pastures	31.07.1998	23419
Water		
Regulation on Surface Water Quality	30.11.2012	28483
Regulation on Water Pollution Control	31.12.2004	25687
Regulation Concerned Water Intended for Human Consumption	17.02.2005	25730
Regulation Concerning Protection of Groundwater against Pollution and Deterioration	07.04.2012	28257
Monitoring of Surface and Groundwater Regulation	11.02.2014	28910
Regulation on Control of Pollution Caused by Hazardous Substances in and around the Water Bodies.	26.11.2005	26005
Communique on Sampling of Surface Water, Ground Water and Sediment and Biological Sampling	21.02.2015	29274
Waste Management		
Regulation on Control of Packaging Wastes	26.06.2021	31523
Regulation on Waste Management	02.04.2015	29314
Regulation on the Control of Excavation Soil, Construction and Demolition Wastes	18.03.2004	25406
Regulation on the Control of Medical Wastes	25.01.2017	29959
Regulation on the Management of Waste Oils	21.12.2019	30985
Regulation on the Control of Vegetable Waste Oils	06.06.2015	29378
Regulation on the Control of Waste Batteries and Accumulators	31.08.2004	25569
Regulation on the Control of End-of-Life Tires	25.11.2006	26357
Regulation on Mining Wastes	15.07.2015	29417
Regulation on the Landfill of Wastes	26.03.2010	27533
Regulation on the Control of Waste Electrical and Electronic Equipment	26.12.2022	32055
Regulation on the Control of End-of-Life Vehicles	30.12.2009	27448
Regulation on Zero Waste	12.07.2019	30829
Regulation on the Control of Collecting Wastes from the Vessels	26.12.2004	25682
Regulation on Recovery of Some Non-Hazardous Wastes	17.11.2011	27967
Air Quality and Greenhouse Gas Emissions		
Regulation on the Control of Industrial Air Pollution	03.07.2009	27277
Regulation on the Assessment and Management of Air Quality	06.06.2008	26898
Regulation on the Control of Exhaust Gas Emissions	11.03.2017	30004
Regulation on Monitoring of Greenhouse Gas Emissions	17.05.2014	29003
Regulation on Increasing Efficiency in the Use of Energy Resources and Energy	27.10.2011	28097
Management of Chemicals		
Regulation on Classification, Labelling and Package of Materials and Mixtures	11.12.2013	28848
Regulation on Safety Information Forms on Hazardous Substances and Mixtures	13.12.2014	29204



Regulation Name	Official Gazette Date	Issue
Regulation Regarding Prevention of Major Industrial Accidents and Mitigation of Their Effects ("BEKRA")	02.03.2019	30702
Regulation Regarding Transport of Hazardous Materials on Highways	18.06.2022	31870
Community and Occupational Health and Safety and Labor and Working Conditions		
Regulation on Occupational Health and Safety Risk Assessment	29.12.2012	28512
Regulation on Occupational Health and Safety Services	29.12.2012	28512
Regulation on Duties, Authority, Responsibilities and Trainings of Occupational Health and Safety Specialists	29.12.2012	28512
Regulation on Procedures and Principles of Occupational Health and Safety Training of Employees	15.05.2013	28648
Regulation on the Occupational Health and Safety Committees	18.01.2013	28532
Regulation on the Health and Safety Measures to be taken in Workplace Buildings and Additions	17.07.2013	28710
Regulation on Protection of Buildings from Fire	19.12.2007	26735
Regulation on the Emergency Cases in Workplaces	18.06.2013	28681
First Aid Regulation	29.07.2015	29429
Regulation on Protection of Workers from Dangers of Explosive Environments	30.04.2013	28633
Communique on Hazard Classes List related to Occupational Health and Safety	26.12.2012	28509
Regulation Concerning the Protection of Workers from Risks Associated with Noise	28.07.2013	28721
Regulation Concerning the Protection of Workers from Risks Associated with Vibration	22.08.2013	28743
Regulation on Health and Safety Conditions in the Use of Work Equipment	25.04.2013	28628
Regulation on Occupational Health and Safety on Construction Works	05.10.2013	28786
Regulation on Health and Safety Regarding Temporary and Time Limited Works	23.08.2013	28744
Regulation on Health and Safety Precautions Regarding Working with Chemicals	12.08.2013	28733
Regulation on Health and Safety Signs	11.09.2013	28762
Regulation on Dust Management	05.11.2013	28812
Regulation on Safety Information Forms Regarding Hazardous Materials and Mixtures	13.12.2014	29204
Regulation on Personal Protection Equipment	01.05.2019	30761
Regulation on Usage of Personal Protective Equipment in Workplaces	02.07.2013	28695
Regulation on Vocational Training of the Employees Working in Dangerous and Highly Dangerous Workplaces	13.07.2013	28706
Regulation on the Provisions of Occupational Health and Safety Training of Employees	29.12.2012	28512
Regulation on the Control of Polychlorinated Biphenyl and Polychlorinated Terphenyls	27.12.2007	26739
Regulation on Transportation of Explosives via Highways	24.04.2019	30754
Act on the Procedures and Principles on Manufacture, Import, Transportation, Storing, Sales, Usage, Disposal and Control of Explosive Materials, Hunting Equipment and Similar Exempted from Monopoly	29.09.1987	19589
Regulation on the Implementation of Law Concerning Private Security Services	07.10.2004	25606
Noise		
Regulation on Environmental Noise Control	30.11.2022	32029
Regulation on Environmental Noise Emission Caused by Equipment Used Outdoors	30.12.2006	26392
Social		
Regulation on Implementation of Resettlement Law	02.12.2007	26718
Regulation on the Implementation of Law Concerning Private Security Services	07.10.2004	25606
Biodiversity		



Regulation Name	Official Gazette Date	Issue
Regulation on the Protection of Wetlands	04.04.2014	28962
Regulation on Wildlife Preservation and Wildlife Development Areas	08.11.2004	25637
Others		
Regulation on Traffic in Highway	18.07.1997	23053

2.2 International Standards

2.2.1 AIIB's Environmental and Social Framework

AIIB is a multilateral financial institution, whose purpose, as set out in its Articles of Agreement (Articles), is to: (a) foster sustainable economic development, create wealth and improve infrastructure connectivity in Asia, by investing in infrastructure and other productive sectors; and (b) promote regional cooperation and partnership in addressing development challenges by working in close collaboration with other multilateral and bilateral development institutions.

The Articles require the AIIB's operations to comply with policies addressing environmental and social impacts, among other policies. The Environmental and Social Framework (ESF) incorporates AIIB's policy addressing environmental and social impacts. The ESF amended in November 2022, replaces the May 2021 ESF and entered into effect on November 22, 2022.

The Environmental and Social Policy (ESP) of AIIB comprises mandatory environmental and social requirements for each Project and is accompanied by (a) three associated mandatory Environmental and Social Standards (ESSs) setting out requirements applicable to Clients on; and (b) an Environmental and Social Exclusion List (ESEL) which sets forth activities and items that are excluded from financing by AIIB and that the Client is required to exclude from the Project.

The ESSs cover the following:

- ESS 1: Environmental and Social Assessment and Management,
- ESS 2: Involuntary Resettlement, and
- ESS 3: Indigenous Peoples.

ESS 1 (Environmental and Social Assessment and Management): When the Bank, AIIB, has determined, in consultation with the Client, that the Project is likely to have adverse environmental and/or social risks and impacts, it requires the Client to conduct an environmental and social assessment relating to these risks and impacts, and design appropriate measures to avoid, minimize, mitigate, offset or compensate for them, all as required under ESS 1.

The objective of ESS 1 is to achieve the environmental and social soundness and sustainability of Projects and to support the integration of environmental and social considerations into the Project decision-making process and implementation.

ESS 1 applies if the Project is likely to have adverse environmental risks and impacts or social risks and impacts (or both). The scope of the environmental and social assessment and management measures are proportional to the risks and impacts of the Project. ESS 1 provides both for quality environmental and social assessment and for management of risks and impacts through effective mitigation and monitoring measures during the course of Project implementation.

ESS 2 (Involuntary Resettlement): If the Project is likely to involve Involuntary Resettlement the Bank requires the Client to address this in the social section of the assessment report, complemented by more in-depth coverage, as required under ESS 2. The Client covers this in a plan or framework, as applicable, which may be called a land acquisition and resettlement



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plan, land acquisition plan or resettlement plan (LARP/LAP/RP) or, in the case of a framework, a land acquisition and resettlement planning framework, land acquisition planning framework or resettlement planning framework (LARPF/LAPF/RPF). This plan or framework is provided to the Bank as a freestanding document, an annex to the assessment report, or incorporated as a recognizable element of the report.

The objectives of ESS 2 are: (a) to avoid Involuntary Resettlement wherever feasible; (b) to minimize Involuntary Resettlement by exploring Project alternatives; (c) where avoidance of Involuntary Resettlement is not feasible, to enhance, or at least restore, the livelihoods of all displaced persons in real terms relative to pre-Project levels and to provide resettlement assistance; (d) to understand and address gender-related risks and differential impacts of Involuntary Resettlement; (e) to improve the overall socioeconomic status of the displaced poor and other vulnerable groups; and (f) to conceive and implement resettlement activities as sustainable development programs, providing sufficient resources to enable the persons displaced by the Project to share in Project benefits.

ESS 2 applies if the Project would or may involve Involuntary Resettlement (including Involuntary Resettlement of the past or foreseeable future that the Bank determines is directly linked to the Project).

ESS 3 (Indigenous Peoples): If the Project would involve Indigenous Peoples the Bank requires the Client to address this in the social section of the assessment report, complemented by more in-depth coverage, as required under ESS 3. The Client covers impacts on Indigenous Peoples in an Indigenous Peoples Plan or Indigenous Peoples planning framework, which is provided to the Bank as a freestanding document, an annex to the assessment report, or incorporated as a recognizable element of the report.

ESS 3 is not applicable for the Projects in Türkiye, since there is no communities or groups of people which can be identified/defined as indigenous peoples in the country.

2.2.2 Other E&S Guidelines

The following E&S Guidelines are also applicable to the project as reference technical documents for determining performance levels and measures to manage the hazards and risks related to environmental, social and OHS issues established for the project:

- World Bank Group (WBG) General Environmental, Health and Safety (EHS) Guidelines,
- WBG EHS Guidelines for Construction Material Extraction (2007)

2.2.3 International Environmental and Social Conventions

Türkiye has joined several conventions and protocols aimed at managing global and regional environmental resources, biodiversity, and cultural heritage. These agreements, which encompass environmental, biodiversity, cultural heritage, and labor-related matters, are outlined in Table 3. Türkiye's involvement in these global treaties will be considered when formulating suitable management strategies for safeguarding environment, biodiversity archaeology, cultural heritage and labor, health and safety.



Table 3. International Agreements, Conventions and Protocols

International Agreements, Conventions and Protocols	Entry Into Force Date	Date of Approval/ Entry into Force by Türkiye
Environmental Protection		
The Convention for the Protection of Marine Environment and the Coastal Region of the Mediterranean (Barcelona Convention)	1978	2002
The International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage (FUND)	18.12.1971	18.12.1971
International Convention on Civil Liability for Oil Pollution Damage	29.11.1969	29.11.1976
Convention for the Protection of the Black Sea Against Pollution (Bucharest) and its protocols including the Protocol for the Protection of Biological and Landscape Diversity in the Black Sea	21.04.1992	14.12.1992
Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal	22.03.1989	28.12.1993
Stockholm Convention on Persistent Organic Pollutant (POPs)	22.05.2001	23.05.2001
Air Quality and Climate Change		
Convention on Long Range Transboundary Air Pollution (CLRTAP)	13.11.1979	23.03.1983
Vienna Convention for the Protection of the Ozone Layer	22.03.1985	08.09.1990
Montreal Protocol on Substances Depleting the Ozone Layer (1990)	16.09.1987	19.01.1991
United Nations Framework Convention on Climate Change (UNFCCC)	09.05.1992	24.05.2004
Kyoto Protocol	11.12.1997	26.08.2009
United Nations Convention to Combat Desertification in Countries Experiencing Serious Drought and/or Desertification, particularly in Africa	26.12.1996	31.08.1998
Biodiversity		
International Convention on Wetlands of International Importance especially as Waterfowl Habitat (RAMSAR Convention)	02.02.1971	13.11.1994
Convention for the Conservation of European Wildlife and Natural Habitats (BERN)	19.09.1979	01.09.1984
UN Convention on Biological Diversity and the Cartagena Protocol on Biosafety	24.05.2000	17.06.2003
Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)	01.07.1975	27.12.2001
Mediterranean Sea Protocol Concerning Specially Protected Areas and Biodiversity (1988)	23.03.1986	29.09.1986
Convention on the Conservation of Migratory Species of Wild Animals (CMS)	23.06.1979	01.03.1982
Agreement on the Conservation of Populations of European Bats (EUROBATS)	04.12.1991	04.10.1994
Convention to Combat Desertification (CCD)	14.10.1994	14.10.1994
Convention (International Treaty) on Plant Genetic Resources for Food and Agriculture	03.11.2001	17.07.2006
European Landscape Convention	20.10.2000	10.06.2003
Cultural Heritage		
Convention on the Protection of the World Cultural and Natural Heritage	16.11.1972	14.02.1983
European Charter of the Architectural Heritage	26.09.1975	12.03.1985
European Convention on the Protection of the Archaeological Heritage	06.05.1969	29.11.1999
European Cultural Convention	19.12.1954	10.10.1957
Convention for the Protection of the Architectural Heritage of Europe	03.10.1985	16.05.1994

International Agreements, Conventions and Protocols	Entry Into Force Date	Date of Approval/ Entry into Force by Türkiye
Convention for the Protection of Human Rights and Fundamental Freedoms (ETS No. 5) (the European Convention on Human Rights) and its protocols	04.11.1950	04.11.1950
UNESCO Convention on the Means of Prohibiting and Preventing the Illicit Import, Export and Transfer of Ownership of Cultural Property	14.11.1970	25.12.1979
UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage	17.11.2003	17.10.2006
UNESCO Convention on the Protection and Promotion of the Diversity of Cultural Expressions	20.10.2005	20.10.2005
UNESCO Convention concerning the Protection of the World Cultural and Natural Heritage	16.11.1972	16.01.1983
Labor, Safety and Health		
ILO Safety and Health in Construction Convention	20.06.1988*	11.01.1991
ILO Occupational Safety and Health Convention	22.06.1981*	22.04.2005
ILO Worst Forms of Child Labor Convention	17.06.1999*	17.01.2001
ILO Forced Labor Convention	28.06.1930*	23.06.1998
ILO Minimum Age Convention	26.06.1973*	26.06.1997
ILO Freedom of Association and Protection of the Right to Organize Convention	09.07.1948*	03.07.1951
ILO Worker's Representatives Convention	23.06.1971*	12.07.1993
ILO Human Resources Development Convention	24.06.1975*	29.09.1977
ILO Employment Policy Convention	09.06.1964*	27.11.1967
ILO Social Security Convention	28.06.1952*	29.01.1975
ILO Equal Remuneration Convention	29.06.1951*	19.07.1967
ILO Discrimination (Employment and Occupation) Convention	25.06.1958*	19.07.1967
ILO Abolition of Forced Labor Convention	25.06.1957*	29.03.1961
ILO Right to Organize and Collective Bargaining Convention	01.06.1949*	23.01.1952

**The dates of entry into force are provided.*



2.3 Gap Analysis

Major gaps between national legislation and AIIB ESSs together with the instruments prepared and/or additional studies conducted to fill/address the gaps identified for the project are summarized in Table 4.

Table 4. Comparison Between National Legislation and AIIB ESSs

ESS	Scope / Aim of the ESS	Gaps between the Turkish Legislation and AIIB ESSs	E&S instruments/additional studies to be performed for addressing the gaps identified for the project
ESS1 Environmental and Social Assessment and Management	Environmental and Social Standard (ESS) 1 applies if the Project is likely to have adverse environmental risks and impacts or social risks and impacts (or both). The scope of the environmental and social assessment and management measures are proportional to the risks and impacts of the Project. ESS 1 provides both for quality environmental and social assessment and for management of risks and impacts through effective mitigation and monitoring	<p>The main gaps between the national EIA and the ESS1 are as follows:</p> <ul style="list-style-type: none"> The process of integrating social impact assessment into the Turkish EIA has started in recent years. Especially with the EIA Regulation published in the Official Gazette dated 29.07.2022 and numbered 31907, social impact assessment has started to be included in Turkish EIA. Turkish EIA process is currently open for improvement but requires a fully integrated process to reach ESS1. In addition, the requirement to address cumulative impacts of other concurrent other projects is limited in Turkish EIA legislation. Under ESS1, cumulative impact assessment is in a more important position. Additionally, where the project involves specifically identified physical elements, aspects, and (associated) facilities that are likely to generate impacts, environmental and social risks and impacts have to be identified in the context of the project's area of influence under ESS1. The preparation of Environmental and Social Management Plans together with the Stakeholder Engagement Plan (during the EIA application process) has been included in Turkish legislation with the latest regulation. However, the management plans prepared are less comprehensive than the ones required under ESS1. In addition, ESS1 supports the use of an effective grievance redress mechanism that can facilitate early indication and prompt remediation for those who believe that they have been harmed by a client's actions. Supply chain management is also highlighted in ESS1. <p>Labor and Working Conditions</p> <p>Turkish national laws and regulations are generally close to the requirements of ESS1 in labor and working conditions. The grievance redress mechanism for workers is the most important gap between the national legislative requirements and ESS1. There are no specific requirements for the establishment and implementation of a Grievance Redress Mechanism in Turkish national legislation.</p>	<p>According to national EIA Regulation projects are classified into two categories as Annex I and Annex II projects, which is mainly based on magnitude or capacity of planned investment, rather than associated risks and impacts. Therefore, Projects are screened with respect to Annex I and Annex II of the EIA Regulation. However, in ESS1, projects are categorized into one of four categories as Category A, Category B, Category C or Category FI by taking into consideration the type, nature, location, sensitivity and scale of the Project, proportional to the significance of the Project's potential environmental and social risks and impacts. Projects are screened on a case-by-case basis.</p> <p>In this respect, this project (sub-projects) (except related facilities such as concrete plant, quarries, etc.) is exempt from the national EIA Regulation, but it is categorized as Category B under the AIIB's ESP.</p> <p>In order to address/bridge this gap, ESIA report (along with ESDD report and ESMP, specific for five sub-project, including mitigation measures and monitoring requirements for each E&S issues in the subjects of land use and soil; noise and vibration; air quality; water resources, water quality and wastewater; resource and waste; cultural heritage; biodiversity; social issues; labor and working conditions; occupational health and safety; community health, safety and security; hazardous and chemical materials) is being prepared. Besides, the relevant requirements of the WBG EHS Guidelines will be applied to the Project in accordance with the ESS1. In cases where the Turkish requirements differ from the</p>

ESS	Scope / Aim of the ESS	Gaps between the Turkish Legislation and AIIB ESSs	E&S instruments/additional studies to be performed for addressing the gaps identified for the project
	measures during the course of Project implementation.	<p>Türkiye is party to a multitude of ILO conventions, including but not limited to conventions on equal treatment of employees, gender equality, child labor, forced labor, Occupational Health and Safety (OHS), right of association and minimum wage. Accordingly, the current Turkish Labor Law (No.4857) is to large extent consistent with international requirements.</p> <p>At the project level, in order to ensure that camp site arrangements, accommodation and working conditions meet ILO standards, national studies are carried out, including gender equality and anti-discrimination, Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH), child labor, forced labor, labor rights and freedom of association.</p> <p><u>Resource Efficiency and Pollution Prevention</u></p> <p>Most Turkish national laws and regulations are in line with European Union (EU) directives. There is no major gap between ESS1 and Turkish national legislation. National EIA process is quite successful in identifying impacts but does not require provision of a detailed overview of mitigation methods and monitoring. However, within the scope of ESS1, the client needs to consider alternatives and implement technically and financially feasible and cost-effective options to reduce project related GHG emissions during the design and operation of the project.</p> <p>Sub-management plans and monitoring programs have started to be integrated into Turkish legislation with the recent EIA Regulation. Furthermore, there are no major gaps between the impacts and mitigation methods in the national legislation and ESS1 on major environmental issues such as waste, air pollution, water resources, wastewater, noise level. On the other hand, ESS1 requires application of pollution prevention and control technologies and practices under the Project consistent with international good practice, as reflected in internationally recognized standards, such as the World Bank Group (WBG) Environmental, Health and Safety (EHS) Guidelines.</p> <p><u>Community Health and Safety</u></p> <p>In Turkish national legislation, the general principles of community health, safety and security are fragmented under different regulations. The general principles are like ESS1. However, social issues such as labor influx, gender impacts and violence-based risks are more prominent under the ESS1 along with cumulative assessment and communication mechanism with external stakeholders.</p> <p><u>Biodiversity Management</u></p> <p>There is no gap in terms of policy level but internationally recognized areas of high biodiversity value including key biodiversity areas, important nature areas, important bird areas and important plant areas are not fully assessed/considered under national legislation.</p>	<p>levels and measures presented in the WBG EHS Guidelines, the more stringent one (such as the most stringent discharge and emission standards) will be applied in the project specifications.</p> <p>In terms of biodiversity management, biodiversity assessments made within the scope of the ESIA will cover internationally recognized areas of high biodiversity value and habitat assessment and biodiversity management plan (BMP) will be prepared, when necessary, in this respect.</p> <p>In terms of cultural management, intangible cultural heritage will be considered within the scope of the ESIA and Chance Find Procedure will be given as an Appendix in each ESMP document. KGM website includes "Complaint Notification Form for Real Persons" and "Complaint Notification Form for Legal Entities" (https://www.kgm.gov.tr/Sayfalar/KGM/SiteTr/Root/SikayetGeriBildirim.aspx).</p> <p>SEP (including GRM) will be prepared to develop a gender-sensitive grievance redress mechanism procedure that includes these and also includes employee complaints, where anonymous complaints can be reported, and to eliminate/close this gap. KGM does not have a stakeholder engagement plan and GRM that will meet the project needs and AIIB standards. SEP/GRM will also be disclosed to stakeholders within the scope of AIIB requirements.</p> <p>In terms of gender equality, site accommodation and working conditions were evaluated with a gender sensitive approach. According to ESDD evaluations regarding accommodation and working conditions, the Project does not cause a discriminatory or negative impact in terms of gender and does not include conditions that will lead to gender inequality. However, in order to improve the project management system in this direction, a gender sensitive approach must be included in all the requirements and the system to be developed. Moreover, Gender Action Plan will be prepared and implemented in</p>

ESS	Scope / Aim of the ESS	Gaps between the Turkish Legislation and AIIB ESSs	E&S instruments/additional studies to be performed for addressing the gaps identified for the project
		<p>There is no clear requirement for habitat assessment in national legislation as well.</p> <p><u>Cultural Management</u> The national legislation covers most of the requirements of the ESS1 in cultural management. However, as ESS1 defines the cultural heritage covering both tangible and intangible heritage, Law No. 2863 covers only the movable and immovable tangible cultural and natural assets.</p> <p>Under ESS1, the preparation and use of the Chance Find Procedure is primarily expected during construction activities, especially for the protection of tangible cultural heritage. In contrast, for intangible forms such as socio-cultural aspects, the implementation of a code of conduct and providing training to all employees become prominent compared to the national legislation.</p> <p><u>Stakeholder Engagement and Information Disclosure</u> In the Turkish EIA legislation, EIA Report for the projects in the list of Annex-I will be made available to the public opinion at the headquarters of MoEUCC or provincial directorates. Following MoEUCC's final assessment of the EIA report, the Governor's Office will disclose its reasoned decision publicly. For the projects in the list of Annex-II, the final Project Introduction File (PIF) will be disclosed publicly at the Provincial Directorates. Similarly, public information and consultation meetings are held only the projects listed in Annex-I of the Turkish EIA Regulation.</p> <p><u>Gender Equality</u> There is no national legislation to identify potential gender-specific adverse risks and effects.</p> <p>However, analyzes should be carried out in accordance with AIIB requirements, plans and procedures should be developed with gender sensitive analyzes and should include equality of opportunity and socioeconomic empowerment of women.</p>	<p>five sub-projects in accordance with international standards.</p>
ESS2 Involuntary Resettlement	<p>This Environmental and Social Standard (ESS) 2 addresses impacts of Project-related land acquisition, including restrictions on land use and access to assets</p>	<p>Turkish legislation on land acquisition basically corresponds to the requirements envisaged by ESS 2. However, some gaps include Resettlement Plan (RP) preparation, the implementation of the plan, impact assessment on vulnerable groups, restoration of land-based livelihoods and the lack of recognition of informal land users and squatters.</p> <p>There are the following gaps between Turkish national legislation and international standards on land acquisition:</p> <ul style="list-style-type: none"> ▪ Buildings and structures are compensated with depreciations; therefore, full replacement cost is not provided. ▪ According to the Resettlement Law (Law No. 5543), compensation in kind cannot be made except resettlement by the state. ▪ Disclosure and stakeholder engagement, Project level grievance redress 	<p>Within the scope of the project, one parcel had to be expropriated. For Parcel No. 105, Plot 200, Sutaşı District, which falls on the Antakya-Samandağ State Highway expropriation corridor;</p> <p>-Expropriation Plan Approved and Public Interest Decision taken,</p> <p>-The outbuildings (tree, type of tree, age, wall, pole, etc.) entering the measurement and expropriation corridor on the basis of the Valuation Appraisal on the parcel were determined,</p>

ESS	Scope / Aim of the ESS	Gaps between the Turkish Legislation and AIIB ESSs	E&S instruments/additional studies to be performed for addressing the gaps identified for the project
	and natural resources, which may cause physical displacement (relocation, loss of land or shelter), and/or economic displacement (loss of land or assets, or restrictions on land use, assets and natural resources leading to loss of income sources or other means of livelihood)	<p>mechanism are not defined as a part of the land acquisition process,</p> <ul style="list-style-type: none"> ▪ Entitlement defining are limited to the legal title holders of the assets or lands for National Legislation; informal, users, tenants, common land users are not defined as beneficiary and the PAPs without recognizable claims are not eligible for expropriation compensation. ▪ In Turkish Resettlement Law, the cut-off date is defined a three-year residence time limit for non-owners. ▪ Restoration of livelihoods of PAPs are not covered in national legislation and no requirements are defined for the displaced poor or other vulnerable groups to improve their socioeconomic situation. 	<p>- Opinions were asked for the zoning and construction features that are the basis for the Valuation Appraisal of the parcel.</p> <p>For the sub-Project P5, Regarding the Tohma Bridge, land for a temporary campsite including a two-storey house structure, has been rented from a private landowner. Determinations were made through interviews with the owner/user of the land used by consenting. The landowner engages in animal husbandry and dairy farming on the remaining parcel of land.</p> <p>Additionally, regarding the Ađın Bridge, the Project works have a content that will not affect the fishing activity and fishing area. Within the scope of the project's RP, which also includes a livelihood restoration plan, small-scale fisheries farming activities in the vicinity of this area will be monitored.</p> <p>Within the scope of the ESS2 Involuntary Resettlement, the Project includes a Project-specific ESIA report with mitigation measures on eliminating the negative impacts that may occur on the fixed assets, agriculture and livestock livelihoods of the local people during the construction or transportation process, and a risk assessment regarding the loss of livelihood and economic displacement of the local people in accordance with the AIIB requirements.</p> <p>A sub-project specific RP for Antakya-Samandađ Road (P3) also will be developed including livelihood restoration plan in accordance with the potential livelihood losses caused from the Project impacts, based on the determination of livelihoods of local people, socioeconomic status of households and vulnerable groups in accordance with AIIB requirements.</p>

* ESS 3: Indigenous Peoples is not applicable for the Projects in Türkiye, since there is no communities or groups of people which can be identified/defined as indigenous peoples in the country.



3 PROJECT DESCRIPTION

3.1 Project Background

The Project will rehabilitate and reconstruct roads, tunnels, and bridges damaged by the February 2023 earthquakes that occurred in the southeast of Türkiye. The Project activities will be implemented through five (5) sub-projects which will entail rehabilitation and enhancement of transportation infrastructure to meet required safety and capacity standards, as well as integration of climate-resilient measures to mitigate and withstand the impacts of seismic events in the future. The subprojects are located within the jurisdictions of the 5th Regional Directorate of Highways (Mersin) and 8th Regional Directorate of Highways (Elazığ).

Project summary information is provided in Table 5 and the sub-projects that are classified according to related Regional Directorates are given in Table 6.

Table 5. Project Summary Information

Project Name	Türkiye Emergency Road Rehabilitation and Reconstruction Project
Project Number	P000848
Sector/Subsector	Transport/Roads
Status of Financing	Under Preparation
Objective	To restore connectivity and enable safe and efficient movements of goods and people by rehabilitating essential transportation infrastructure located in the earthquake affected areas of Türkiye
E&S Category	Category B

Table 6. Classification of the Sub-projects

Responsible Regional Directorate	Subproject No.	Subproject Name	Province/District
5 th Regional Directorate (Mersin)	1	TAG Highway Aslanlı Tunnel (Km:214+490)-Nurdağı Junction (Km: 223+115) Section, Repair of All Kinds of Damages and Strengthening of Viaducts Against Earthquakes in This Section Construction Work	Gaziantep/Nurdağı
	2	Islahiye-Hassa-Kırıkhan Road (Km:24+500-84+500), Antakya-Reyhanlı Road (Km:0+000-42+500) Hot Bituminous Mixture Repair Work, Hatay Airport Road Soil Works, Art Structures and Superstructure Construction Work	Hatay
	3	Antakya-Samandağ Road (Including Samandağ Crossing) Km: 0+000-26+850 Section Supply Construction Works	Hatay/Samandağ
8 th Regional Directorate (Elazığ)	4	(Malatya-Akçadağ) Junction - Gölbaşı Road (Construction Works of Erkenek Tunnel Damaged in Earthquake and Erkenek Tunnel-Karanlıkdere Section Damaged in Earthquake)	Malatya/Doğanşehir Adıyaman/Gölbaşı
	5	Repair of Technological Bridges Damaged in Earthquake (Tohma, Ağın, Beylerderesi Bridges Earthquake Damage Repair)	Malatya Elazığ

Province and district information regarding the sub-projects is summarized in Table 6. The project encompasses Hatay, Gaziantep, Malatya, Elazığ, and Adıyaman Provinces. A map presenting the locations of all sub-projects is provided in Figure 1.



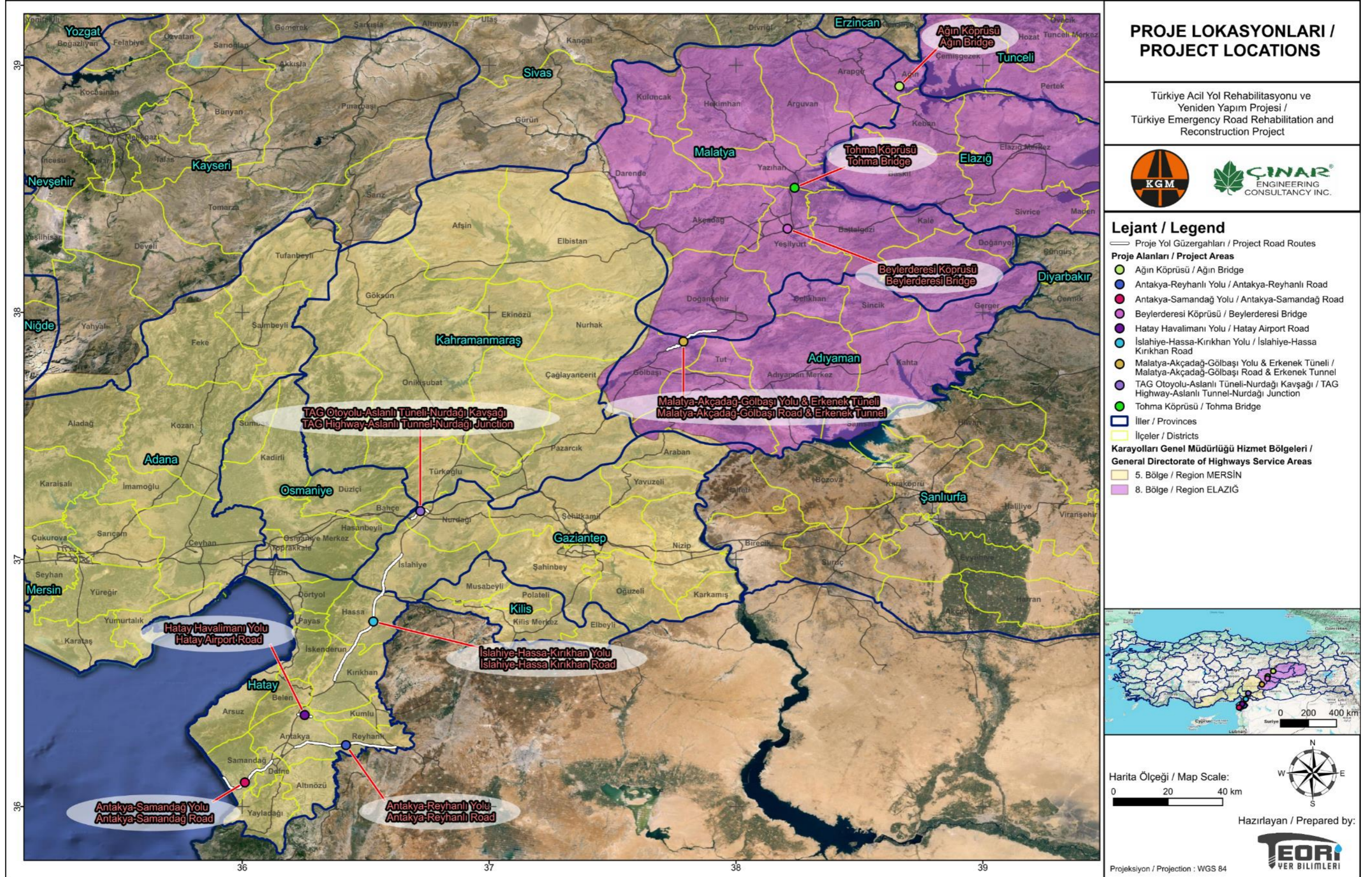


Figure 1. Project Locations Map

3.2 Contractor Information and Current Status

For the implementation of sub-projects, contracts were signed between KGM and different contractors and work completion dates were determined. Contractor names, contract dates and current completion percentages of sub-projects are presented in Table 7.

Table 7. Contact Names and Contractor Information of Sub-Projects

Responsible Regional Directorate	Subproject No.	Subproject Name	Contractor Name	Contract Date	Commencement Date	Expected Completion Date	Current Construction Progress*
5 th Regional Directorate (Mersin)	1	TAG Highway Aslanlı Tunnel (Km:214+490)-Nurdağı Junction (Km: 223+115) Section, Repair of All Kinds of Damages and Strengthening of Viaducts Against Earthquakes in This Section Construction Work	SNH İnşaat	04.05.2023	05.05.2023	05.05.2025	29.07%
	2	Islahiye-Hassa-Kırıkhan Road (Km:24+500-84+500), Antakya-Reyhanlı Road (Km:0+000-42+500) Hot Bituminous Mixture Repair Work, Hatay Airport Road Soil Works, Art Structures and Superstructure Construction Work	FEZA	05.05.2023	09.05.2023	31.01.2025	64.09%
	3	Antakya-Samandağ Road (Including Samandağ Crossing) Km: 0+000-26+850 Section Supply Construction Works	DEHA	03.01.2024	17.01.2024	02.08.2025	1.20 %
8 th Regional Directorate (Elazığ)	4	(Malatya-Akçadağ) Junction - Gölbası Road (Construction Works of Erkenek Tunnel Damaged in Earthquake and Erkenek Tunnel-Karanlıkdere Section Damaged in Earthquake)	at the tender stage	-	-	-	-
	5	Repair of Technological Bridges Damaged in Earthquake (Tohma, Ağın, Beylerderesi Bridges Earthquake Damage Repair)	ENKON	16.10.2023	20.10.2023	25.09.2024	72%

*These are the completion percentages of the work done as of 07.06.2024.



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3.3 Institutional Structure

KGM is a public institution affiliated to the MoTI with a special budget for finance. KGM has a range of responsibilities related to the planning, construction, maintenance, and management of the country's road infrastructure KGM's duties are summarized below.

- **Planning and development of highways:** KGM is responsible for developing plans and strategies for the construction and expansion of Türkiye's highway network.
- **Construction and maintenance of highways:** KGM oversees the construction, maintenance, and repair of highways throughout Türkiye, including both urban and rural areas.
- **Traffic management:** KGM is involved in managing traffic flow, implementing safety measures, and improving transportation efficiency on highways.
- **Road safety:** KGM works to improve road safety by implementing measures such as signage, speed limits, and traffic enforcement.
- **Environmental protection:** KGM considers environmental factors in highway construction and maintenance projects to minimize their impact on the environment.
- **Coordination with other agencies:** KGM collaborates with other government agencies, local authorities, and private sector entities involved in transportation and infrastructure development.

Headquartered in Ankara, KGM operates through a network of 18 Regional Directorates strategically located throughout the country. KGM serves as the implementing agency for the Project, operating through its central offices in Ankara and two of its Regional Directorates (5th and 8th). Subprojects are being implemented and supervised by the Regional Directorate responsible for the area where they are located.

The project will have one Project Implementation Unit (PIU) in Ankara and two Regional Implementation Units (RIUs) within Regional Directorates 5 and 8. The PIU will primarily coordinate project preparation and implementation, while the RIUs will manage day-to-day activities, procurement, supervision, and monitoring specific to their respective subprojects. The PIU established within KGM consists of the Project Director, PIU Head, Environmental and Social Specialist(s), a Procurement Specialist, a Financial Management (FM) Specialist, a Technical Specialist and a Monitoring and Evaluation (M&E) Specialist along with two RIUs. The PIU and each RIU have E&S staff to be able to manage effective implementation of the project.

The Contractor carrying out the execution of the rehabilitation and reconstruction works within the scope of the sub-project will be responsible for all of its staff (including subcontractor staff, if any) to have E&S responsibility awareness to ensure that E&S requirements are implemented smoothly on site. The ESMS structure to be executed by KGM and the Contractor will be managed with the organizational structure defined in

Figure 2.

As the project owner, it is the responsibility of KGM to manage the environmental and social issues of the project via E&S Specialists and/or Supervision Consultant, and to ensure that the necessary mechanisms are developed and implemented by the Contractors. A framework regarding the roles and responsibilities of KGM PIU and the Contractor is presented in Table 8.



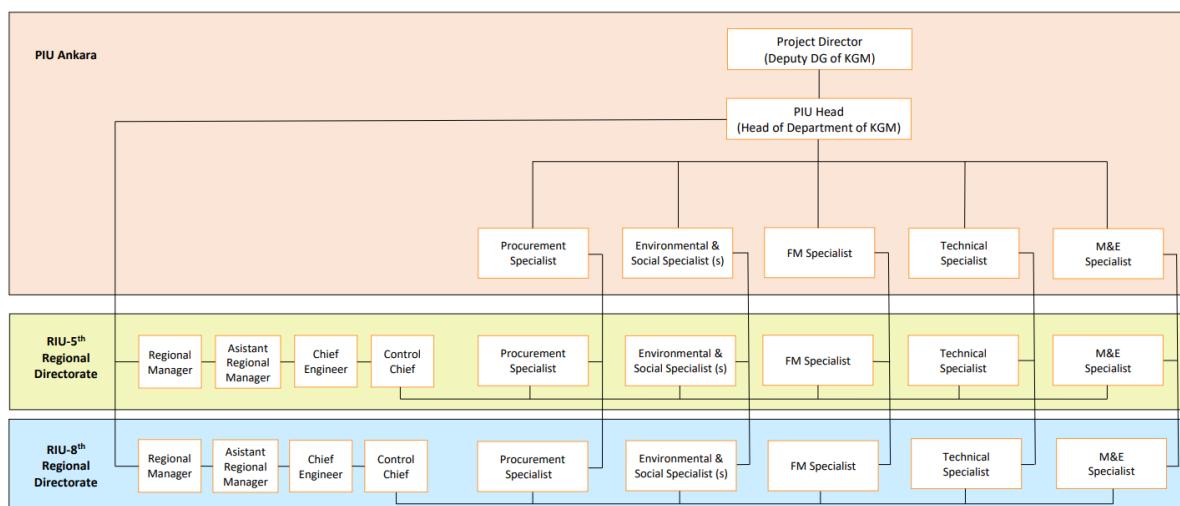


Figure 2. Organizational Structure of the Project

Table 8. Roles and Responsibilities Regarding the Implementation of the ESMS

KGM PIU
<p><u>Project Director and PIU Head</u></p> <ul style="list-style-type: none"> ▪ Responsible for the overall coordination and management of the project or program at the central level. ▪ Ensuring the effective implementation of the ESAP, ESIA requirements including ESMP and related environmental and social sub-management plans by the KGM Regional Implementation Unit (RIU), and the fulfillment of all commitments under the ESAP and ESMP. ▪ Ensuring incorporating the ESMP into the civil work contract and sharing the ESMP with the Contractor by KGM RIU. ▪ Ensuring periodic (semi-annual) reporting to the Bank by the RIU regarding the implementation of the ESAP and ESMP. ▪ Ensuring the employment of competent EHS personnel and external experts by the RIU for the project. ▪ Coordinating actions and assessments by the RIU in the event of changes due to engineering/design modifications, route/location alterations, changes in applicable environmental and social regulations, amendments to authority provisions, introduction of new environmental/social data, changes in construction/operation strategies, or stakeholder impacts on the project. <p><u>Environmental, Social and M&E Specialists</u></p> <ul style="list-style-type: none"> ▪ Coordinating with the RIU to provide EHS training (including ESMP training) to relevant project personnel if necessary. ▪ Coordination by the RIU for environmental and social reviews, monitoring, and audits related to ESAP and ESMP implementations, and evaluation of the results. ▪ To review and analyze environmental, social, and occupational health and safety accidents in coordination with the RIU for the purpose of tracking and analysis. ▪ Ensuring stakeholder participation in coordination with the RIU, implementing the grievance redress mechanism, and facilitating continuous information sharing through transparent communication channels. ▪ Ensuring immediate reporting to the Bank by the RIU of any incident or accident related to the Project that has or may have significant adverse effects on the environment, the affected communities, the public or workers including but not limited to; incidents and accidents encountered during construction works, environmental spills, etc. ▪ Coordinating the provision of sufficient details regarding incidents or accidents and Root Cause Analysis (RCA) findings by the RIU; specifying emergency measures or corrective actions taken or planned to resolve the issue, compensation paid, and any information provided by contractors and supervisors, as appropriate. Furthermore, upon request from the Bank, ensuring the preparation of a report by the RIU on the incident or accident and proposing necessary measures to prevent recurrence.

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Financial Management (FM) Specialist

- Assuming leadership in financial management duties pertaining to the project, with oversight provided by the PIU situated in KGM Ankara.
- Supervising day-to-day financial operations, delegating tasks to the Regional Implementation Units (RIUs).
- Undertaking key tasks including budget planning, financial reporting, approval of payments, and preparation of withdrawal applications.
- Coordinating closely with RIUs, the Ministry of Transport and Infrastructure (MoTI), KGM's Accounting Department, and other relevant entities to secure necessary approvals for payment processing.
- Ensuring accurate accounting of project activities, with regional Accounting Departments responsible for this aspect.
- Oversee the consolidation of accounting data by the Accounting Department at KGM Ankara, utilizing it to prepare project financial statements and other pertinent financial records.
- Collaborating with the Bank to establish templates for both unaudited and audited project financial statements.
- Submitting quarterly Interim Unaudited Financial Reports (IUFRRs) to the Bank within 45 days following each calendar quarter.
- Preparing and deliver annual external audit reports to the Bank within 6 months following the financial year-end.

Technical Specialist

- Contributing to project planning, design, and implementation by offering technical insights and recommendations.
- Analyzing complex technical challenges and propose innovative solutions to overcome them.
- Ensuring the quality of project deliverables by conducting reviews, inspections, and tests to verify compliance with technical standards and specifications.
- Assessing technical risks associated with project activities and develop risk mitigation strategies to prevent potential issues from impacting project objectives.
- Collaborating with cross-functional teams, including project managers, engineers, technicians, and subject matter experts, to coordinate technical activities and align project objectives.

Procurement Specialist

- Ensuring strict adherence to the specific procurement provisions delineated in Section II of the Interim Operational Directive on Procurement Instructions to Recipients (PIR) (2016), governing the procurement processes for the project.
- Supervising the financial aspects concerning civil works contracts awarded through the Negotiated Procedure stipulated in Article 21b of Turkey's Public Procurement Law No. 4734, particularly addressing urgent situations necessitating the utilization of such procurement methods.
- Participating actively in the procurement process for additional contracts, estimated at USD 100 million, by meticulously adhering to the procedures outlined in the Country Procurement Systems, while ensuring alignment with the financing considerations of the Asian Infrastructure Investment Bank (AIIB).
- Collaborating closely with the Project Implementation Unit (PIU) and Regional Implementation Units (RIUs) to orchestrate and oversee procurement activities, ensuring stringent compliance with pertinent regulations and guidelines.
- Contributing significantly to the development of a comprehensive Project Delivery Strategy (PDS) through effective negotiation strategies, aimed at optimizing project outcomes and ensuring strategic alignment.
- Assisting in the formulation and refinement of a detailed Procurement Plan (PP), articulating intricate procurement arrangements such as contract packaging, financial allocations, procurement methodologies, and timelines, thereby establishing a robust framework for project procurement activities.
- Facilitating the seamless submission of any updates or revisions to the Project Delivery Strategy (PDS) and Procurement Plan (PP) to the Bank for meticulous review and subsequent approval, thereby upholding principles of transparency and ensuring alignment with overarching project objectives.

RIU

- Responsible for the implementation of project activities at the regional or local level according to the guidelines and instructions provided by the KGM PIU.
- Ensuring the implementation of the ESAP, ESMP and related sub-management plans and fulfilling all commitments within the scope of ESMP.
- Stopping the work in any situation that threatens the environment, human health, and safety, and when encountering an accidental circumstance.
- Ensuring the follow-up and analysis of environmental, social, and occupational health and safety accidents.
- Incorporating the ESMP into the civil work contract, sharing the ESMP with the Contractor, guiding the Contractor in preparing the implementation plans, approving these plans.
- Ensuring the effective implementation of the project and address local concerns through interaction with



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<p>local stakeholders, including communities, government officials, and civil society organizations.</p> <ul style="list-style-type: none"> ▪ Carrying out the purchasing processes and contract management of the goods, services and works required for the implementation of the project in their region. ▪ Identification and addressing of implementation challenges and bottlenecks at the regional level, collaborating with KGM PIU and other stakeholders to find solutions. ▪ Monitoring of contractor activities in accordance with the ESAP and ESMP requirements. ▪ Ensuring compliance with project standards and requiring the contractor to make necessary emergency corrections in case of non-compliance.

Supervision Consultant

<ul style="list-style-type: none"> ▪ Supervision of construction and/or rehabilitation works and installation of equipment, ▪ Monitoring and evaluating the performance of the services provided by the Contractor, ▪ Ensuring initiation of corrective actions where necessary, ensuring implementation of mitigation measures by the Contractor, ▪ Follow up and audit the Contractor's activities periodically in line with the measures and commitments given in the ESAP and ESMP, ▪ Monitoring and semiannually reporting to the KGM PIU/RIU regarding the implementation of the ESMP along with ESAP.

The Contractor

<ul style="list-style-type: none"> ▪ Fulfillment of all requirements of the ESAP, ESIA, ESMP and related E&S sub-management plans. ▪ Implementation of additional commitments determined by KGM PIU/RIU and/or AIIB. ▪ Developing its own site-specific Contractor's ESMP (C-ESMP) including relevant E&S sub-management plans and implementing this C-ESMP throughout the construction works after obtaining approval before the commencement of the construction works. ▪ Ensuring compliance with project standards, obtaining all relevant permits and licenses ▪ Monitoring construction activities (including subcontractor activities, if any) and taking measures within the scope of the ESAP and ESMP. ▪ Development of implementation and monitoring plans / procedures in line with the ESMP structure, implementation after the approval of KGM RIU. ▪ Employment of competent EHS staff (at least one environmental and social expert, one full-time OHS expert and/or obtaining consultancy services) within the scope of the project. ▪ Providing the necessary trainings to all project staff including sub-contractor staff on environmental, social and occupational health and safety issues. ▪ Providing follow-up and analysis of environmental, social occupational health and safety accidents. ▪ E&S inspections, monitoring and audits related to ESAP and ESMP practices, at least monthly reporting to KGM RIU and PIU. ▪ Prompt notification of accident and incidents and keeping an incident register at construction sites throughout the Project life. ▪ Carrying out the management of change process via filling the Management of Change Process (MCP) Form, which is provided as Appendix-1 of each ESMP and informing KGM RIU/PIU and AIIB about the details and the results of the process including at the final design stage.
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3.4 Sub-Projects Under the Responsibility of 5th Regional Directorate of Highways

3.4.1 TAG Highway-Aslanlı Tunnel- Nurdağı Junction

Scope of the sub-project: Repairing the breaks and deformations occurred in the sections of TAG Highway between Aslanlı Tunnel (KM: 214+490) and Nurdağı Junction (KM: 223+115). The sub-project location map is given in Figure 3.

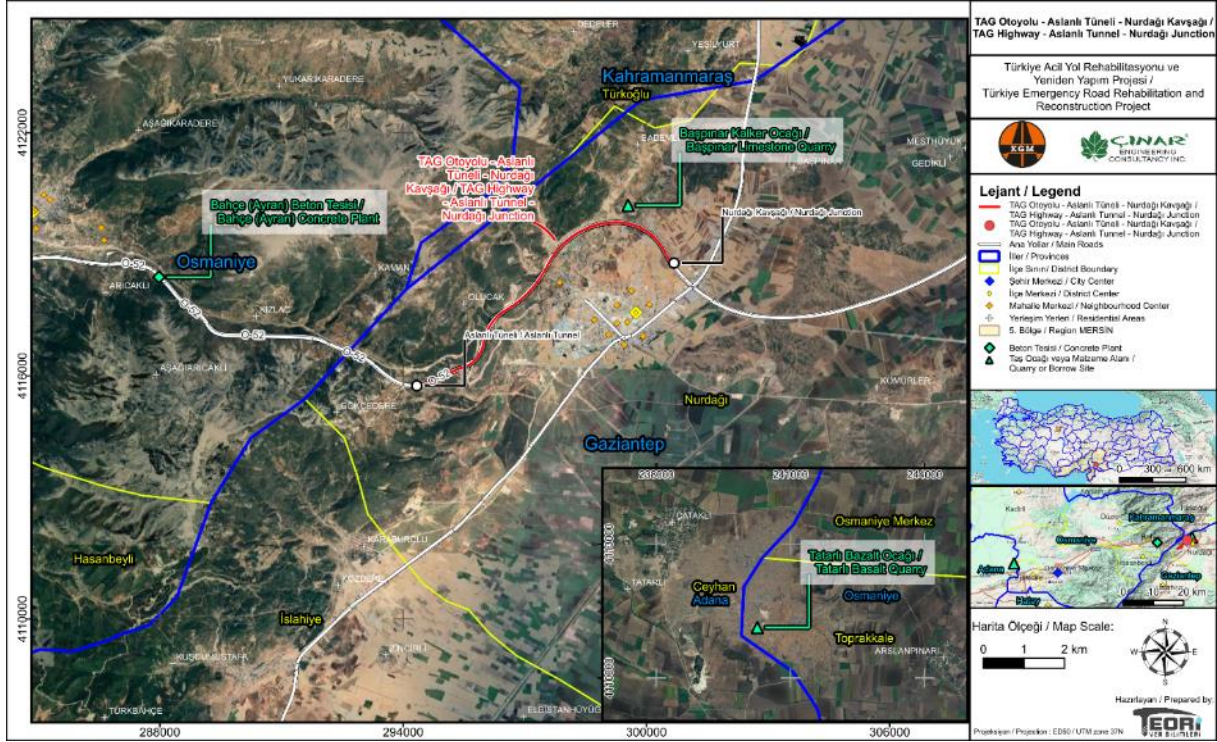


Figure 3. TAG Highway-Aslanlı Tunnel-Nurdağı Junction Sub-project Area

The Contractor's main accommodation site, Ceyhan Construction and Accommodation Site, which has been actively used since 2019 for different projects, will be utilized for this sub-project. Additionally, lodgings of 5th Regional Directorate of Highways will be used for accommodation.

Due to the earthquakes that occurred on 06.02.2023, damages occurred in the expansion joints, floor concretes, approach fillings, earthquake wedges, supports and elevations of five (5) viaducts; Şehitler, Nurdağı, Atatürk, Turgut Özal and Başpınar Viaducts (see Figure 4).



Figure 4. Location of the Viaducts within the scope of the sub-project

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Within the scope of the sub-project, it is planned to carry out superstructure repair works along the project route, including bridge auxiliary elements, supports and expansion joints. Additionally, reinforcement works are planned for the columns of the Şehitler, Nurdağı, and Başpınar Viaducts (see Figure 5, Figure 6 and Figure 7 respectively) using steel armor and carbon fiber polymer.

It was observed during the site visits that the reinforcement works were already being carried out. No active work was observed in the tunnels and highway.



Figure 5. Damages on the Piers – Şehitler Viaduct



Figure 6. Damages on the Nurdağı Viaduct



Figure 7. Damages on the Başpınar Viaduct

3.4.2 İslahiye-Hassa-Kırıkhan Road

Scope of the sub-project: Repairing the breaks and deformations occurred in İslahiye-Hassa-Kırıkhan Road body across various sections. Road repair and asphalt renewal works will be carried out between KM:24+500 – 84+500. The sub-project location map is given in Figure 8.

It was stated by the contractor that the damages on the road were temporarily repaired after the earthquakes occurred in February 2023.

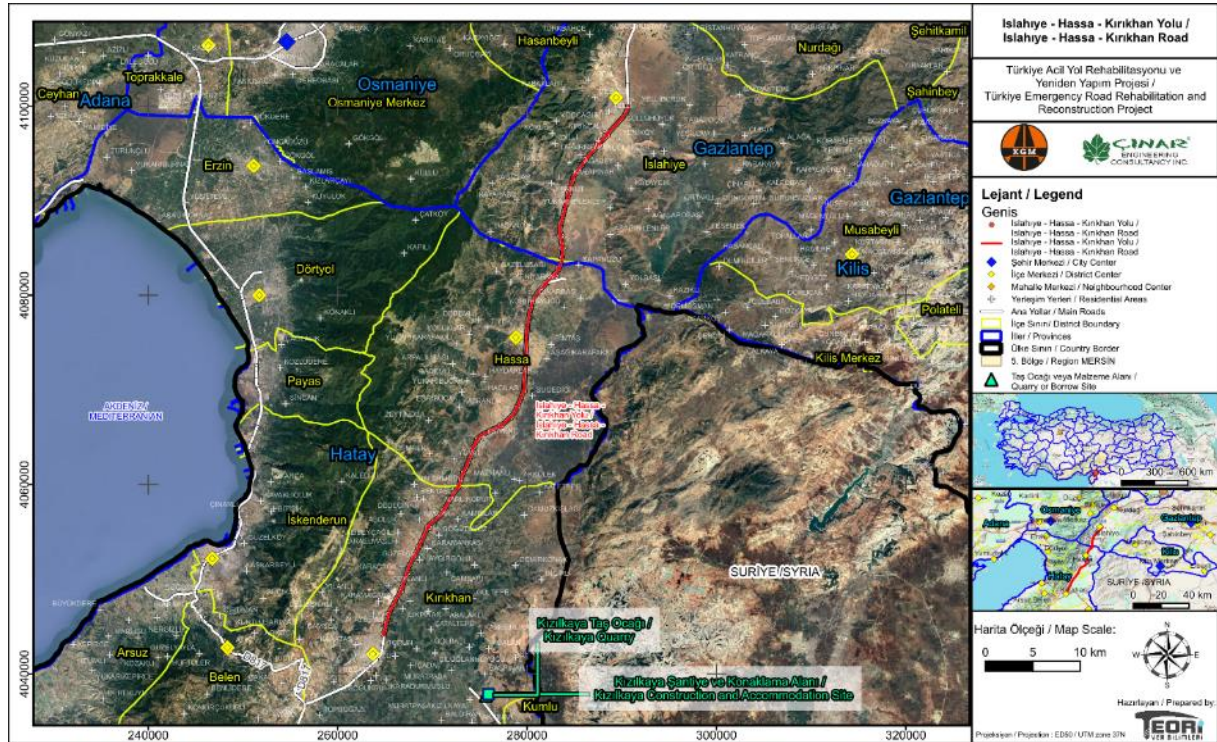


Figure 8. İslahiye-Hassa-Kırıkhan Road Sub-project Area

3.4.3 Antakya-Reyhanlı Road

Scope of the sub-project: The road repair and asphalt renewal works in various sections between KM: 0+000 – 42+500 and reconstruction of the Demirköprü (Hitit) Bridge that collapsed due to the earthquake. The sub-project location map is given in Figure 9.

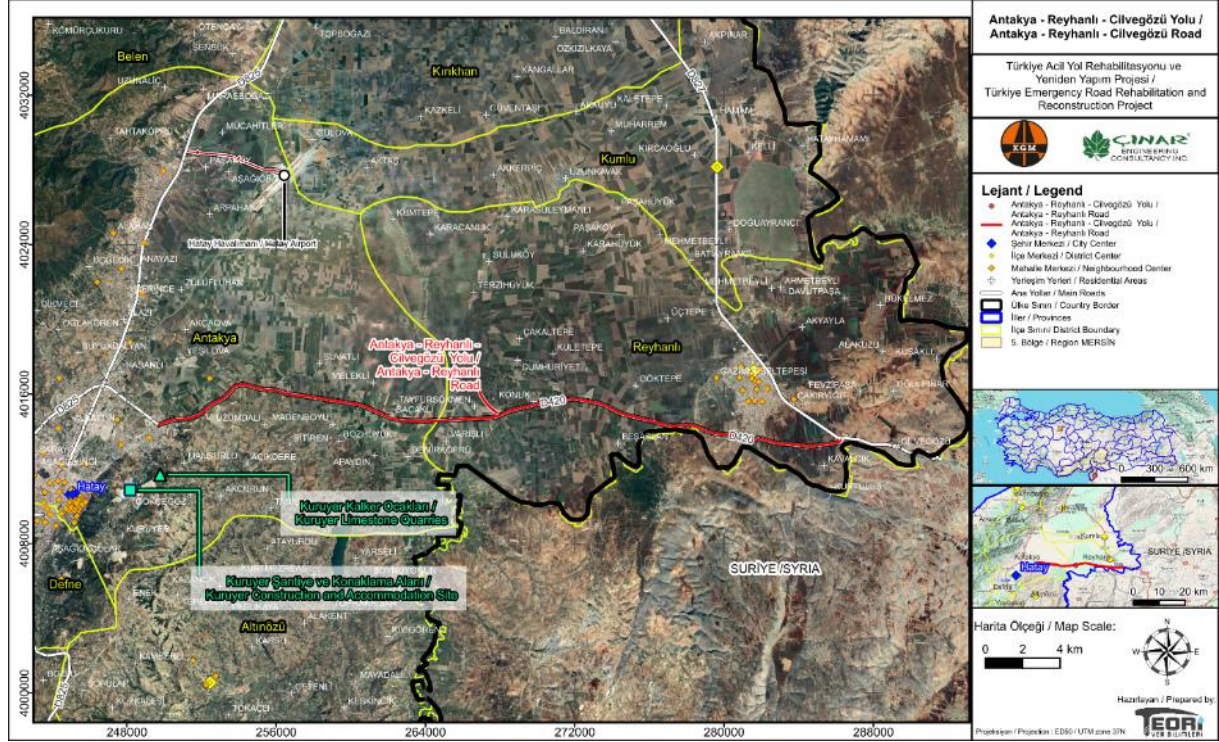


Figure 9. Antakya-Reyhanlı Road Sub-project Area

KM:19+981.00 Hittite Bridge (Demirköprü) over the Asi River, located on the Demirköprü-Reyhanlı road within the borders of Hatay province, is a twin bridge with a double platform. The part on the axis left was built in 1989, and the part on the axis right was built in 2010. As a result of the earthquakes that occurred on 06.02.2023, the bridge incurred irreparable damage due to stability losses in its foundations, primarily caused by liquefaction.

It was observed during the site visit that Demirköprü Bridge is currently being reconstructed.



Figure 10. Damage on the Bridge Piers



Figure 11. View of the Demirköprü Bridge After the Earthquake

3.4.4 Hatay Airport Road

Scope of the sub-project: The removal of deformations with earthworks, engineering structures and superstructure construction works on the connection between Hatay Airport and D825 State Road. The sub-project location map is given in Figure 12.

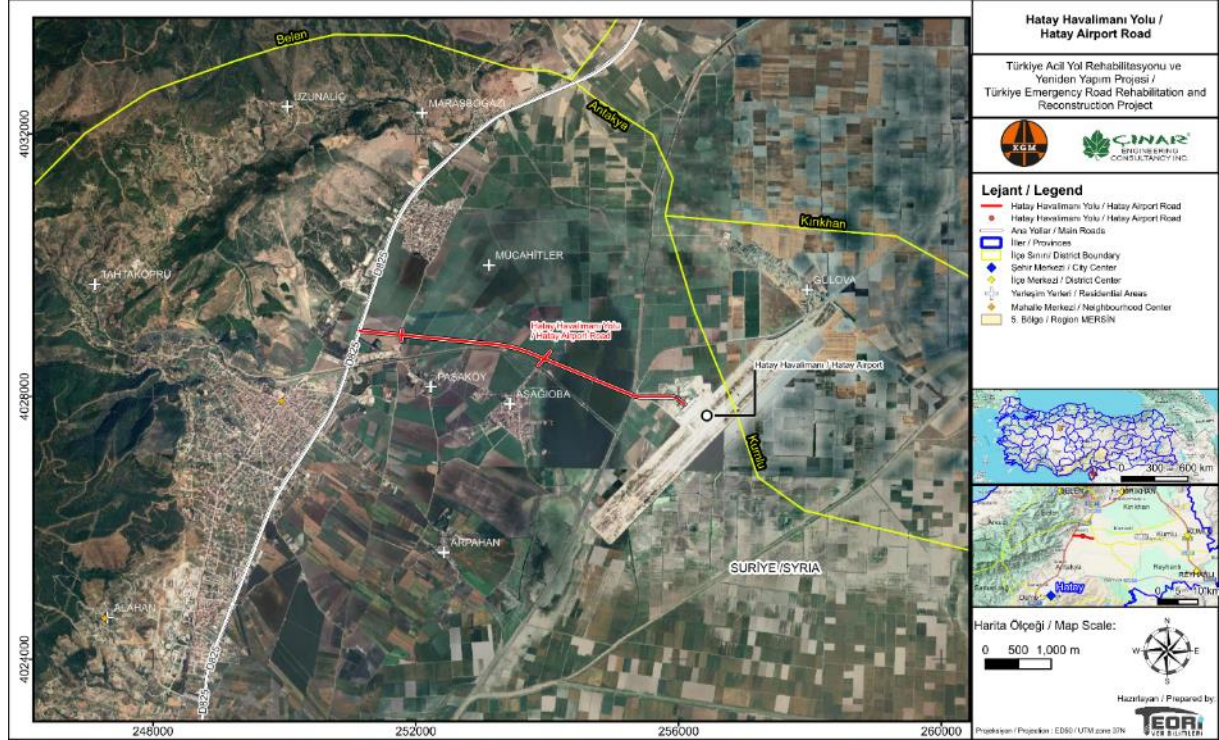


Figure 12. Hatay Airport Road Sub-project Area

Hatay Airport Road sub-project utilizes the same quarry and construction and accommodation site with Islahiye-Hassa-Kirikhan sub-project. The further information is provided in Section 4.

Deformations that disrupted the road embankment and retaining wall structures were detected in three different locations along the route. It was determined that these deformations occurred as a result of secondary ruptures due to the main fault system and the resulting ground liquefaction problem.

The boreholes were drilled approximately every 200 meters throughout the connection road. Drilling works commenced on 22.02.2023 and completed on 20.03.2023.

It was stated by the contractor that Hatay Airport Road sub-project's construction works started in October 2023 and planned to be completed in October 2024. It was observed during the site visit that the construction works are progressing rapidly. Soil reinforcement is carried out by pumping a mixture of cement and water to a depth of 20 meters with Deep Soil Mixing (DSM) machines.



Figure 13. View of the Hatay Airport Road After the Earthquake (Km:2+840-3+480)

3.4.5 Antakya-Samandağ Road

Scope of the sub-project: Repairing the breaks and deformations that occurred on the Antakya-Samandağ Road, as well as asphalt renewal works, will be carried out between KM:0+000 – 26+850. Additionally, reclamation works for landslide control and the reconstruction of a bridge located in Sutaşı Neighborhood are also planned.

The sub-project location map is given in Figure 14.

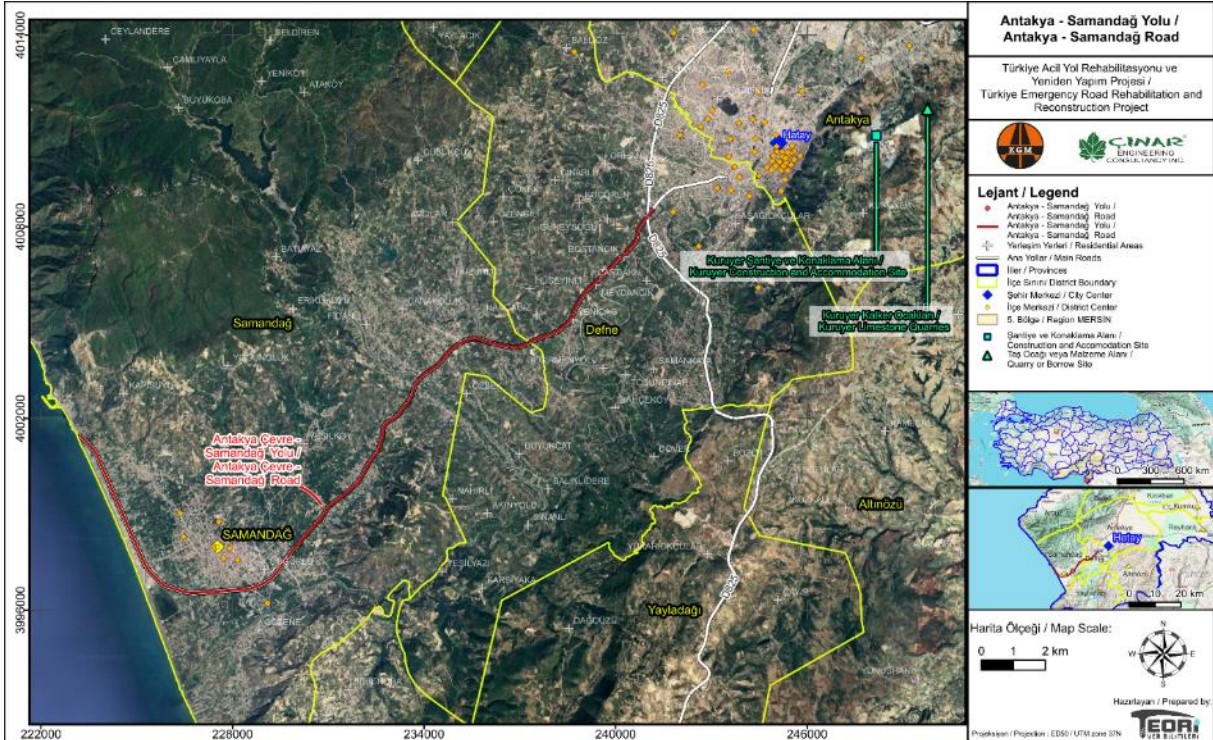


Figure 14. Antakya-Samandağ Road Sub-project Area

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Bored pile wall construction in various segments and superstructure renovation works along the 27 km road are carried out in order to prevent the risk of landslides caused by steep slopes. Additionally, a bridge will be rebuilt as part of the work. It was observed during the site visits that the landslide removal works at the 6th km are continuing by the subcontractor.



Figure 15. Landslide Removal Works



Figure 16. Bridge to be Reconstructed

3.5 Sub-Projects Under the Responsibility of 8th Regional Directorate of Highways

3.5.1 Malatya-Akçadağ-Gölbasi Road & Erkenek Tunnel

Scope of the sub-project: Construction and repair works of the damaged parts at Erkenek Tunnel and the section between Erkenek Tunnel-Karanlıkdere.

The sub-project location map is given in Figure 17.

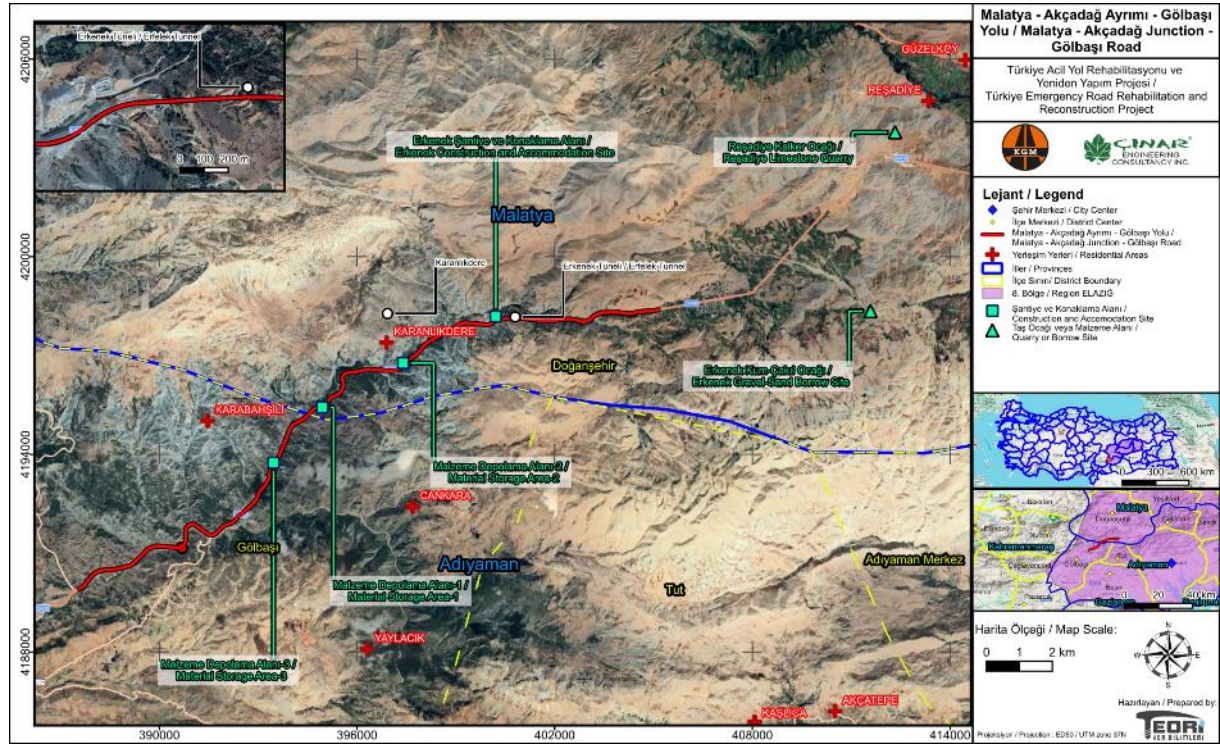


Figure 17. Malatya-Akçadağ-Gölbasi Road & Erkenek Tunnel Sub-project Area

The damages occurred at the sub-project area due to the earthquakes on 06.02.2023 can be listed as; transformer zone landslides (see Figure 18), Erkenek Tunnel entrance portal area (see Figure 19), Erkenek Tunnel internal lining structure, deformations occurring in fillings, and damages occurred in Erkenek Tunnel electromechanical systems. The extension of the Erkenek Tunnel's entrance portal (see Figure 20) by 48 meters is also planned within the scope of the sub-project.

Works planned to be conducted in the Erkenek Tunnel (systems that require partial or complete renewal);

- Feeding
- Lighting Systems
- Telecontrol System
- Traffic Control System
- Closed Circuit Television System (CCTV)
- Public Announcement System
- Fire Detection and Alarm System
- Ventilation Systems
- Fire Response Systems
- Emergency Communication Systems



Figure 18. Damage on the Transformers Zone (Malatya-Gölbası Road KM:89+260-KM:30+100)



Figure 19. Damage on Erkenek Tunnel Entrance Portal Area

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Figure 20. Erkenek Tunnel – Entrance Portal

Brief information on the current status:

- Since the sub-project is at tender stage and there is neither contractor assigned nor construction works commenced, the sub-project is out of scope of this ESDD. Environmental and social risks and impacts of the sub-project will be assessed in the ESIA.
- EIA Exemption opinion for the sub-project was obtained from Malatya Provincial Directorate of Environment, Urbanization and Climate Change with the letter dated 21.12.2023 and numbered 8286086.
- Three permanent material storage areas are planned to be used within the scope of the sub-project. Two of them are located near the Karanlıkdere Stream.
- “Erkenek Construction and Accommodation Site” will be utilized within the scope of sub-project works. This site has not been established yet and will be constructed after the tender stage.
- Reşadiye limestone quarry and Erkenek gravel-sand borrow site are planned to be utilized for the material supply.
- It was stated by 8th Regional Directorate of Highways that the damages on the road were temporarily repaired after the earthquake.

3.5.2 Repair Works of Technological Bridges

3.5.2.1 Beylerderesi Bridge

Scope of the sub-project: Replacement of the structural bearings and expansion joints
The sub-project location map is given in Figure 21.

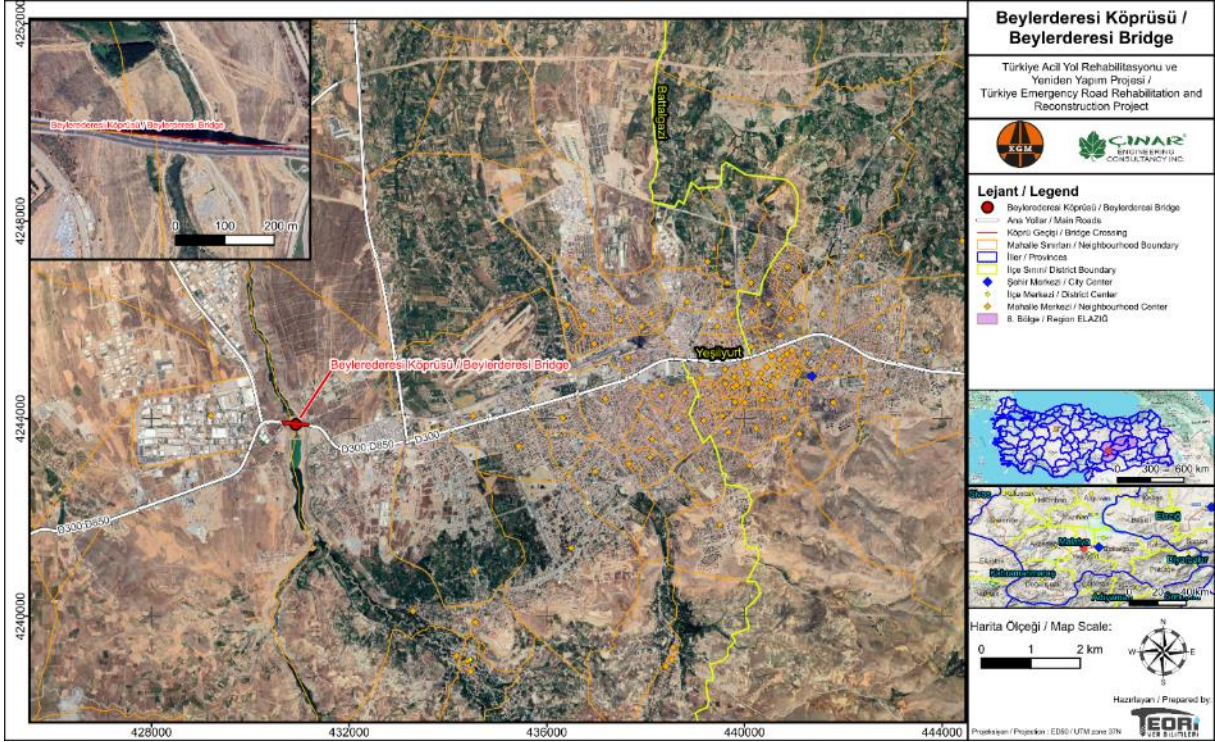


Figure 21. Beylerderesi Bridge Sub-project Area

Beylerderesi Bridge (also known as Turgut Özal Viaduct, see Figure 22) was constructed as a post-tensioned balanced cantilever type, spanning 420 meters in length, with a platform width of 24 meters (equivalent to 2 lanes in each direction), and an average height of 55 meters.

Numerous hairline shear cracks (see Figure 23) were identified at the edge openings of the bridge, particularly in the anchorage areas. Additionally, the teflon coatings on the 4 bearings (see Figure 24) on both sides has worn off and requires replacement.



Figure 22. Beylerderesi Bridge



Figure 23. Hairline Shear Cracks



Figure 24. Damages on the Structural Bearings

3.5.2.2 Tohma Bridge

Scope of the sub-project: Replacement of the structural bearings, expansion joints and viscous dampers

The sub-project location map is given in Figure 25.



Figure 25. Tohma Bridge Sub-project Area

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Tohma Bridge (also known as Şehit Gaffari Güneş Bridge) provides both road and rail transportation. The railway on the bridge encompasses both freight and passenger transportation.

The steel beams used in the construction of the bridge, weighing a total of 2,700 tons, were manufactured with a height of 3 m and a width of 16 m; and was placed by pushing along the bridge axis with the "Incremental Launch Method (ILM)".

Due to the earthquake impact on the bridge, structural damage occurred to the 2x2 viscous dampers on both side piers, 20 pot bearings on the two side piers, 8 on the middle piers, and the modular expansion joints on both side piers.



Figure 26. Freight Train Crossing the Tohma Bridge

3.5.2.3 Ağın Bridge

Scope of the sub-project: Replacement of damaged anchor covers and inclined suspension cables

The sub-project location map is given in Figure 27 and a general view of the bridge is given in Figure 28.



Figure 27. Ağın Bridge Sub-project Area

As part of the sub-project, inspections are planned for all equipment, including the deck level and above the pylon area, encompassing all cables, steel connection parts (such as formwork tubes (FWT), anti-vandalism tubes (AVT), transition tubes, etc.), deviators, guide assemblies, and accuracy checks for anchor block-rope routes within the FWT.

Dismantling of cable suspension ropes, anchor covers, injection dismantling of the rope bundle, nail checks and inspection, anchor covers, injection, installation of anchor covers and re-injection, disassembly and supply of damaged inclined suspension cable system and re-assembly and anchoring of the cable system works will also be conducted.



Figure 28. General View of Ağın Bridge



Figure 29. Damaged Suspension Cables

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4 ENVIRONMENTAL AND SOCIAL DUE DILIGENCE

4.1 Islahiye-Hassa-Kırıkhan Road

4.1.1 General Information

- Feza Taahhüt A.Ş. (FEZA) was assigned as the Contractor through a contract signed with the 5th Regional Directorate of Highways on 05.05.2023 for three sub-projects; **Islahiye-Hassa-Kırıkhan Road**, Antakya-Reyhanlı Road Hot Bituminous Mixture Repair Work, **Hatay Airport Road** Soil Works, Art Structures and Superstructure Construction Work.
- Damages on the road were temporarily repaired by the Contractor (FEZA) after the earthquake.
- “Kızılkaya Limestone Quarry” and “Kızılkaya Construction and Accommodation Site²” will be utilized within the scope of the sub-project. These sites are located in the same area with an approximate distance of 300 meters. This quarry and camp site are existing facilities which were originally designated for other projects before this sub-project. Additionally, Kızılkaya Limestone Quarry and Kızılkaya Construction and Accommodation site is also being used for Hatay Airport Road sub-project. Construction activities for this sub-project have not yet fully commenced; only a few curbs have been renewed. The commencement is planned for June 2024. During the site visit, there were no workers on-site.

4.1.2 Assessment of the Social Findings

4.1.2.1 Population Change

For the Sub-Project, in the Kırıkhan-Kızılkaya Construction Site, 80 workers and 25 technical personnel are accommodating, which is located next to the Kızılkaya Quarry in the Kızılkaya Village. No negative impact is expected on population change and migration.

The nearest settlement is Muratpaşakızılkaya (see Figure 30) and is approximately 1000 meters away from the camping area. Majority of workers working in the project are men. Considering this situation, in order to avoid negative communication with the surrounding settlements and to prevent conflicts arising from social and cultural disagreements, the interaction between workers and local people will be minimized and all needs will be met within the camp area. Training on community health and safety (CHS), Sexual exploitation and abuse (SEA) of the populations and sexual harassment (SH) (SEA/SA), traffic security, communication with local people should be provided for workers, security personnel and drivers staying at the camp site, and the code of conduct should also include compliance with the measures taken on these issues as part of the contracts.

² Kızılkaya Construction and Accommodation site is an existing campsite, consisting of containers for accommodation, a cafeteria, material storage area, water tanks, temporary waste storage area and a septic tank.





Figure 30. Nearest Settlement - Muratpaşakızılkaya

Vulnerable Groups: The Construction Site is not expected to have a direct negative impact on vulnerable groups or gender issues. There is a container camp area (see Figure 31) in the Project area of influence of the road passing through Ardıçlı Town and temporary shelter areas.



Figure 31. Container Camp Location

Necessary information sharing and mitigation measures should be developed and implemented to ensure that the daily lives of vulnerable groups affected by the earthquake are not slowed down. It should be ensured that their access to health and education services is not slowed down due to traffic congestion or road restrictions caused by road construction.

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4.1.2.2 Community Health and Safety

Traffic Impacts: İslahiye-Hassa-Kırıkhan Road (see Figure 32) is approximately 80 km line passing through residential areas. Therefore, sub-project should be managed and monitored with the traffic safety measures and trainings to be provided to the workers, drivers. Especially for the sensitive points such as schools, container camps, hospitals etc. along the route will be considered and related stakeholders should be informed on the health and safety measures, construction schedule and road restrictions, if occurred.



Figure 32. İslahiye-Hassa-Kırıkhan Road

Source: March 2024 Site Visit Photos

It was observed that, some shepherds are using the access roads of the Construction Site with their animals (see Figure 33). Therefore, on the access roads of the Kuruyer Construction Site, due to the heavy vehicle traffic, local people who are engaged in the husbandry activities may be adversely impacted.



Figure 33. Shepherd with animals

Source: March 2024 Site Visit Photos

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Health and safety information should be provided to the local settlements and Project workers, drivers and signings should be placed.

Measures should be taken in these areas to minimize the dust and traffic risks in the related Project ESMP and sub management plans.

It was observed that the construction site area has not been fenced off properly to separate the camp site border to the outside and there is no security for providing control the visitor entrance. This situation may occur security issues for both outside visitors and workers. For providing visitors health and safety, local community health and safety and workers health and safety, additional isolation and entrance safety measures need to be taken.

4.1.2.3 Resettlement and Land Acquisition

There is no need for land acquisition within the scope of the Sub-Project activities.

It has been also learned that the land used within the scope of Construction Site is unused empty treasury land, surrounding with quarry areas. However, information on the previous condition of the land and permissions to use the land should be provided.

Therefore, a potential physical displacement will not occur due to the Sub-Project activities.

4.1.2.4 Loss of Livelihood

A potential economic displacement will not occur due to the Sub-Project activities.

Heavy vehicle traffic and excavation works continue on the Kırıkhan-Kızılkaya construction site access roads. Therefore, dust effects may occur on agriculture/livestock farming carried out near construction activities and transportation routes. In the context of not restricting access to lands where livelihoods are maintained, it is important not to close the passageways and livestock access roads used by the local people, and to determine the needs of the local people in this regard.

Considering the impacts of this Project, its impacts on livelihoods should be determined through consultation.

4.1.2.5 Infrastructure and Services

For the Kırıkhan-Kızılkaya Construction Site, it is learned that domestic wastes have been collected by Kırıkhan Municipality and have been sent to licensed waste management facilities. Construction and excavation wastes have been sent to storage areas designated by KGM or transferred to be used in other projects.

Drinking water is provided from ready-bottled water and for personnel usage, groundwater has been utilizing. There are two storage tanks of 20 m³ each available with water booster system. Electrical infrastructure is available and there is also an emergency generator.

No sewerage infrastructure exists on the construction site. Septic tanks are being utilized, with sewage truck services provided by Kırıkhan Municipality.

4.1.2.6 Labor and Working Conditions

80 workers and 25 technical personnel are accommodating at the Construction Site, which is located next to the Kızılkaya Quarry in the Kızılkaya Village.

There are 3 shuttle vehicles for transporting workers in the campus. Approximately 40 local employees are employed, 5 of whom are female employees. The female cafeteria worker is an earthquake victim and is staying at the camp site with her family.



There are showers, toilets, rest areas and a dining hall within the Camp Site to meet all accommodation needs of the workers. The views from the campsite are given in Figure 34.



Figure 34. Construction Camp Site Views

Accommodation conditions were evaluated to include drinking water, health facilities, washing-bathroom conditions, changing rooms, food and beverage facilities, accommodation areas, rest areas, worker health and safety conditions.

Workers work in road construction areas, their food and beverage needs are met from the camp site, and they are transported to the work areas by shuttle service. It has been observed that service facilities and cafeteria conditions are suitable.

Accommodation is in dormitories for 4 people, and the necessary 12 cubic meters of space per person is provided for workers.

Although the accommodation conditions at the camp site comply with AIIB ESF, it is recommended to improve the isolation of the camp site from the outside.

It was observed that the construction site area has not been fenced off, and there is no security. This situation may create security issues for both outside visitors and workers. For providing

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visitors health and safety, local community health and safety and workers health and safety, additional isolation and entrance safety measures need to be taken.

Social Compliance Issues

Since KGM is an official institution, it is subject to the relevant laws, regulations³ and conventions. In this context, KGM and all contractors working under it are subject to Labor Law and ILO conventions to which Türkiye is a party⁴.

All contractors within the scope of the project are obliged to prohibit child labor, forced labor, and ensure equal treatment and gender equality for employees, including the ILO conventions listed below under the following headings: freedom of association, child labor, forced labor, equal treatment of employees, and gender equality.

- Forced Labor Convention No. 29
- Convention No. 105 on the Abolition of Forced Labor
- Minimum Age Convention No. 138
- No. 182 Urgent Prohibition and Eradication of Worst Forms of Child Labor
- Action Agreement
- Convention No. 87 on Freedom of Association and Protection of the Right to Organize
- Convention on the Right to Organize and Collective Bargaining No. 98
- Equal Pay Convention No. 100
- Equality of Treatment (Social Security) Convention No. 118
- Employment Policy Agreement No. 122

In this context, KGM will ensure that the following actions are taken to ensure that all these laws, procedures and agreements are implemented throughout the Project, regulating the management of working conditions and labor relations, including the prevention of Child Labor and Forced Labor.

- Notifying the main contractor and all subcontractors of the contracts, policies and procedures to which they are parties and which they are obliged to comply with,
- Including the contract, policies and procedures and their determined main headings in the training given before starting work and making contractor employee training a part of the induction training.
- Incorporating policies and procedures within the scope of all employee agreements into contracts, either as part of these agreements or by transferring them to codes of conduct.
- Making prohibitions, ethical principles and responsibilities visible in work areas (camp sites, work areas).
- Establishing a grievance mechanism that is accessible to all employees of the Project, including subcontractor employees, and allowing anonymous complaints, and disclosing it to employees.

4.1.3 Stakeholder Engagement and Grievance Redress Mechanism

KGM does not have a stakeholder engagement plan and grievance mechanism that will meet the project requirements and AIIB standards. Within the scope of the Project, no discussions or meetings have been held with stakeholders in the surrounding settlements regarding the Project so far.

The grievance mechanism operated within the scope of the project is as follows:

³ <https://www.kgm.gov.tr/Sayfalar/KGM/SiteTr/Kurumsal/KanunMevzuat.aspx>

⁴ https://www.ilo.org/sites/default/files/wcmsp5/groups/public/@europe/@ro-geneva/@ilo-ankara/documents/genericdocument/wcms_645630.pdf



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For the grievance mechanism, worker complaints can be submitted in writing to both the on-site construction site managers and the Contractor's Human Resources department. Requests/complaints received are examined and responded to as soon as possible.

For the grievance mechanism, citizens/institutions must contact both the control offices in charge and the KGM. They can apply to the Regional Directorate of KGM. Requests/complaints received are examined on-site and responded to as soon as possible.

KGM website includes "Complaint Notification Form for Real Persons" and "Complaint Notification Form for Legal Entities" (<https://www.kgm.gov.tr/Sayfalar/KGM/SiteTr/Root/SikayetGeriBildirim.aspx>). Complaint forms allow complaints with open names, but do not allow anonymous complaints to be received.

The grievance mechanism of the contractors and KGM was evaluated. It has been observed that the grievance management and stakeholder participation activities operated by both KGM and the main contractors of the sub-projects do not comply with AIIB standards.

Within the scope of the project, it is proposed to establish both external and employee grievance mechanisms.

Within the scope of the Project, a worker grievance mechanism should be established where anonymous complaints of employees can be received, accessible to all employees free of charge, safely and equally, defining the gender-based violence and harassment procedure in accordance with AIIB standards.

The grievance mechanism should be explained to all workers within the scope of the training to be given before they start working.

The grievance mechanism should ensure that complaints are received through complaint boxes in common areas and cafeterias, as well as through tools such as the ethics line and telephone.

SEP (including GRM) will be prepared to develop a gender-sensitive grievance mechanism procedure that includes these and also includes employee complaints, where anonymous complaints can be reported, and to eliminate/close this gap.

4.1.4 Assessment of the Environment, OHS and Biodiversity-Related Findings

Due diligence findings regarding the Islahiye-Hassa-Kırıkhan Road sub-project and related facilities are given in Table 9. The findings of this sub-project are presented together with the Hatay Airport Road sub-project, as both utilize the same construction sites and quarry.



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4.2 Hatay Airport Road

4.2.1 General Information

- Feza Taahhüt A.Ş. (FEZA) was assigned as the Contractor through a contract signed with the 5th Regional Directorate of Highways on 05.05.2023 for three sub-projects; Islahiye-Hassa-Kırıkhan Road, Antakya-Reyhanlı Road Hot Bituminous Mixture Repair Work, Hatay Airport Road Soil Works, Art Structures and Superstructure Construction Work.
- Construction works for this sub-project commenced in October 2023 and planned to be completed in October 2024. The entrance of the construction area is shown in Figure 35.
- “Kızılkaya Limestone Quarry” and “Kızılkaya Construction and Accommodation Site” is utilized within the scope of the sub-project. These sites are located in the same area with an approximate distance of 300 meters. This quarry and camp site are existing facilities which were originally designated for other projects before this sub-project. Additionally, Kızılkaya Limestone Quarry and Kızılkaya Construction and Accommodation site will also be used for Islahiye-Hassa-Kırıkhan Road sub-project.
- In the sub-project area, soil reinforcement works are carried out by using DSM machines. DSM method is an in-situ soil mixing technology that mixes existing soil with cementitious materials using mixing shafts consisting of auger cutting heads, discontinuous auger flights, and mixing paddles (see Figure 36).



Figure 35. Entrance of the Sub-Project Construction Area

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Figure 36. Deep Soil Mix (DSM) Machines on-site

4.2.2 Assessment of the Social Findings

Since Kırıkhan-Kızılkaya Construction Site is also used for this Sub-Project, the evaluations made within the scope of Islahiye-Hassa-Kırıkhan Road Sub-project will also be valid within the scope of this Sub-Project (see Section 4.1.2).

4.2.2.1 Population Change

For the Sub-Project, in the Kırıkhan-Kızılkaya Construction Site, 80 workers and 25 technical personnel are accommodating, which is located next to the Kızılkaya Quarry in the Kızılkaya Village. No negative impact is expected on population change and migration.

Detailed evaluation of this area is given in section 4.1.2.1 Population Change.

In addition, the Sub-Project area is shown in the map below (see Figure 37). Construction activities in this area do not directly affect a settlement and will not have a negative impact on the local population or vulnerable groups.

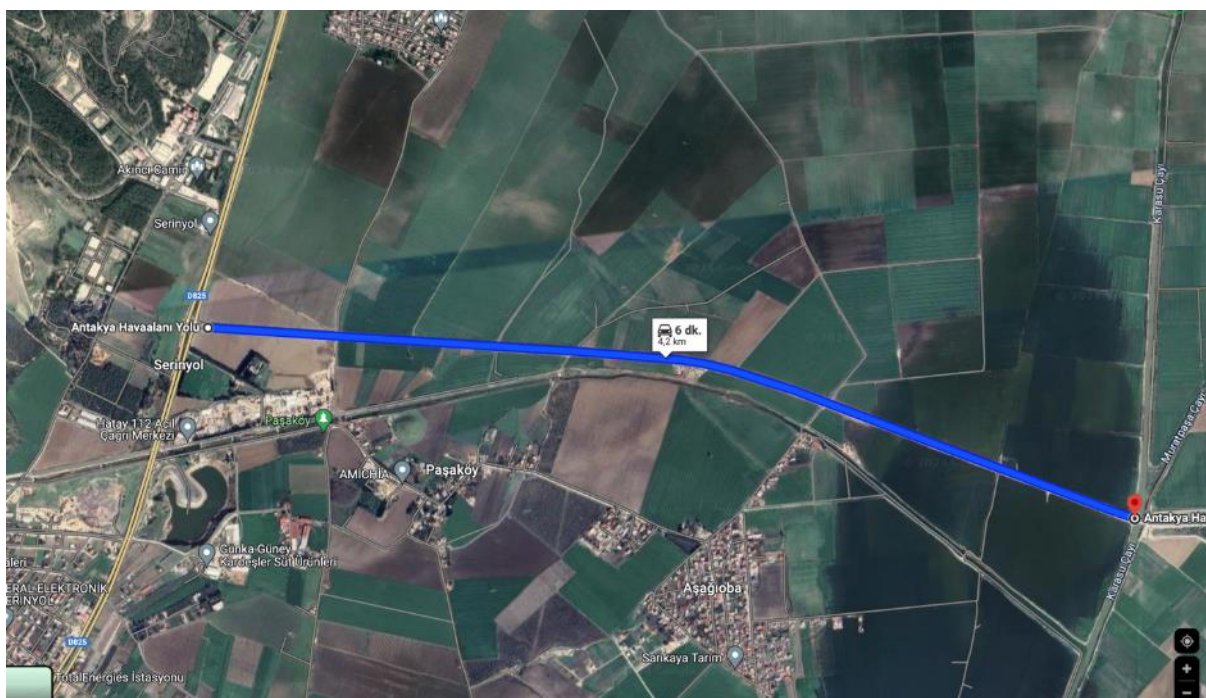


Figure 37. Hatay Airport Road Surroundings

4.2.2.2 Community Health and Safety

Traffic Impacts: Hatay Airport Road is approximately 6 km line passing through agricultural areas. Therefore, sub-project should be managed and monitored with the traffic safety measures especially on the agricultural and husbandry intense season from April to October.

Related stakeholders should be informed on the health and safety measures, construction schedule and road restrictions, if occurred.

4.2.2.3 Resettlement and Land Acquisition

There is no need for land acquisition within the scope of the Sub-Project activities. Therefore, a potential physical displacement will not occur due to the Sub-Project activities.

4.2.2.4 Loss of Livelihood

A potential economic displacement will not occur due to the Sub-Project activities. However, heavy vehicle traffic and excavation works continue on the Hatay Airport Road may occur dust impacts on the agricultural activities and agricultural products. Therefore, taking measures to prevent the dust, not to close the passageways and livestock access roads used by the local people should be considered as mitigation measures.

Considering the impacts of this Project, its impacts on livelihoods should be determined through consultation.

4.2.2.5 Infrastructure and Services

For the Kırıkhan-Kızılkaya Construction Site which is defined under the 4.1.2.5. Infrastructure and Services Section is also valid for this Sub-Project Infrastructure and Services impact assessment.

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4.2.2.6 Labor and Working Conditions

80 workers and 25 technical personnel are accommodating at the Construction Site, which is located next to the Kızılkaya Quarry in the Kızılkaya Village. Since this workforce will also be the workforce of this sub-project, the evaluations under 4.1.2.6 Labor and Working Conditions are also valid within the scope of the Hatay Airport sub-project.

4.2.3 Stakeholder Engagement and Grievance Redress Mechanism

KGM does not have a stakeholder engagement plan and grievance mechanism that will meet the project requirements and AIIB standards. Within the scope of the Project, no discussions or meetings have been held with stakeholders in the surrounding settlements regarding the Project so far.

The grievance mechanism operated within the scope of the project is as follows:

For the grievance mechanism, worker complaints can be submitted in writing to both the on-site construction site managers and the Contractor's Human Resources department. Requests/complaints received are examined and responded to as soon as possible.

For the grievance mechanism, citizens/institutions must contact both the control offices in charge and the KGM. They can apply to the Regional Directorate of KGM. Requests/complaints received are examined on-site and responded to as soon as possible.

KGM website includes "Complaint Notification Form for Real Persons" and "Complaint Notification Form for Legal Entities" (<https://www.kgm.gov.tr/Sayfalar/KGM/SiteTr/Root/SikayetGeriBildirim.aspx>). Complaint forms allow complaints with open names, but do not allow anonymous complaints to be received.

The grievance mechanism of the contractors and KGM was evaluated. It has been observed that the grievance management and stakeholder participation activities operated by both KGM and the main contractors of the sub-projects do not comply with AIIB standards.

Within the scope of the project, it is proposed to establish both external and employee grievance mechanisms.

Within the scope of the Project, a worker grievance mechanism should be established where anonymous complaints of employees can be received, accessible to all employees free of charge, safely and equally, defining the gender-based violence and harassment procedure in accordance with AIIB standards.

The grievance mechanism should be explained to all workers within the scope of the training to be given before they start working.

The grievance redress mechanism should ensure that complaints are received through complaint boxes in common areas and cafeterias, as well as through tools such as the ethics line and telephone.

SEP (including GRM) will be prepared to develop a gender-sensitive grievance mechanism procedure that includes these and also includes employee complaints, where anonymous complaints can be reported, and to eliminate/close this gap.

4.2.4 Assessment of Environment, OHS and Biodiversity-Related Findings

Due diligence findings regarding the Hatay Airport Road sub-project and related facilities are given in Table 9. The findings of this sub-project are presented together with the Islahiye-Hassa-Kırıkkhan Road sub-project, as both utilize the same construction sites and quarry.



Table 9. Due Diligence Findings for Islahiye-Hassa-Kirikhan Road and Hatay Airport Road Sub-projects and related facilities

Topic/Issue	Kızilkaya Construction and Accommodation Site	Kızilkaya Quarry	Islahiye-Hassa-Kirikhan Road Construction Area	Hatay Airport Road Construction Area
Owner/operator of the facility or the works carried out	FEZA	Owner of the quarry: 5 th Regional Directorate of Highways Operator of the quarry: FEZA	Owner of the sub-project: 5 th Regional Directorate of Highways Contractor: FEZA	Owner of the sub-project: 5 th Regional Directorate of Highways Contractor: FEZA
Specifications and properties of facility or work	Accommodation containers Cafeteria (see Figure 38)	No accommodation on-site Asphalt Plant belonging to FEZA with a capacity of 768,000 tons/year (see Figure 39) Crusher belonging to FEZA with a capacity of 390,000 tons/year (see Figure 40)	No accommodation on-site Construction activities have not started yet.	No accommodation on-site Deep soil mixing machines (DSM) and cementitious materials preparation stations (see Figure 41 and Figure 42)
EIA Opinion	The decision of 'EIA is not required' for the addition of a crushing and screening facility to the existing facility was given by the Hatay Provincial Directorate of EUCC on 02.03.2024. This EIA opinion also covers the construction and accommodation site.	There is an "EIA out of scope" decision for the quarry dated 13.07.2007 and numbered 6400-190-2042 obtained from Hatay Provincial Environment and Forestry Directorate. For the Asphalt Plant Facility, the "EIA is not Required" decision was obtained by FEZA from Hatay Provincial Directorate of Environment and Urbanization on 29.01.2018. The decision of 'EIA is not required' for the addition of a crushing and screening facility to the existing facility was given by the Hatay Provincial Directorate of EUCC on 02.03.2024.	As per the official letters from Hatay Provincial Directorate of EUCC (dated 7.12.2023 and numbered E-26634441-220.03-8142460) and Gaziantep Provincial Directorate of EUCC (numbered E-46818599-000-8190252), the activities to be carried out within the scope the subproject are determined as "EIA out of scope".	The decision of "EIA out of scope" was made by Hatay Provincial Directorate of EUCC, dated 7.12.2023 and numbered E-26634441-220.03-8141979.
Environmental Permit	N/A	There is an environmental permit for the asphalt plant obtained by FEZA on air emission issued by Hatay Provincial Directorate of EUCC, valid until 11.09.2028. 5 th Regional Directorate of Highways has a raw material production permit numbered 31/2006-11(ER:3119679) in an area of 17.19 hectares. FEZA has a blasting permit obtained from Hatay Governorship for this quarry. It was stated by FEZA that, the environmental permit will be renewed to include quarry and crusher once the capacity report is obtained.	N/A	N/A
Working hours and shifts	08:00-17:00 (single shift) On the other hand, it was stated that some works require double shifts.	Quarry activities are carried out during the daytime as needed.	Construction activities have not started yet.	08:00-17:00 (single shift) On the other hand, it was stated that some works require double shifts.
Service procurement	Environmental consultancy OHS service	Environmental consultancy OHS service	Environmental consultancy OHS service	Environmental consultancy OHS service Civil works manufacturing (DSM stations and geotextile membrane implementations)
<u>Water and Wastewater Management</u>				
Water supply – for drinking purposes	The drinking water needs of the personnel have been met from bottled water.	The drinking water needs of the personnel have been met from bottled water.	Construction activities have not started yet.	The drinking water needs of the personnel have been met from bottled water.
Water supply – for personnel usage	Groundwater has been utilizing. There are two storage tanks of 20 m ³ each available.	The facilities at the Kızilkaya construction and accommodation site have been utilized.	Construction activities have not started yet.	Opportunities in nearby facilities have been used.

Topic/Issue	Kızılkaya Construction and Accommodation Site	Kızılkaya Quarry	Islahiye-Hassa-Kırıkhan Road Construction Area	Hatay Airport Road Construction Area
	No groundwater permit was provided.			
Water supply – for process	Groundwater has been utilizing. There are two storage tanks of 20 m ³ each available.	Mains water has been supplied through the neighboring facility “Aslar Beton”, which has infrastructure.	Construction activities have not started yet.	Process water for DSM stations has been purchased through tankers and also provided by using groundwater. No groundwater use permit was provided.
Wastewater management	Wastewater infrastructure works are continuing, the old septic tank is being demolished (see Figure 43) and the new septic system is about to be completed (see Figure 44). It was declared that wastewater accumulated in the septic tank is collected by Kırıkhan Municipality and sent to the licensed Kırıkhan Wastewater Treatment Plant.	The facilities at the Kızılkaya construction and accommodation site have been utilized.	Construction activities have not started yet.	There was no wastewater infrastructure in the construction area, it was stated that the opportunities of nearby facilities have been used.
Raw Material Supply	N/A	N/A	Raw materials have been supplied from Kızılkaya Quarry (owned by KGM), Opal Quarry and Bozkayalar Quarry. It should be noted that Opal quarry and Bozkayalar quarry are operated by a third party and providing raw material to other projects in the region also.	Raw materials have been supplied from Kızılkaya Quarry (owned by KGM), Opal Quarry and Bozkayalar Quarry. It should be noted that Opal quarry and Bozkayalar quarry are operated by a third party and providing raw material to other projects in the region also.
<u>Pollution Prevention & Waste Management</u>				
Hazardous Wastes	Hazardous waste has been stored in the temporary waste storage area. The dispatch of hazardous waste has been carried out through the online platform of MoEUCC, which is Integrated Environmental Information System (EÇBS)/Waste Management Application (MoTAT). Waste vegetable oil has been collected separately in a leak-proof container in the cafeteria and sent to licensed companies. There is an Industrial Waste Management Plan (EAYP) prepared by the consultant covering only three types of waste; 15 01 10, 15 02 05 and 13 02 08. The MoTAT records belonging to these wastes were shared with ÇINAR; however other hazardous wastes should be added to Industrial Waste Management Plan (EAYP). Waste management is not handled properly, related mitigation measures provided in respective ESMP should be applied to bring the sub-project into compliance with national laws and regulations and AIB's requirement.	Existing areas on the construction site are being used.	Construction activities have not started yet.	Waste management practices in the deep soil mixing stations were found to be inadequate, considering national legislation and international standards. Wastes have been stored in open areas regardless of their type and hazard class. (see Figure 45 and Figure 46)
Non-Hazardous Wastes	Domestic wastes have been collected by Kırıkhan Municipality. Other non-hazardous wastes such as end-of-life tires, packaging waste have not been stored in a designated area. The basic level zero waste certificate dated 08.07.2022 and numbered TS731/B3/16/111 was	Domestic wastes have been collected by Kırıkhan Municipality. Other non-hazardous wastes such as end-of-life tires, packaging waste have not been stored in a designated area. The basic level zero waste certificate dated 08.07.2022 and numbered TS731/B3/16/111 was	Construction activities have not started yet.	Waste management practices in the deep soil mixing stations were found to be inadequate, considering national legislation and international standards. Wastes have been stored in open areas regardless of their type and hazard class.

Topic/Issue	Kızılkaya Construction and Accommodation Site	Kızılkaya Quarry	Islahiye-Hassa-Kırıkhan Road Construction Area	Hatay Airport Road Construction Area
	obtained from Hatay Provincial Directorate of EUCC.	obtained from Hatay Provincial Directorate of EUCC.		
Temporary Waste Storage Area	<p>In the temporary waste storage area, hazardous wastes have been stored in compartmentalized and labeled (in accordance with the waste code) areas on the concrete floor. There were no spill kits, no fire extinguishers, no drainage systems for spillages in the storage area. Additionally, it was observed that a few contaminated packaging wastes and waste filters have been stored on the soil outside the temporary waste storage area.</p> <p>Although the area is covered, it should be enclosed on all four sides instead of using wire fences to protect it from external factors (precipitation, intrusions of living creatures). Additionally, it is important to maintain and clean the area regularly, and hazardous waste should be sent to licensed disposal companies within a maximum of 6 months (see Figure 47).</p> <p>Waste management is not handled properly, related mitigation measures provided in the respective ESMP should be applied to bring the sub-project into compliance with national laws and regulations and AIB's requirement.</p>	Existing areas on the construction site are being used.	Construction activities have not started yet.	It was stated that the wastes have been sent to the Kızılkaya construction site.
Topsoil	N/A	N/A	Construction activities have not started yet.	Topsoil has been sending to the storage areas determined by KGM and included in the contracts, or it has been given to the requesting citizens by signing a letter of consent.
Excavation wastes	N/A	N/A	Construction activities have not started yet.	Construction and excavation wastes have been sending to the storage areas determined by KGM and included in the contracts. No permit/official letter for construction and excavation wastes storage area was provided.
Construction wastes	N/A	N/A	Construction activities have not started yet.	Construction and excavation wastes have been sending to the storage areas determined by KGM and included in the contracts. No permit/official letter for construction and excavation wastes storage area was provided.
Chemical Management	<p>Chemicals have been using and stored in a designated chemical storage area. BEKRA Notification should be shared (see Figure 48).</p> <p>No spill kits or fire extinguishers were observed during the site visit.</p>	Existing areas on the construction site are being used.	Construction activities have not started yet.	<p>During the site visit, it was observed that secondary containment structures have not been used at the concrete plants.</p> <p>There are two fuel storage tanks on-site.</p>
Soil Contamination Risk	It should be ensured that hazardous wastes and chemicals are not stored outside designated impermeable areas.	During the site visit, no soil contamination was detected.	Construction activities have not started yet.	<p>It was observed that some parts of the soil have been contaminated due to poor chemical and waste management (see Figure 45 and Figure 46).</p> <p>The soil contamination can be defined as minor when the scope of the work is considered.</p>

Topic/Issue	Kızılkaya Construction and Accommodation Site	Kızılkaya Quarry	Islahiye-Hassa-Kirikhan Road Construction Area	Hatay Airport Road Construction Area
Air Quality and Noise	<p>Generators with capacities of 400 kW and 110 kW have been used for 8 hours per day. In accordance with the Regulation on Control of Industrial Air Pollution, emission measurements are required if the usage period exceeds 500 hours per year.</p> <p>Since the site is located far from residential areas, it does not pose a significant impact in terms of environmental noise.</p> <p>It was stated by KGM and FEZA that no complaints have been received so far regarding air quality and noise.</p>	<p>The air emission measurements of the steam boiler and asphalt plant were conducted between 29.03.2023-29.05.2023.</p> <p>When the measurement report was analyzed, it was found that all parameters complied with national standards except for the total mass flow rate of dust emissions. In this context, settled dust measurements were conducted at the operation site, and the results comply with the limits specified in Annex 2, Table 2.2 of the Regulation on the Control of Industrial Air Pollution.</p> <p>It was declared that dust prevention techniques have been adopted (watering with sprinkler) for both quarry and crusher activities.</p> <p>Since the quarry is located far from residential areas, it does not pose a significant impact in terms of environmental noise. By effectively using the Grievance Redress Mechanism, complaints should be resolved, and necessary mitigating measures should be taken.</p> <p>It was stated by KGM and FEZA that no complaints have been received so far regarding air quality and noise.</p>	<p>Construction activities have not started yet.</p>	<p>A generator has been used in each deep soil mixing station. In accordance with the Regulation on Control of Industrial Air Pollution, emission measurements are required if the usage period exceeds 500 hours per year. Besides, heavy vehicle traffic and excavation works continue on the Hatay Airport Road may occur dust impacts on the agricultural activities and agricultural products.</p> <p>Since the activity areas are located away from residential areas, no significant risk is anticipated in terms of environmental noise.</p> <p>It was stated by KGM and FEZA that no complaints have been received so far regarding air quality and noise.</p>
Community Health and Safety				
Security	<p>The construction site area lacks surrounding fences and a security service; instead, it relies on its own guards.</p>	<p>The construction site area lacks surrounding fences and a security service; instead, it relies on its own guards.</p>	<p>Construction activities have not started yet.</p>	<p>The area where the work was carried out is closed to transportation.</p>
Information and Warning/Safety Signs	<p>The presence of warning/safety signs, including speed limits, is found to be insufficient.</p>	<p>The presence of warning/safety signs, including speed limits, is found to be insufficient.</p>	<p>Construction activities have not started yet.</p>	<p>There is lighting available in the area, and warning signs have been hung to prevent public entry and traffic warning signs have been hung for project workers. However, there is no signboard identifying the project contractor and describing the work (see Figure 49)</p>
Occupational Health and Safety				
OHS Documents	<p>Occupational Health and Safety Professional Contracts are available.</p> <p>The Risk Analysis Report was prepared by the contractor company FEZA on 18.08.2023.</p> <p>The Health and Safety Plan was prepared by the contractor company FEZA on 18.08.2023.</p> <p>The Emergency Response Preparedness Plan was prepared by the contractor company FEZA on 18.08.2023.</p> <p>Within the scope of annual plans and reports, "Annual Training Plan, Annual Work Plan, and Annual Evaluation Report" have been prepared.</p> <p>OHS trainings have been provided and records have been maintained.</p>	<p>Occupational Health and Safety Professional Contracts are available.</p> <p>The Risk Analysis Report was prepared by the contractor company FEZA on 18.08.2023.</p> <p>The Health and Safety Plan was prepared by the contractor company FEZA on 18.08.2023.</p> <p>The Emergency Response Preparedness Plan was prepared by the contractor company FEZA on 18.08.2023.</p> <p>Within the scope of annual plans and reports, "Annual Training Plan, Annual Work Plan, and Annual Evaluation Report" have been prepared.</p>	<p>Occupational Health and Safety Professional Contracts are available.</p> <p>The Risk Analysis Report was prepared by the contractor company FEZA on 18.08.2023.</p> <p>The Health and Safety Plan was prepared by the contractor company FEZA on 18.08.2023.</p> <p>The Emergency Response Preparedness Plan was prepared by the contractor company FEZA on 18.08.2023.</p> <p>Within the scope of annual plans and reports, "Annual Training Plan, Annual Work Plan, and Annual Evaluation Report" have been prepared.</p> <p>OHS trainings have been provided and records have been maintained.</p>	<p>Occupational Health and Safety Professional Contracts are available.</p> <p>The Risk Analysis Report was prepared by the contractor company FEZA on 18.08.2023.</p> <p>The Health and Safety Plan was prepared by the contractor company FEZA on 18.08.2023.</p> <p>The Emergency Response Preparedness Plan was prepared by the contractor company FEZA on 18.08.2023.</p> <p>Within the scope of annual plans and reports, "Annual Training Plan, Annual Work Plan, and Annual Evaluation Report" have been prepared.</p> <p>OHS trainings have been provided and records have been maintained.</p>

Topic/Issue	Kızilkaya Construction and Accommodation Site	Kızilkaya Quarry	Islahiye-Hassa-Kırıkhan Road Construction Area	Hatay Airport Road Construction Area
		OHS trainings have been provided and records have been maintained. ⁵		
Emergency Drills	The Emergency Drill has not been conducted yet.	The Emergency Drill has not been conducted yet.	The Emergency Drill has not been conducted yet.	The Emergency Drill has not been conducted yet.
Safety of the construction/accommodation area	<p>Ergonomics, thermal comfort, natural ventilation, and natural lighting have been prioritized in office areas.</p> <p>There is a dining hall. The meals are cooked and served by chefs (see Figure 50).</p> <p>Exposed rebar, nailed boards, untidy ground, irregular excavation areas, and slopes pose a danger (see Figure 51 and Figure 52).</p> <p>The vehicle parking areas have been designated, but the vehicles have not been parked facing the exit direction (see Figure 53).</p> <p>Emergency assembly areas have been designated, and directional signs have been used.</p> <p>Fire extinguishers are available in dormitories, administrative buildings, and construction sites.</p> <p>Wire insect screens are available to protect against flying insects.</p>	There are no warning signs in the work area.	No work was being carried out during the site visit.	<p>Warning signs and safety barriers around excavation areas are insufficient.</p> <p>Nailed boards, hazardous behaviors leading to fire risks, irregular excavation areas, and slopes pose a danger (see Figure 54).</p> <p>There are areas where working at heights is carried out without using safety harnesses (see Figure 55).</p>
Procurement and Usage of PPE	All employees are provided with work shoes, high visibility jacket, and helmets. Employees working at heights or involved in welding tasks are provided with PPE such as harness lanyard, goggles, earplugs, gloves, etc.	All employees are provided with work shoes, high visibility jacket, and helmets. Employees working at heights or involved in welding tasks are provided with PPE such as harness lanyard, goggles, earplugs, gloves, etc.	All employees are provided with work shoes, high visibility jacket, and helmets. Employees working at heights or involved in welding tasks are provided with PPE such as harness lanyard, goggles, earplugs, gloves, etc.	All employees are provided with work shoes, high visibility jacket, and helmets. Employees working at heights or involved in welding tasks are provided with PPE such as harness lanyard, goggles, earplugs, gloves, etc.
Occupational Accident	There have been one (1) occupational accident at the project area. There has been no permanent disability. The accidents have been resulted in minor injuries.	No occupational accidents have occurred.	No occupational accidents have occurred.	No occupational accidents have occurred.
Biodiversity Management				
Biodiversity Consideration	Although the Kızilkaya Construction and Accommodation Site is an existing facility, its location within a Legally Protected Area and the presence of a sensitive wildlife species make it necessary to evaluate and implement appropriate measures for any activities conducted in this area. According to the Project Introduction File (PIF) of the project, the necessary permissions from the General Directorate of Nature Conservation and National Parks were obtained.	Although the Kızilkaya Quarry is an existing facility, its location within a Legally Protected Area and the presence of a sensitive wildlife species makes it necessary to evaluate and implement appropriate measures for any activities conducted in this area. According to the PIF of the project, the necessary permissions from the General Directorate of Nature Conservation and National Parks were obtained.	The Islahiye-Hassa-Kırıkhan Road is an existing road. No direct impact is expected from the project; however, indirect pollution of water resources may occur due to work on river crossings. Necessary measures will be taken to prevent these effects.	The Hatay Airport Road is an existing road. No direct impact is expected from the project; however, indirect pollution of water resources (such as water canal passing parallel to the road) may occur due to construction works. Necessary measures will be taken to prevent these effects.
Biodiversity Impacts	The Kızilkaya Construction and Accommodation Site is located within a Legally Protected Area and will be evaluated in detail in the ESIA especially for <i>Gazella gazella</i> and <i>Hyaena hyaena</i> .	The Kızilkaya Quarry is located within a Legally Protected Area and will be evaluated in detail in the ESIA especially for <i>Gazella gazella</i> and <i>Hyaena hyaena</i> .	The Islahiye-Hassa-Kırıkhan Road is an existing road. No additional impacts on biodiversity are determined.	The Hatay Airport Road is an existing road. No additional impacts on biodiversity are determined.
Critical Habitats	The Kızilkaya Construction and Accommodation Site is located within a Legally Protected Area and	The Kızilkaya Quarry is located within a Legally Protected Area and will be evaluated in detail in the	The Islahiye-Hassa-Kırıkhan Road is an existing road. No critical habitat is determined.	The Hatay Airport Road is an existing road. No critical habitat is determined.

⁵ It has been observed that a single registration number covering all of Feza's works under the contract has been opened, and to fulfill the legal requirement, a risk analysis report, health safety plan, and emergency response preparedness plan covering all works to be done under this registration number have been prepared.



Topic/Issue	Kızılkaya Construction and Accommodation Site	Kızılkaya Quarry	Islahiye-Hassa-Kırıkhan Road Construction Area	Hatay Airport Road Construction Area
	will be evaluated in detail in the ESIA especially for <i>Gazella gazella</i> and <i>Hyaena hyaena</i> . Although there is intensive work in the project area and the area is modified habitat, precautions need to be taken for the sensitive <i>Gazella gazella</i> species.	ESIA especially for <i>Gazella gazella</i> and <i>Hyaena hyaena</i> . Although there is intensive work in the project area and the area is modified habitat, precautions need to be taken for the sensitive <i>Gazella gazella</i> species.		
Natural Habitats	The Kızılkaya Construction and Accommodation Site is an existing facility. Also, the surroundings contain modified habitats. Therefore, the impact on natural habitats is expected to be low.	The Kızılkaya Quarry is an existing facility. Also, the surroundings contain modified habitats. Therefore, the impact on natural habitats is expected to be low.	The Islahiye-Hassa-Kırıkhan Road is an existing road, therefore impact on natural habitats is expected to be low.	The Hatay Airport Road is an existing road, therefore impact on natural habitats is expected to be low.
Protected Areas*	The Kızılkaya Construction and Accommodation Site is situated within the Mountain Gazelle Wildlife Development Area, which is a Legally Protected Area. Despite being an existing facility, it remains threatened and falls within the distribution range of a protected species (<i>Gazella gazella</i>). Any adverse effects will be evaluated in detail in the ESIA in this respect.	The Kızılkaya Quarry is situated within the Mountain Gazelle Wildlife Development Area, which is a Legally Protected Area. Despite being an existing facility, it remains threatened and falls within the distribution range of a protected species (<i>Gazella gazella</i>). Any adverse effects will be evaluated in detail in the ESIA in this respect.	The Islahiye-Hassa-Kırıkhan Road is situated adjacent to the boundary of Haydarlar Lake, which is a Locally Important Wetland, a Legally Protected Area. Additionally, it falls within the Amanos Mountains Important Plant Area (IPA) border, an Internationally Recognized Area. However, due to the existing road infrastructure and surrounding urbanization, the impact on these areas is expected to be low. Nevertheless, measures should be taken to avoid activities that could affect the wetland system during work conducted around Haydar Lake, such as pollution of streams flowing into the lake, waste disposal within the area, and prevention of dust formation.	The Hatay Airport Road intersects with the Amanos Mountains Important Plant Area (IPA) and the Altınözü Tepeleri Important Natural Area (KBA), both of which are Internationally Recognized Areas. However, due to the existing road infrastructure and surrounding urbanization, the impact on these areas is expected to be low.
Cultural Heritage Management				
Official correspondence	<p>There is an "EIA not Required" decision given by Hatay Provincial Directorate of EUCC on 02.03.2024. This EIA opinion also covers the construction and accommodation site, that means the location of this campsite was already assessed with respect to cultural heritage and no known cultural heritage exists on-site.</p> <p>Nevertheless, further information regarding the cultural heritage will be provided in the ESIA report.</p>	<p>There is an "EIA out of scope" decision for the quarry and "EIA not Required" decisions for the other facilities (asphalt plant and crushing and screening facility) given by Hatay Provincial Directorate of EUCC on 02.03.2024.</p> <p>These EIA opinions indicate that the quarry area was already assessed with respect to cultural heritage and no known cultural heritage exists on-site.</p> <p>Nevertheless, further information regarding the cultural heritage will be provided in the ESIA report.</p>	<p>For Hassa-Kırıkhan part, as per the official letter from Hatay Cultural Heritage Preservation Regional Board Directorate, dated 09.12.2023 and numbered E-85020971-755.99-4550539, in the Saylak Junction Region, the road passes through the 3rd degree archaeological site section of the Saylak Mevkii Ancient Settlement, which is registered as a 1st and 3rd degree archaeological site by the Adana Cultural and Natural Heritage Preservation Regional Board; in the Akbez bridge section, it was seen that the road passes through the 3rd degree archaeological site section of the Çukurtarla Ruin, which was registered as a 1st and 3rd degree archaeological site by the Adana Cultural Heritage Preservation Regional Board Directorate. It has been determined that there is no objection from the Regional Board in carrying out hot bituminous mixture asphalt construction and repair and intersection construction works, provided that they remain within the existing road corridor; however, it has been stated that permission must be obtained from the Regional Preservation Regional Board before any construction and physical implementation to be carried out in the protected areas mentioned above and in the protected areas located near the Hassa-Kırıkhan State Road.</p> <p>For Nurdağı-İslahiye part, as per the official letter from Gaziantep Cultural Heritage Preservation Regional Board Directorate, dated 21.12.2023 and numbered E-71691431-165.99-4528707, in the examinations carried out by the Regional Board Directorate's experts, it was understood that there</p>	<p>As per the official letter, dated 08.12.2023 and numbered E-85020971-165.02.03-4515487, from the Hatay Cultural Heritage Preservation Regional Board Directorate, it has been observed that the area covering Hatay Province, Antakya District, Airport Connection Road is not within the scope of Law No. 2863 or registered archaeological, historical, urban sites or immovable cultural assets that need to be protected are within the protection area. It was stated that no movable or immovable cultural property was found.</p>

Topic/Issue	Kızılkaya Construction and Accommodation Site	Kızılkaya Quarry	Islahiye-Hassa-Kırıkhan Road Construction Area	Hatay Airport Road Construction Area
			<p>are no immovable cultural assets within the scope of Law No. 2863 on the property and its immediate surroundings. For this reason, there is no objection to carrying out road improvement work on the specified route in terms of the Regional Board's legislation. However, if any finds or remains that qualify as immovable cultural assets that need to be protected are encountered during the physical and construction interventions to be carried out in the area, the work must be stopped immediately and this must be reported to the nearest Museum Directorate, the headman in the village or the local administrative authorities in other places within 3 (three) days at the latest.</p>	

*Maps of the Legally Protected and Internationally Recognized Areas are given in Appendix-5.



Figure 38. Kizilkaya Construction and Accommodation Site



Figure 39. Asphalt Plant in Kizilkaya Quarry



Figure 40. Crusher in Kizilkaya Quarry



Figure 41. Deep Soil Mixing Station-1 at the Hatay Airport Road



Figure 42. Deep Soil Mixing Station-2 at the Hatay Airport Road



Figure 43. Old Septic Tank in the Kizilkaya Construction and Accommodation Site



Figure 44. New Septic Tank in the Kizilkaya Construction and Accommodation Site



Figure 45. Poor Management of Wastes and Chemicals-1 at the Hatay Airport Road



Figure 46. Poor Management of Wastes and Chemicals-2 at the Hatay Airport Road



Figure 47. Temporary Waste Storage Area in the Kızılkaya Construction and Accommodation Site



Figure 48. Chemical Storage Tank in the Kızılkaya Construction and Accommodation Site



Figure 49. Warning Sign at the Hatay Airport Road Construction Site



Figure 50. The Dining Hall at the Kızılkaya Construction and Accommodation Site



Figure 51. Hazardous Behaviors at the Kızılkaya Construction and Accommodation Site-1



Figure 52. Environmental and OHS Non-conformity at the Kızılkaya Construction and Accommodation Site-2



Figure 53. Parking area at the Kızılkaya Construction and Accommodation Site



Figure 54. Hazardous Conditions and Hazardous behavior at the Hatay Airport Road Construction Site



Figure 55. At the Hatay Airport Road Construction Site, Working at Heights

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4.3 Antakya-Reyhanlı Road

4.3.1 General Information

- Feza Taahhüt A.Ş. (FEZA) was assigned as the Contractor through a contract signed with the 5th Regional Directorate of Highways on 05.05.2023 for three sub-projects: Islahiye-Hassa-Kırıkhan Road, **Antakya-Reyhanlı Road** Hot Bituminous Mixture Repair Work, Hatay Airport Road Soil Works, Art Structures and Superstructure Construction Work.
- “Kızılkaya Quarry” and “Kuruyer Construction and Accommodation Site” will be utilized within the scope of the sub-project. Kuruyer Construction and Accommodation Site will also be used for Antakya-Samandağ Road sub-project.
- Kızılkaya Construction and Accommodation Site, utilized for the Islahiye-Hassa-Kırıkhan Road sub-project and Hatay Airport sub-project, was used for the Antakya-Reyhanlı Road sub-project temporarily, until the completion of the Kuruyer Construction and Accommodation Site.
- It was observed during the site visit that Demirköprü Bridge is currently being reconstructed (see Figure 56). There is a ready-mixed concrete facility located on the construction area with a capacity of 50 m³/hour for the reconstruction works of Demirköprü Bridge.
- Road renewal and partial arrangement activities are being carried out in various sections.



Figure 56. Demirköprü Bridge Construction Area

4.3.2 Assessment of the Social Findings

4.3.2.1 Population Change

Antakya Kuruyer Construction Site (see Figure 57) will be used for the Antakya-Reyhanlı Road construction activities. The camp site is in the installation process and located in the Narlıca Kuruyer Village boundaries.



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Figure 57. Antakya Kuruyer Construction Site

There will be accommodation for a maximum of 150 people. Nearest resident is approximately 1250 m from the Kuruyer Construction Site. This distance falls within Project AoI. Worker accommodation will be temporary due to the nature of the work and Project activities will not trigger population migration to the region.

Gender Issues: It is expected that the majority of workers working in the project will be men. Considering this situation, in order to avoid negative communication with the surrounding settlements and to prevent conflicts arising from social and cultural disagreements, the interaction between workers and local people will be minimized and all needs will be met within the camp area. Training on CHS, SEA/SA, traffic security, communication with local people should be provided for workers, security personnel and drivers staying at the camp site, and the code of conduct should also include compliance with the measures taken on these issues as part of the contracts.

Vulnerable People: Along the Antakya-Reyhanlı Road, there are temporary shelter areas in Üzümdalı location. As shown in Figure 58 below, there is a tent area on the highway between Alaattin and Üzümdalı.

Necessary information sharing and mitigation measures should be developed and implemented to ensure that the daily lives of vulnerable groups affected by the earthquake are not slowed down. It should be ensured that their access to health and education services is not slowed down due to traffic congestion or road restrictions caused by road construction.

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Figure 58. Temporary Shelter Areas in Üzümdalı location

4.3.2.2 Community Health and Safety

The road under construction is the road leading to the Cilvegözü border gate and the roads are heavily used by many heavy vehicles/trucks (see Figure 59). However, recently it has been closed to the passage of trucks and trailers. Heavy vehicles that want to go to the border pass through the neighborhood using the back roads (Alaattin Neighborhood). Even though it is independent of the KGM Project impacts, this situation occurs community health and safety risks and problems on the village roads used. Considering these risks and current impacts, not using roads other than the main road within the scope of the Project, and not allowing trucks and heavy vehicles to enter villages and neighborhoods are among the concerns highlighted by the local people and the mukhtars as an important issue.



Figure 59. Antakya/Reyhanlı/Cilvegözü State Highway

Source: March 2024 Site Visit Photos

The settlement in Tayfursökmen district is close to the road where the work will be carried out. The repair work of the collapsed bridge in Demirköprü neighborhood has been continuing for about one year. Interviews were held with the Demirköprü Mukhtar and business owners, and according to the information received, it was stated that even if precautions were taken, dust and noise were intense, and traffic problems and negative effects were experienced from time to time.

The Mukhtar of the Demirköprü stated that heavy vehicles crashed into buildings and caused damage while using narrow roads. There are container areas, earthquake martyrs' cemetery and Tayinat Mound on the road where work will be carried out within the scope of the Project.



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Kuruyer Limestone Quarry will be utilized for concrete production activities. It is planned that another company will extract the material from the quarry. It was declared that limestone would be purchased.

Intense heavy vehicle traffic and excavation truck traffic may pose a risk for settlements and agricultural/husbandry activities near the construction activities and Project transportation roads including Kuruyer Construction Site. Measures should be taken in these areas to minimize the dust, traffic risks in the related Project ESMP.

4.3.2.3 Resettlement and Land Acquisition

There is no need for land acquisition within the scope of the Sub-Project activities.

The land used within the scope of Antakya Kuruyer Construction Site is treasury land, around which mining, and quarry activities continue. Information on the previous condition of the land and permissions to use the land should be provided.

Therefore, a potential physical displacement will not occur.

4.3.2.4 Loss of Livelihood

Potential Economic Displacement, Restrictions on Land Use: The project activities in the Antakya-Reyhanlı Road does not have a direct negative impact on the livelihoods of the local people.

The land used within the scope of Antakya Kuruyer Construction Site is treasury land, around which mining, and quarry activities continue. Information on the previous condition of the land and permissions to use the land should be provided and potential physical displacement should be assessed.

Due to the heavy vehicle traffic and excavation works, dust impact may occur on the agricultural/husbandry activity near the construction activities and Project transportation roads including Kuruyer Construction Site.

Measures should be taken in these areas to minimize the dust, traffic risks in the related Project ESMP and sub management plans.

4.3.2.5 Infrastructure and Services

During the process of meeting the electricity, water and sewage needs for the camp site to be used within the scope of the project, pressure should not be put on the services used by the local people. It has been learned that Kuruyer Construction Site will use groundwater, and there will be a septic tank at the camp site. In addition, all other usage permits must be obtained, documented and monitored.

It has been learned that it is planned to establish an asphalt plant, a concrete plant/crusher and a mechanical plant. It has been stated that the necessary permits will be obtained in the upcoming periods. It has been declared that groundwater will be used.

In order for the project not to have an impact on ecosystem services and infrastructure, taking the necessary precautions to protect water resources, making water resources measurements and obtaining permits will be important stages in this process.

4.3.2.6 Labor and Working Conditions

There are currently 10 employees in the Kuruyer Camp Site. Infrastructure works continue and transportation is provided by shuttle vehicles. The rooms have air conditioning and there will



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be separate showers, toilets, dining halls and social areas for men and women. It is also planned to build a masjid and ablution facility.

Before completing the installation of the Kuruyer Construction Site, the camping area was isolated to protect its boundaries from the outside and the accommodation conditions, drinking water, health facilities, washing-bathroom conditions, changing rooms, food and beverage facilities, accommodation areas, rest areas, worker health and safety conditions were made by ILO. It is recommended that it be monitored to ensure that it is provided in accordance with the standards and AIIB ESF.

Social Compliance Issues

Since KGM is an official institution, it is subject to the relevant laws, regulations⁶ and conventions. In this context, KGM and all contractors working under it are subject to Labor Law and ILO conventions to which Türkiye is a party⁷.

All contractors within the scope of the project are obliged to prohibit child labor, forced labor, and ensure equal treatment and gender equality for employees, including the ILO conventions listed below under the following headings: freedom of association, child labor, forced labor, equal treatment of employees, and gender equality.

- Forced Labor Convention No. 29
- Convention No. 105 on the Abolition of Forced Labor
- Minimum Age Convention No. 138
- No. 182 Urgent Prohibition and Eradication of Worst Forms of Child Labor
- Action Agreement
- Convention No. 87 on Freedom of Association and Protection of the Right to Organize
- Convention on the Right to Organize and Collective Bargaining No. 98
- Equal Pay Convention No. 100
- Equality of Treatment (Social Security) Convention No. 118
- Employment Policy Agreement No. 122

In this context, KGM will ensure that the following actions are taken to ensure that all these laws, procedures and agreements are implemented throughout the Project, regulating the management of working conditions and labor relations, including the prevention of Child Labor and Forced Labor.

- Notifying the main contractor and all subcontractors of the contracts, policies and procedures to which they are parties and which they are obliged to comply with,
- Including the contract, policies and procedures and their determined main headings in the training given before starting work and making contractor employee training a part of the induction training.
- Incorporating policies and procedures within the scope of all employee agreements into contracts, either as part of these agreements or by transferring them to codes of conduct.
- Making prohibitions, ethical principles and responsibilities visible in work areas (camp sites, work areas).
- Establishing a grievance mechanism that is accessible to all employees of the Project, including subcontractor employees, and allowing anonymous complaints, and disclosing it to employees.

⁶ <https://www.kgm.gov.tr/Sayfalar/KGM/SiteTr/Kurumsal/KanunMevzuat.aspx>

⁷ https://www.ilo.org/sites/default/files/wcmsp5/groups/public/@europe/@ro-geneva/@ilo-ankara/documents/genericdocument/wcms_645630.pdf



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4.3.3 Stakeholder Engagement and Grievance Redress Mechanism

KGM does not have a stakeholder engagement plan and grievance mechanism that will meet the project requirements and AIIB standards. Within the scope of the Project, no discussions or meetings have been held with stakeholders in the surrounding settlements regarding the Project so far.

The grievance mechanism operated within the scope of the project is as follows:

For the grievance mechanism, worker complaints can be submitted in writing to both the on-site construction site managers and the Contractor's Human Resources department. Requests/complaints received are examined and responded to as soon as possible.

For the grievance mechanism, citizens/institutions must contact both the control offices in charge and the KGM. They can apply to the Regional Directorate of KGM. Requests/complaints received are examined on-site and responded to as soon as possible.

KGM website includes "Complaint Notification Form for Real Persons" and "Complaint Notification Form for Legal Entities" (<https://www.kgm.gov.tr/Sayfalar/KGM/SiteTr/Root/SikayetGeriBildirim.aspx>). Complaint forms allow complaints with open names, but do not allow anonymous complaints to be received.

The grievance mechanism of the contractors and KGM was evaluated. It has been observed that the grievance management and stakeholder participation activities operated by both KGM and the main contractors of the sub-projects do not comply with AIIB standards.

Within the scope of the project, it is proposed to establish both external and employee grievance mechanisms.

Within the scope of the Project, a worker grievance mechanism should be established where anonymous complaints of employees can be received, accessible to all employees free of charge, safely and equally, defining the gender-based violence and harassment procedure in accordance with AIIB standards.

The grievance mechanism should be explained to all workers within the scope of the training to be given before they start working.

The grievance redress mechanism should ensure that complaints are received through complaint boxes in common areas and cafeterias, as well as through tools such as the ethics line and telephone.

SEP (including GRM) will be prepared to develop a gender-sensitive grievance mechanism procedure that includes these and also includes employee complaints, where anonymous complaints can be reported, and to eliminate/close this gap.

4.3.4 Assessment of the Environment, OHS and Biodiversity-Related Findings

Due diligence findings regarding the Antakya-Reyhanlı Road sub-project and related facilities are given in Table 10. The findings of this sub-project are presented together with the Antakya-Samandağ Road sub-project, as both utilize the same construction sites and quarry.



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4.4 Antakya – Samandağ Road

4.4.1 General Information

- Deha Altyapı A.Ş. (DEHA) was assigned as the Contractor through a contract signed with the 5th Regional Directorate of Highways on 03.01.2024 for Antakya-Samandağ Road (Including Samandağ Crossing) Km: 0+000-26+850 Section Supply Construction Works.
- “Kuruyer Limestone Quarries” and “Kuruyer Construction and Accommodation Site” will be utilized within the scope of the sub-project. Kuruyer Construction site is still under construction. It is anticipated that the use of the construction site will begin in May 2024. Kuruyer Construction and Accommodation Site will also be used for Antakya-Reyhanlı Road sub-project.
- Kızılkaya Construction and Accommodation Site utilized for the İslahiye-Hassa-Kırıkhan Road sub-project and Hatay Airport sub-project, is also serving temporarily for the Antakya-Samandağ Road sub-project until the completion of the Kuruyer Construction and Accommodation Site.
- Asphalt renewal works have not commenced yet. Construction works for this sub-project will commence in May 2024 and planned to be completed in December 2024.
- It was observed during the site visits that the landslide removal works at the 6th km are continuing by another company (see Figure 60). This landslide removal work is a preliminary preparation to initiate the work within the scope of the sub-project. The landslide removal services were received by DEHA from another company.
- Endpoint of the sub-project is shown in Figure 61.



Figure 60. Landslide Removal Works at the Project Site

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Figure 61. Endpoint of the Sub-project Area

4.4.2 Assessment of the Social Findings

4.4.2.1 Population Change

The camp site is in the installation process and located in the Narlıca Kuruyer Village boundaries. There will be accommodation for a maximum of 150 people. Nearest resident is approximately 1250 m from the Kuruyer Construction Site. This distance falls within Project Aol.

It is expected that the majority of workers working in the project will be men. Considering this situation, in order to avoid negative communication with the surrounding settlements and to prevent conflicts arising from social and cultural disagreements, the interaction between workers and local people will be minimized and all needs will be met within the camp area.

Training on CHS, SEA/SA, traffic security, communication with local people should be provided for workers, security personnel and drivers staying at the camp site, and the code of conduct should also include compliance with the measures taken on these issues as part of the contracts.

4.4.2.2 Community Health and Safety

Samandağ Belt Highway is approximately 27 km line passing through residential areas as shown in Figure 62.

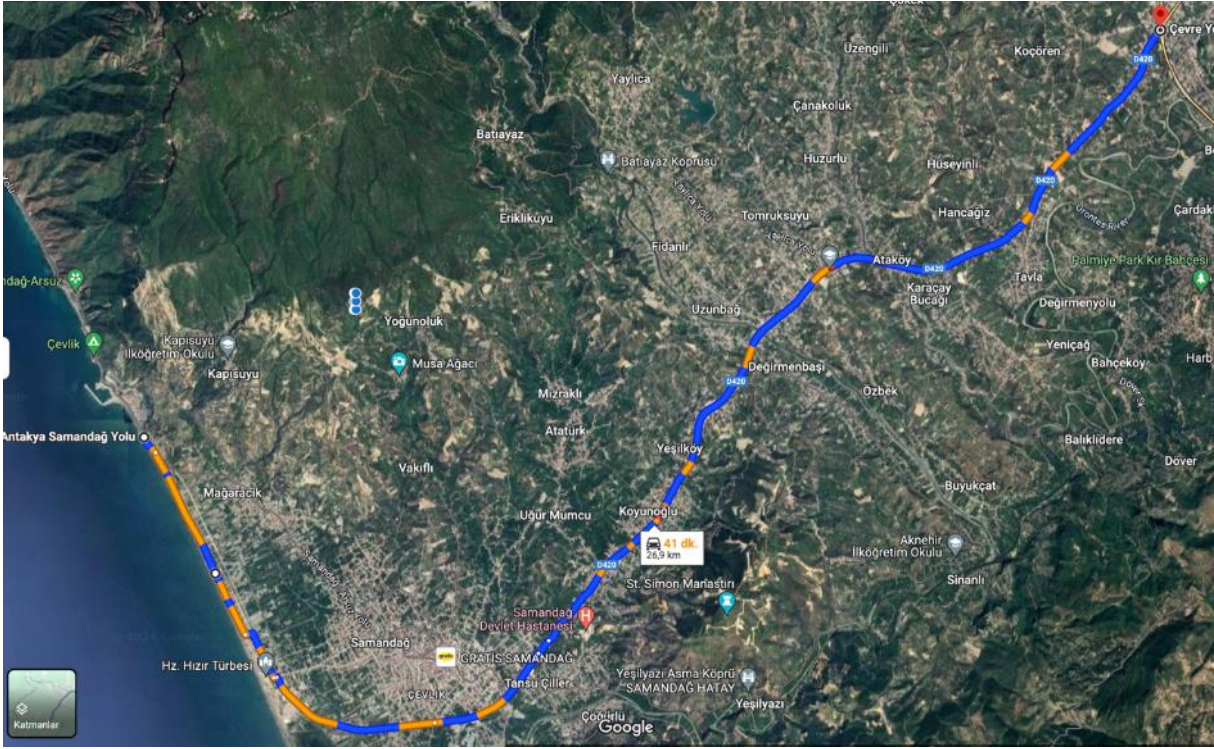


Figure 62. Samandağ Belt Highway Route

Also, a landslide has damaged the road in Küçükkaracaay District as shown in Figure 63 below and restoration works have been started. Container camping areas are available in various locations throughout the region.



Figure 63. Landslide in Küçükkaracaay District Road

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The sub-project should be managed and monitored with the traffic impact mitigation measures with trainings to be provided to the drivers, workers especially for the sensitive points such as schools, container camps, hospitals etc. in the Aol.

4.4.2.3 Resettlement and Land Acquisition

In addition to the current community health and safety issues, land acquisition is also highlighting an important issue on the sub-project study area. There is a private parcel in the expropriation process in the Sutaşı location of the Defne region in this region (see Figure 64).

Additional land acquisition is required for the Supply Construction Work of Antakya-Samandağ Road (Including Samandağ Passage) Km: 0+000-26+850, located within the borders of the 5th Regional Directorate of Highways.

KGM carries out the following procedure in this regard:

KGM submits the Expropriation Plan prepared according to the approved Project to the Ministry for a "Public Interest Decision" by the General Directorate of Highways. Following the Public Interest Decision, declarations are sent to the relevant cadastral directorates for registration. As a result of the registrations, a valuation report is prepared for the immovable properties within the road construction and safety area, the determined prices are forwarded to the relevant parcel owners and bargaining negotiations are held. For the parcels for which an agreement is reached, an allowance is requested from KGM, and the expropriation money is deposited into the owners' accounts.

At the end of this process, which is carried out in accordance with Article 27 of the Expropriation Law, the "Price Determination and Registration case" specified in Article 10 of the Expropriation Law is filed by KGM with the relevant Court of First Instance for the parcels for which no agreement can be reached. The amount determined by the judge as a result of the determination of the impartial expert is deposited into the account of the court by the KGM, thus ensuring the registration of the parcel.

In this context, at the stage of expropriation of the existing parcel, KGM will start purchasing negotiations with the parcel owners after completing the Valuation procedures.



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Figure 64. Project Land Acquisition Parcel

The studies have been carried out so far for Sutaşı District, 200 Island, Parcel No. 105, which falls within the Antakya-Samandağ State Highway expropriation corridor, are listed below;

- Expropriation Plan Approved and Public Interest Decision was taken.
- Measurement was made on the basis of the Valuation Appraisal on the parcel and the outbuildings (tree, type of tree, age, wall, pole, etc.) entering the expropriation corridor were determined.
- In order to obtain the zoning and construction characteristics that are the basis for the Valuation Appraisal of the parcel, the zoning status was asked from Samandağ Municipality in an official letter.
- Inspections and surveys continue at the Land Registry Directorate and locally for recent comparable sales around the parcel.

Potential Physical Displacement

On the expropriated parcel a family affected by the earthquake is currently residing in a temporary container shelter. Regarding this vulnerable household's occupancy of the parcel, the Hatay Governorship, Provincial Disaster and Emergency Directorate issued a letter dated 22.02.2024, stating that 'the individual in question has been acknowledged as eligible for one house. However, the allocation date for the housing cannot be determined at this time, as the allocation process is conducted through random selection from among the disaster houses constructed in accordance with Law No. 7269.

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4.4.2.4 Loss of Livelihood

A potential economic displacement will not occur due to the Sub-Project activities. Due to the heavy vehicle traffic and excavation works, dust impact may occur on the agricultural/husbandry activity near the construction activities and Project transportation roads including Kuruyer Construction Site.

4.4.2.5 Infrastructure and Services

During the process of meeting the electricity, water and sewage needs for the camp site to be used within the scope of the project, pressure should not be put on the services used by the local people. It has been learned that Kuruyer Construction Site will use groundwater, and there will be a septic tank at the camp site. In addition, all other usage permits must be obtained, documented and monitored.

It has been learned that it is planned to establish an asphalt plant, a concrete plant/crusher and a mechanical plant. It has been stated that the necessary permits will be obtained in the upcoming periods. It has been declared that groundwater will be used.

In order for the project not to have an impact on ecosystem services and infrastructure, taking the necessary precautions to protect water resources, making water resources measurements and obtaining permits will be important stages in this process.

4.4.2.6 Labor and Working Conditions

There are currently 10 employees in the Kuruyer Camp Site. Infrastructure works continue and transportation is provided by shuttle vehicles. The rooms have air conditioning and there will be separate showers, toilets, dining halls and social areas for men and women. It is also planned to build a masjid and ablution facility.

Before completing the installation of the Kuruyer Construction Site, the camping area was isolated to protect its boundaries from the outside and the accommodation conditions, drinking water, health facilities, washing-bathroom conditions, changing rooms, food and beverage facilities, accommodation areas, rest areas, worker health and safety conditions were made by ILO. It is recommended that it be monitored to ensure that it is provided in accordance with the standards and AIB ESF.

Social Compliance Issues

Since KGM is an official institution, it is subject to the relevant laws, regulations⁸ and conventions. In this context, KGM and all contractors working under it are subject to Labor Law and ILO conventions to which Türkiye is a party⁹.

All contractors within the scope of the project are obliged to prohibit child labor, forced labor, and ensure equal treatment and gender equality for employees, including the ILO conventions listed below under the following headings: freedom of association, child labor, forced labor, equal treatment of employees, and gender equality.

- Forced Labor Convention No. 29
- Convention No. 105 on the Abolition of Forced Labor
- Minimum Age Convention No. 138
- No. 182 Urgent Prohibition and Eradication of Worst Forms of Child Labor
- Action Agreement
- Convention No. 87 on Freedom of Association and Protection of the Right to Organize

⁸ <https://www.kgm.gov.tr/Sayfalar/KGM/SiteTr/Kurumsal/KanunMevzuat.aspx>

⁹ https://www.ilo.org/sites/default/files/wcmsp5/groups/public/@europe/@ro-geneva/@ilo-ankara/documents/genericdocument/wcms_645630.pdf



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- Convention on the Right to Organize and Collective Bargaining No. 98
- Equal Pay Convention No. 100
- Equality of Treatment (Social Security) Convention No. 118
- Employment Policy Agreement No. 122

In this context, KGM will ensure that the following actions are taken to ensure that all these laws, procedures and agreements are implemented throughout the Project, regulating the management of working conditions and labor relations, including the prevention of Child Labor and Forced Labor.

- Notifying the main contractor and all subcontractors of the contracts, policies and procedures to which they are parties and which they are obliged to comply with,
- Including the contract, policies and procedures and their determined main headings in the training given before starting work and making contractor employee training a part of the induction training.
- Incorporating policies and procedures within the scope of all employee agreements into contracts, either as part of these agreements or by transferring them to codes of conduct.
- Making prohibitions, ethical principles and responsibilities visible in work areas (camp sites, work areas).
- Establishing a grievance mechanism that is accessible to all employees of the Project, including subcontractor employees, and allowing anonymous complaints, and disclosing it to employees.

4.4.3 Stakeholder Engagement and Grievance Redress Mechanism

KGM does not have a stakeholder engagement plan and grievance mechanism that will meet the project requirements and AIIB standards. Within the scope of the Project, no discussions or meetings have been held with stakeholders in the surrounding settlements regarding the Project so far.

The grievance mechanism operated within the scope of the project is as follows:

For the grievance mechanism, worker complaints can be submitted in writing to both the on-site construction site managers and the Contractor's Human Resources department. Requests/complaints received are examined and responded to as soon as possible.

For the grievance mechanism, citizens/institutions must contact both the control offices in charge and the KGM. They can apply to the Regional Directorate of KGM. Requests/complaints received are examined on-site and responded to as soon as possible.

KGM website includes "Complaint Notification Form for Real Persons" and "Complaint Notification Form for Legal Entities" (<https://www.kgm.gov.tr/Sayfalar/KGM/SiteTr/Root/SikayetGeriBildirim.aspx>). Complaint forms allow complaints with open names, but do not allow anonymous complaints to be received.

The grievance mechanism of the contractors and KGM was evaluated. It has been observed that the grievance management and stakeholder participation activities operated by both KGM and the main contractors of the sub-projects do not comply with AIIB standards.

Within the scope of the project, it is proposed to establish both external and employee grievance mechanisms.

Within the scope of the Project, a worker grievance mechanism should be established where anonymous complaints of employees can be received, accessible to all employees free of charge, safely and equally, defining the gender-based violence and harassment procedure in accordance with AIIB standards.



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The grievance mechanism should be explained to all workers within the scope of the training to be given before they start working.

The grievance mechanism should ensure that complaints are received through complaint boxes in common areas and cafeterias, as well as through tools such as the ethics line and telephone.

SEP (including GRM) will be prepared to develop a gender-sensitive grievance mechanism procedure that includes these and also includes employee complaints, where anonymous complaints can be reported, and to eliminate/close this gap.

4.4.4 Assessment of the Environment, OHS and Biodiversity-Related Findings

Due diligence findings regarding the Antakya-Samandağ Road sub-project and related facilities are given in Table 10. The findings of this sub-project are presented together with the Antakya-Reyhanlı Road sub-project, as both utilize the same construction sites and quarry.



Table 10. Due Diligence Findings for Antakya-Reyhanlı Road and Antakya-Samandağ Road Sub-projects and related facilities

Topic/Issue	Kuruyer Construction and Accommodation Site	Kuruyer Limestone Quarries	Antakya-Reyhanlı Road Construction Area	Antakya-Samandağ Road Construction Area
Owner/operator of the facility or the works carried out	DEHA ¹⁰	<p>Owner of the quarry: 5th Regional Directorate of Highways</p> <p>Operator of the quarry: As shown in Figure 66, Kuruyer Limestone Quarries are divided into four parts and three of which are currently operated by different contractors working with KGM on other projects.</p> <p>One part of the mentioned quarry was allocated to DEHA by 5th Regional Directorate of Highways. In the current situation, DEHA is not planning to operate the quarry.</p>	<p>Owner of the sub-project: 5th Regional Directorate of Highways</p> <p>Contractor: FEZA</p>	<p>Owner of the sub-project: 5th Regional Directorate of Highways</p> <p>Contractor: DEHA</p>
Specifications and properties of facility or work	<p>This construction and accommodation site is still under construction (see Figure 65) and planned to be completed in May 2024. It was declared by DEHA that the personnel will start to use this campsite in early May 2024.</p> <p>Concrete plant capacity: 95 m³/h (constructed)</p> <p>Asphalt plant capacity: 240 tons/h (constructed)</p> <p>Mechanical plant capacity: 400 ton/h (planned)</p> <p>These facilities will be used by both FEZA and DEHA within the scope of Antakya-Reyhanlı and Antakya-Samandağ sub-projects. DEHA is responsible for obtaining the required permissions and operating these plants.</p>	<p>It was declared by DEHA that they will not establish a crushing and screening facility at the quarry.</p> <p>They will purchase aggregate from other companies operating in Kuruyer Limestone Quarries.</p>	<p>No accommodation on-site</p> <p>Concrete plant with a capacity of 50 m³/hour (see Figure 67) . This concrete plant is located at a separate location near the Demirköprü bridge.</p>	<p>No accommodation on-site</p> <p>Construction activities have not started yet.</p>
EIA Opinion	<p>There is an "EIA is out of scope" decision dated 01.03.2024 and numbered E-26634441-220.03-8932722, received from Hatay Provincial Directorate of EUCC for concrete plant.</p> <p>The "EIA Not Required" decision for the asphalt plant was obtained by DEHA from Hatay Provincial Directorate of EUCC on 06.06.2024.</p> <p>The EIA opinion for the mechanical plant has not yet been obtained. The EIA opinion must be obtained if the mechanical plant will be established.</p>	<p>There is an "EIA Not Required" decision taken by 5th Regional Directorate of Highways dated 08.11.2023 for the Limestone Quarry and Crushing Screening Facilities project, which is permitted on a 24.91-hectare area for raw material production with permit certificate of 31/2023-09 (ER: 3480631).</p>	<p>The "EIA is out of scope" decision was made by Hatay Provincial Directorate of EUCC within the scope of the official letter dated 07.12.2023.</p> <p>On the other hand, since the concrete plant capacity is below the limit (100 m³/hour) specified in the EIA Regulation lists, it is considered out of scope for EIA.</p>	<p>As per the official letter from Hatay Provincial Directorate of EUCC, dated 18.12.2023 and numbered E-26634441-611.02-8160875, the "EIA is out of scope" decision was made.</p>
Environmental Permit	<p>The environmental permit process must be initiated before the asphalt plant, concrete plant and mechanical plant become operational.</p>	<p>It should be ensured by DEHA before the aggregate purchase that the required permits for the quarries and crushing & screening facilities have been obtained by the companies which are operating the related facilities.</p>	<p>The environmental permit for the concrete plant within the scope of Regulation on Environmental Permit and License has not been obtained by FEZA yet.</p>	N/A
Working hours and shifts	Single shift is planned to be 08:00-17:00	N/A	Single shift is planned to be 08:00-17:00	Single shift is planned to be 08:00-17:00
Service procurement	OHS services Environmental consultancy	Purchasing of aggregate	OHS services Environmental consultancy	OHS services
Water and Wastewater Management				

¹⁰ It should be noted that FEZA and DEHA are affiliated companies. Kızılkaya Construction Site belongs to FEZA, and Kuruyer Construction Site belongs to DEHA. Each company is responsible from its camp site and facilities.

Topic/Issue	Kuruyer Construction and Accommodation Site	Kuruyer Limestone Quarries	Antakya-Reyhanlı Road Construction Area	Antakya-Samandağ Road Construction Area
Water supply – for drinking purposes	The drinking water needs of the personnel will be met from bottled water.	N/A	The drinking water needs of the personnel will be met from bottled water.	Construction activities have not started yet.
Water supply – for personnel usage	Utility water will be provided from groundwater. Well drilling work has been continuing. There will be two tanks with a volume of 20 m ³ . The groundwater use permit has not yet been obtained.	N/A	Personnel are using water from the nearby facilities and bottled water during the daytime.	Construction activities have not started yet.
Water supply – for process	Process water will be provided from groundwater. Well drilling work has been continuing. There will be two tanks with a volume of 20 m ³ . The groundwater use permit has not yet been obtained.	N/A	Water used for the concrete plant has been delivered via tankers from Kızılkaya and/or Kuruyer campsites to the sub-project area.	Construction activities have not started yet.
Wastewater management	There is a septic tank with a volume of 120 m ³ . Wastewater will be collected with a vacuum truck by HATSU. The wastewater generated in the concrete plant has been collected in sedimentation ponds and then reused in the process.	N/A	There are no mobile toilets at the sub-project area, personnel are using nearby facilities. The wastewater generated in the concrete plant has been collected in sedimentation ponds and then reused in the process.	Construction activities have not started yet.
Raw Material Supply	Kuruyer Limestone Quarries	N/A	Kızılkaya Quarry	Kuruyer Limestone Quarries
<u>Pollution Prevention & Waste Management</u>				
Hazardous Wastes	It was declared that a temporary waste storage area will be established.	N/A	Hazardous wastes generated on-site are not collected separately. Waste management was found to be insufficient.	Construction activities have not started yet.
Non-Hazardous Wastes	It was declared that a temporary waste storage area will be established.	N/A	Existing containers belong to the municipality is being used for domestic waste generated on-site. During the site visit, no separate waste bins used for other non-hazardous wastes were observed. Waste management was found to be insufficient.	Construction activities have not started yet.
Temporary Waste Storage Area	It was declared that a temporary waste storage area will be established.	N/A	No temporary waste storage area was observed on-site. <u>It was declared that the temporary waste storage area at Kızılkaya Construction and Accommodation Site is being used until the temporary waste storage area at Kuruyer Construction and Accommodation Site is completed.</u>	Construction activities have not started yet.
Topsoil	It was declared that the topsoil has been sent to the storage areas indicated by KGM or given to citizens who request it.	N/A	It was declared that the topsoil has been sent to the storage areas indicated by KGM or given to citizens who request it.	It was declared that the topsoil will be sent to the storage areas indicated by KGM or given to citizens who request it.
Excavation wastes	N/A	N/A	It was declared that the excavation wastes have been sent to the storage areas indicated by KGM. It has been also used in backfilling where appropriate. <u>No permit/official letter for construction and excavation wastes storage area was provided.</u>	It was declared that the excavation wastes will be sent to the storage areas indicated by KGM. It will be also used in backfilling where appropriate.

Topic/Issue	Kuruyer Construction and Accommodation Site	Kuruyer Limestone Quarries	Antakya-Reyhanlı Road Construction Area	Antakya-Samandağ Road Construction Area
Construction wastes	It was declared that the construction wastes have been sent to the storage areas indicated by KGM	N/A	It was declared that the construction wastes have been sent to the storage areas indicated by KGM. <u>No permit/official letter for construction and excavation wastes storage area was provided.</u>	It was declared that the construction wastes will be sent to the storage areas indicated by KGM
Chemical Management	It is planned to have a chemical storage area on the site.	N/A	It was declared that existing chemical storage areas on the <u>Kızilkaya Construction and Accommodation Site</u> are being used until the installation of <u>Kuruyer Construction and Accommodation Site is completed.</u>	Construction activities have not started yet.
Soil Contamination Risk	No evidence of soil contamination was detected during the site visit.	N/A	During the site visit, no soil contamination was observed.	Construction activities have not started yet.
Air Quality and Noise	This construction and accommodation site is still under construction. It is anticipated that generators will also be used in the campsite. Moreover, once the asphalt and concrete plants are put into operation, periodic air quality measurements must be carried out and necessary precautions must be taken, as required by the environmental permit on air emissions. It was stated by DEHA that no complaints during the campsite installation were received so far regarding air quality and noise.	N/A	Within the scope of the environmental permit on air emissions, the air emission measurements for the concrete plant which has a capacity exceeding the limit value of 10 m ³ / hour according to Regulation on Environmental Permit and License should be conducted. It was stated by both FEZA and KGM that no complaints were received so far regarding air quality and noise.	Construction activities have not started yet.
Community Health and Safety				
Security	This construction and accommodation site is still under construction.	N/A	N/A	Construction activities have not started yet.
Information and Warning/Safety Signs	This construction and accommodation site is still under construction.	N/A	Traffic warning and directional signs have been placed in the areas where work has been carried out to avoid disrupting traffic flow but there is no signboard identifying the project contractor and describing the work. Additionally, fences or barriers have not been used to define the boundaries of the work area.	Construction activities have not started yet.
Occupational Health and Safety				
OHS Documents	Occupational Health and Safety Professional Contracts are available. The Risk Analysis Report was prepared by the contractor company DEHA on 11.03.2024. The Health and Safety Plan was prepared by the contractor company DEHA on 11.03.2024. The Emergency Response Preparedness Plan was prepared by the contractor company DEHA on 11.03.2024. Within the scope of annual plans and reports, "Annual Training Plan, Annual Work Plan, and Annual Evaluation Report" have been prepared. OHS trainings have been provided and records have been maintained.	N/A	Occupational Health and Safety Professional Contracts are available. The Risk Analysis Report was prepared by the contractor company FEZA on 18.08.2023. The Health and Safety Plan was prepared by the contractor company FEZA on 18.08.2023. The Emergency Response Preparedness Plan was prepared by the contractor company FEZA on 18.08.2023. Within the scope of annual plans and reports, "Annual Training Plan, Annual Work Plan, and Annual Evaluation Report" have been prepared. OHS trainings have been provided and records have been maintained.	Occupational Health and Safety Professional Contracts are available. The Risk Analysis Report was prepared by the contractor company DEHA on 11.03.2024. The Health and Safety Plan was prepared by the contractor company DEHA on 11.03.2024. The Emergency Response Preparedness Plan was prepared by the contractor company DEHA on 11.03.2024. Within the scope of annual plans and reports, "Annual Training Plan, Annual Work Plan, and Annual Evaluation Report" have been prepared. OHS trainings have been provided and records have been maintained.

Topic/Issue	Kuruyer Construction and Accommodation Site	Kuruyer Limestone Quarries	Antakya-Reyhanlı Road Construction Area	Antakya-Samandağ Road Construction Area
Emergency Drills	The Emergency Drill has not been conducted yet.	N/A	The Emergency Drill has not been conducted yet.	Construction activities have not started yet.
Safety of the construction/accommodation area	<p>During the site visit, it was observed that the building constructions at the Kuruyer Construction and Accommodation Site were completed, while landscaping works were still ongoing.</p> <p>It was observed that safety measures were not taken for excavated areas during landscaping (see Figure 68).</p> <p>It has been observed that there are no informational or warning signs in the construction site that is still under installation.</p> <p>It has been observed that the procurement of items to be used for accommodation has been completed (see Figure 69 and Figure 70).</p> <p>The administrative building and dormitory building have been constructed with emphasis on natural lighting, natural ventilation, and thermal comfort (see Figure 71).</p>	N/A	At the Antakya-Reyhanlı Road Construction Site, warning signs and safety barrier around excavation areas are insufficient (see Figure 72).	<p>Construction machinery was working in the landslide area on the Antakya-Samandağ Road (see Figure 73).</p> <p>Landslide removal services were received by DEHA from another company.</p> <p>There are no warning signs present at the construction site.</p>
Procurement and Usage of PPE	All employees are provided with work shoes, high visibility jacket, and helmets. Employees working at heights or involved in welding tasks are provided with PPE such as harness lanyard, goggles, earplugs, gloves, etc.	N/A	All employees are provided with work shoes, high visibility jacket, and helmets. Employees working at heights or involved in welding tasks are provided with PPE such as harness lanyard, goggles, earplugs, gloves, etc.	All employees are provided with work shoes, high visibility jacket, and helmets. Employees working at heights or involved in welding tasks are provided with PPE such as harness lanyard, goggles, earplugs, gloves, etc.
Occupational Accident	No occupational accidents have occurred at the Kuruyer Construction and Accommodation Site.	N/A	There have been two (2) occupational accident at the project area. There has been no permanent disability. The accidents have been resulted in minor injuries.	Construction activities have not started yet.
Biodiversity Management				
Biodiversity Consideration	Although Kuruyer Construction and Accommodation Site is an existing facility and is located in a modified habitat, the ESIA will include a detailed assessment of flora, fauna and habitats containing potentially threatened species. Detailed assessment of the Kuruyer Construction and Accommodation Site will be given in the ESIA.	N/A	The Antakya-Reyhanlı Road is an existing road. No direct impact is expected from the project; however, indirect pollution of water resources may occur due to work on river crossings. Necessary measures will be taken to prevent these effects.	The Antakya-Samandağ Road is an existing road. No direct impact is expected from the project; however, indirect pollution of water resources may occur due to work on river crossings. Necessary measures will be taken to prevent these effects.
Biodiversity Impacts	The Kuruyer Construction and Accommodation Site is an existing facility and located in a modified habitat but also located within an Internationally Recognized Area, and detailed evaluation will be given in the ESIA.	N/A	The Antakya-Reyhanlı Road is an existing road. No additional impacts on biodiversity are determined.	The Antakya-Samandağ Road is an existing road. No additional impacts on biodiversity are determined.
Critical Habitats	The Kuruyer Construction and Accommodation Site is an existing facility and located in a modified habitat but also located within an Internationally Recognized Area. Detailed evaluation will be given in the ESIA.	N/A	The Antakya-Reyhanlı Road is an existing road. No critical habitat is determined.	The Antakya-Samandağ Road is an existing road. No critical habitat is determined.
Natural Habitats	The Kuruyer Construction and Accommodation Site area is an existing facility and located in a modified habitat as a large portion has been cleared, but still contains natural habitats such as patches of forest	N/A	The Antakya-Reyhanlı Road is an existing road, therefore impact on natural habitats is expected to be low.	The Antakya-Samandağ Road is an existing road, therefore impact on natural habitats is expected to be low.

Topic/Issue	Kuruyer Construction and Accommodation Site	Kuruyer Limestone Quarries	Antakya-Reyhanlı Road Construction Area	Antakya-Samandağ Road Construction Area
	and woodland-clearing interfaces. Detailed evaluation will be given in the ESIA.			
Protected Areas*	The Kuruyer Construction and Accommodation Site area intersects with the Altınözü Tepeleri Important Nature Area (INA), an Internationally Recognized Area. Due to the existing facility and area, the impact is assessed to be low.	N/A	The Antakya-Reyhanlı Road passes through several Internationally Recognized Areas, including the Amanos Mountains Important Plant Area (IPA), Samandağ Sand Dunes Important Nature Area (INA), and Amanos Mountains Important Nature Area (INA). Due to the existing road infrastructure, the impact on the protected areas is considered to be low. Additionally, the road is located 150 meters away from the Mileyha Wetland of Local Importance, a Legally Protected Area. Detailed evaluation will be also be provided in the ESIA.	The Antakya-Samandağ Road passes through the Altınözü Tepeleri Important Nature Area (INA), an Internationally Recognized Area. Due to the existing road infrastructure, the impact on the protected area is considered to be low.
Cultural Heritage Management				
Official correspondence	It was stated in the PIF prepared for the asphalt plant that, there are no cultural, historical or natural protected areas in the Kuruyer Construction and Accommodation Site.	N/A	<p>As per the official letter from Hatay Cultural Heritage Preservation Regional Board Directorate (CHPRBD), dated 18.12.2023 and numbered E-85020971-165.99-4545304, the road route overlaps with the Ilıca Ancient Settlement 1st degree archaeological site, the Kavalcık Necropolis 3rd degree archaeological site, and the Tell Tayinat Mound 1st and 3rd degree archaeological site, registered by Adana CHPRBD.</p> <p>The road route has borders with Bahlile Mound 3rd degree archaeological protected area registered by Adana CHPRB, Askerçayırı 1st degree archaeological protected area and Reyhanlı Cemetery 1st degree archaeological protected areas, registered by Hatay CHPRBD.</p> <p>It has been determined that there are Büyük Algene and Küçük Algene Mound 1st degree archaeological sites in the immediate vicinity of the road route, registered by Adana CNHPRBD.</p> <p>Since there are protected areas that overlap with the road route and are adjacent to the border, detailed information, documents and additional studies have been requested by the Board and it was stated that no works should be carried out without receiving a final opinion letter from the institution.</p> <p>If any finds or remains that qualify as immovable cultural assets that need to be protected are encountered during the physical and construction interventions to be carried out in the area, the work must be stopped immediately and this must be reported to the nearest Civil Administrative Authority or Museum Directorate, and information should be obtained from the relevant institution as to whether there is a Natural Site in the area in question.</p>	<p>As per the official letter from Hatay CHPRBD, dated 19.12.2023 and numbered E-85020971-165.02.03-4550554, it has been observed that a part of Hatay Province Samandağ State Road (Antakya Beltway Road) (Including Samandağ Passage) remains within the 1st and 3rd degree archaeological site boundaries of Seleukeia Pieria Ancient City, which registered as a 1st, 2nd and 3rd degree archaeological site by the Supreme Council of Immovable Cultural and Natural Heritage (and its borders were finalized by Adana CHPRBD).</p> <p>Since there are protected areas that overlap with the road route; detailed information, documents and additional studies have been requested by the Directorate and it was stated that no works should be carried out without receiving a final opinion letter from the institution.</p>

*Maps of the Legally Protected and Internationally Recognized Areas are given in Appendix-5.



Figure 65. Kuruyer Construction and Accommodation Site



Figure 66. Kuruyer Limestone Quarry



Figure 67. Concrete Plant used for Bridge Construction in Demirköprü



Figure 68. Hazardous Conditions in Kuruyer Construction and Accommodation Area



Figure 69. Accommodation Items in Kuruyer Construction and Accommodation Area



Figure 70. Cafeteria Items in Kuruyer Construction and Accommodation Area



Figure 71. Office Building in Kuruyer Construction and Accommodation Area



Figure 72. Antakya-Reyhanlı Road Construction Area



Figure 73. Landslide Area on the Antakya-Samandağ Road.

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4.5 TAG Highway – Aslanlı Tunnel – Nurdağı Junction

4.5.1 General Information

- “Ceyhan Construction and Accommodation Site”, “Başpınar Limestone Quarry”, “Tatarlı Basalt Quarry”, and “Bahçe (Ayran) Concrete Plant” will be utilized within the scope of the sub-project.
- Ceyhan Construction and Accommodation Site is the Contractor’s (SNH) main accommodation site which has actively been used since 2019 for different projects (see Figure 74, Figure 75, and Figure 76).
- Meals are being prepared at the Ceyhan Construction and Accommodation Site (see Figure 77) and distributed to the personnel working on different sites within the scope of the sub-project.
- Additionally, several apartments from the lodging of 5th Regional Directorate of Highways were reorganized and allocated to the project personnel (see Figure 78). Approximately 30 personnel are staying at this accommodation area (also known as Bahçe Accommodation Area). Showers, toilets, cafeteria, and social areas are available.



Figure 74. Entry of Ceyhan Construction and Accommodation Site



Figure 75. Ceyhan Construction and Accommodation Site - Offices



Figure 76. Ceyhan Construction and Accommodation Site - Accommodation Area



Figure 77. Ceyhan Construction and Accommodation Site – Kitchen



Figure 78. The lodging of 5th Regional Directorate of Highways

4.5.2 Assessment of the Social Findings

4.5.2.1 Population Change

Ceyhan Construction Site is used for the construction works of the sub-project. The construction site is located in Ceyhan district.

143 workers are accommodated at the construction site, which is approximately 20 km away from the nearest settlement. The worker accommodation area is an isolated area from its

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surroundings, and all the needs of the workers are met within the camp area. Project work has limited communication and interaction with the local population, and the camp site does not have any negative impact on the surrounding settlements or the local population.

4.5.2.2 Community Health and Safety

Within the scope of the Tag Highway sub-project, the works have started on five (5) viaducts with a total length of 8.63 km, namely Şehitler, Nurdağı, Atatürk, Turgut Özal and Başpınar Viaducts, and it has been informed that the temporary repairs on the superstructures have been completed. Aslanlı Tunnel and Kömürcüler Junction are also within the scope of the works. The quarry, which is actively used and will operate within the scope of the project, is on the side of the road near Başpınar and there is no settlement around it. Başpınar Village (see Figure 79) is the closest village to the quarry. Transportation within the scope of the project activities will be provided via the KGM transportation road, without using village roads. Başpınar Village, the closest village, has its own village road and work trucks do not use the village road.



Figure 79. Başpınar Village and Başpınar Viaduct

Source: March 2024 Site Visit Photos

Although the project activities are not expected to pose a significant community health and safety risk, PAPs/households interviews need to be held in the residential buildings/houses located under the viaducts and/or nearby the limestone quarry; that are likely to be affected due to the dust, vibration and vehicle traffic impacts.

4.5.2.3 Resettlement and Land Acquisition

A physical displacement will not occur due to the Sub-Project activities.

4.5.2.4 Loss of Livelihood

An economic displacement will not occur due to the Sub-Project activities. There will be no restrictions on land use.

4.5.2.5 Infrastructure and Services

Drinking water for Ceyhan Construction Camp Site is provided from ready-bottled water, utility water is provided from Hacı Sabancı OIZ, and irrigation water is obtained from groundwater well. For the use of groundwater well, the usage license must be shared. Hot water is supplied via solar panels. Electrical infrastructure is available and there is also an emergency generator.



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On the other hand, only domestic wastewater has been generated from the activities, and domestic wastewater has been discharged into the water channel after being treated in the package WWTP, which has an environmental permit and an approved WWTP identification certificate.

The campsite does not create any pressure on local settlements and local services.

4.5.2.6 Labor and Working Conditions

143 workers are accommodated at the construction site, which is approximately 20 km away from the nearest settlement. The worker accommodation area is an isolated area from its surroundings; therefore, it does not have any interaction or communication with the local people that may pose a risk regarding SEA/SH.

There is no affected settlement around the KGM worker accommodation area in Bahçe. Since the employees do not have any communication or interaction with the local people and all needs are met within the camp area, there is no risk on SEA/SH.

Bahçe Accommodation Area

A facility belonging to the KGM was rented in Bahçe Town for the accommodation of the workforce in the works carried out within the scope of the Tag Highway viaduct and tunnel works, and approximately 30 workers are accommodated here. All workers are men. The accommodation area is isolated from its surroundings, not directly interacting with the local people. The area has been fenced off, and security is present at the campsite entrance.

Workers provide transportation to the Project area via Project services. The campus has showers, toilets and social areas, and workers' meals are provided by KGM.

Ceyhan Construction and Campsite

Camp site OHS, working conditions and accommodation conditions are assessed. Engineer and worker dormitories are separate and have showers, toilets and a common activity area. Men's and women's toilets are separated. Hot water is provided by solar energy and the municipality's mains water is also used. Drinking water is packaged and supplied from private companies. There is an active workers' dining hall serving all workers.

Field findings and evaluations show that accommodation and working conditions are carried out in accordance with the Working Conditions and Community Health and Safety requirements defined within the scope of AIIB ESS 1 Environmental and Social Management System for Ceyhan Construction Camp Site and Bahçe Accommodation Site.

Accommodation conditions were evaluated to include drinking water, health facilities, washing-bathroom conditions, changing rooms, food and beverage facilities, accommodation areas, rest areas, worker health and safety conditions.

Workers work in road construction areas, their food and beverage needs are met from the camp site, and they are transported to the work areas by shuttle service. It has been observed that service facilities and cafeteria conditions are suitable.

Accommodation is in dormitories for 4/6 people, and the required 12 cubic meters of space per person is provided for workers.

Full compliance with AIIB ESF has been observed in terms of accommodation conditions at the camp site, security of the camp site, and controls of entrances and exits in isolation from the environment.



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Social Compliance Issues

Since KGM is an official institution, it is subject to the relevant laws, regulations¹¹ and conventions. In this context, KGM and all contractors working under it are subject to Labor Law and ILO conventions to which Türkiye is a party¹².

All contractors within the scope of the project are obliged to prohibit child labor, forced labor, and ensure equal treatment and gender equality for employees, including the ILO conventions listed below under the following headings: freedom of association, child labor, forced labor, equal treatment of employees, and gender equality.

- Forced Labor Convention No. 29
- Convention No. 105 on the Abolition of Forced Labor
- Minimum Age Convention No. 138
- No. 182 Urgent Prohibition and Eradication of Worst Forms of Child Labor Action Agreement
- Convention No. 87 on Freedom of Association and Protection of the Right to Organize
- Convention on the Right to Organize and Collective Bargaining No. 98
- Equal Pay Convention No. 100
- Equality of Treatment (Social Security) Convention No. 118
- Employment Policy Agreement No. 122

In this context, KGM will ensure that the following actions are taken to ensure that all these laws, procedures and agreements are implemented throughout the Project, regulating the management of working conditions and labor relations, including the prevention of Child Labor and Forced Labor.

- Notifying the main contractor and all subcontractors of the contracts, policies and procedures to which they are parties and which they are obliged to comply with,
- Including the contract, policies and procedures and their determined main headings in the training given before starting work and making contractor employee training a part of the induction training.
- Incorporating policies and procedures within the scope of all employee agreements into contracts, either as part of these agreements or by transferring them to codes of conduct.
- Making prohibitions, ethical principles and responsibilities visible in work areas (camp sites, work areas).
- Establishing a grievance mechanism that is accessible to all employees of the Project, including subcontractor employees, and allowing anonymous complaints, and disclosing it to employees.

4.5.3 Stakeholder Engagement and Grievance Redress Mechanism

KGM does not have a stakeholder engagement plan and grievance mechanism that will meet the project requirements and AIB standards. Within the scope of the Project, no discussions or meetings have been held with stakeholders in the surrounding settlements regarding the Project so far.

The grievance mechanism operated within the scope of the project is as follows:

For the grievance mechanism, worker complaints can be submitted in writing to both the on-site construction site managers and the Contractor's Human Resources department. Requests/complaints received are examined and responded to as soon as possible.

¹¹ <https://www.kgm.gov.tr/Sayfalar/KGM/SiteTr/Kurumsal/KanunMevzuat.aspx>

¹² https://www.ilo.org/sites/default/files/wcmsp5/groups/public/@europe/@ro-geneva/@ilo-ankara/documents/genericdocument/wcms_645630.pdf



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For the grievance mechanism, citizens/institutions must contact both the control offices in charge and the KGM. They can apply to the Regional Directorate of KGM. Requests/complaints received are examined on-site and responded to as soon as possible.

KGM website includes "Complaint Notification Form for Real Persons" and "Complaint Notification Form for Legal Entities" (<https://www.kgm.gov.tr/Sayfalar/KGM/SiteTr/Root/SikayetGeriBildirim.aspx>). Complaint forms allow complaints with open names, but do not allow anonymous complaints to be received.

The grievance mechanism of the contractors and KGM was evaluated. It has been observed that the grievance management and stakeholder participation activities operated by both KGM and the main contractors of the sub-projects do not comply with AIIB standards.

Within the scope of the project, it is proposed to establish both external and employee grievance mechanisms.

Within the scope of the Project, a worker grievance mechanism should be established where anonymous complaints of employees can be received, accessible to all employees free of charge, safely and equally, defining the gender-based violence and harassment procedure in accordance with AIIB standards.

The grievance mechanism should be explained to all workers within the scope of the training to be given before they start working.

The grievance mechanism should ensure that complaints are received through complaint boxes in common areas and cafeterias, as well as through tools such as the ethics line and telephone.

SEP (including GRM) will be prepared to develop a gender-sensitive grievance mechanism procedure that includes these and also includes employee complaints, where anonymous complaints can be reported, and to eliminate/close this gap.

4.5.4 Assessment of the Environment, OHS and Biodiversity-Related Findings

Due diligence findings regarding the TAG Highway-Aslanlı Tunnel-Nurdağı Junction sub-project and related facilities are given in Table 11.



Table 11. Due Diligence Findings for TAG Highway – Aslanlı Tunnel – Nurdağı Junction Sub-Project and related facilities

Topic/Issue	Ceyhan Construction and Accommodation Site	Bahçe (Ayran) Concrete Plant	Tatarlı Basalt Quarry	Başpınar Limestone Quarry	TAG Highway – Aslanlı Tunnel – Nurdağı Junction Sub-Project Construction Area
Owner/operator of the facility or the works carried out	SNH	SNH	Owner of the quarry: 5 th Regional Directorate of Highways Operator of the quarry: SNH	Owner of the quarry: 5 th Regional Directorate of Highways Operator of the quarry: SNH	Owner of the sub-project: 5 th Regional Directorate of Highways Contractor: SNH
Specifications and properties of facility or work	Asphalt plant with a capacity of 320 tons/hour (Hot Bituminous Mixture production) (see Figure 80). Accommodation Site There are solar panels for hot water supply (see Figure 86).	No accommodation on-site Concrete Plant with a capacity of 90 m ³ /hour (see Figure 81). Office containers	This quarry is also used for other projects rather than this sub-project. No accommodation on-site Mechanical plant/crusher with a capacity of 500 tons/hour (see Figure 82)	No accommodation on-site Material extraction works have not started yet. 1,200,000 tons of limestone will be produced annually. Work will be conducted in the quarry for a duration of 24 months, with 96 explosions per year (see Figure 83)	No accommodation on-site Reinforcement and repair works of the highways and viaducts
EIA Opinion	"EIA Not Required Decision" issued by Adana Provincial Directorate of Environment and Urbanization, dated 27.02.2020 with decision number of 90438820 220-02 E-202097-1186 for asphalt plant facility.	The "EIA Out of Scope" decision was made by the Osmaniye Provincial Directorate of Environment, Urbanization and Climate Change with its letter dated 04.03.2024 and numbered E-51765934-220.03-8941680.	Facility activities was evaluated as 'out of scope' in accordance with (repealed) Provisional Article 3 of the EIA Regulation No. 29186 dated 25.11.2014, as per the official letter from the Adana Provincial Directorate, dated 13.07.2020, numbered 90438820-220.03-E.19946.	Facility activities was evaluated as 'out of scope' in accordance with (repealed) Article 24 (Extraordinary Situations and Special Provisions) and Provisional Article 2 of the EIA Regulation No. 31907 dated 29.07.2022, as per the official letter from the MoEUCC, dated 08.02.2024 and numbered E-14108550-220.01-8709304.	Since the operations to be carried out only include maintenance on the existing road, the project has been considered exempt from the EIA Regulation as per the official letter from Gaziantep Provincial Directorate of EUCC, dated 05.01.2024 and numbered E-46818599-220.03-8417181.
Environmental Permit	Environmental Permit Certificate which is valid until 12.10.2026, was issued by Adana Provincial Directorate of Environment and Urbanization, dated 13.10.2021 with document number of 288804714.0.1 on air emission (for the asphalt plant) and wastewater discharge (for the package WWTP) on behalf of "SNH İnşaat A.Ş."	Since the total production capacity is above 10 m ³ /hour, which is the limit value specified in the Annex-2 of the Environmental Permit and License Regulation, the facility is subject to an Environmental Permit. It was stated by SNH that that the environmental permit process is continuing (in the process of applying for a temporary activity certificate). The facility should not be operated until obtaining the temporary activity certificate.	Mines and quarries (for Group I (a and b), Group II (including limestone), Group IV and Group V) with a mining capacity of 150 tons/day and above Mines and/or quarries where explosives are used and Open and/or not fully closed storage and/or screening-packaging facilities with a storage capacity of 200 tons/day or more and where substances that can cause dust are transferred and/or filled and unloaded are within the scope of Annex-2 list of the current Environmental Permit and License Regulation. Environmental Permit certificate or exemption letter issued by Adana Provincial Directorate of EUCC has not been shared. It has been stated that environmental permit process will be initiated following the completion of the physical deficiencies.	Mines and quarries (for Group I (a and b), Group II (including limestone), Group IV and Group V) with a mining capacity of 150 tons/day and above Mines and/or quarries where explosives are used and Open and/or not fully closed storage and/or screening-packaging facilities with a storage capacity of 200 tons/day or more and where substances that can cause dust are transferred and/or filled and unloaded are within the scope of Annex-2 list of the current Environmental Permit and License Regulation. Environmental Permit certificate or exemption letter issued by Gaziantep Provincial Directorate of EUCC has not been shared. It has been declared that since no activity is currently being carried out in the Başpınar Quarry, no process has been initiated for an environmental permit. Before starting activities, a decision related to the environmental permit must be obtained from the Provincial Directorate of EUCC, and the necessary requirements must be fulfilled.	N/A

Topic/Issue	Ceyhan Construction and Accommodation Site	Bahçe (Ayran) Concrete Plant	Tatarlı Basalt Quarry	Başpınar Limestone Quarry	TAG Highway – Aslanlı Tunnel – Nurdağı Junction Sub-Project Construction Area
				It is known that the raw material production permit, covering an area of 24.63 hectares, was obtained with Access Number 3483952 on 1.10.2023.	
Working hours and shifts	08:00-18:00 and single shift (+overtime work)	08:00-18:00 and single shift (+overtime work)	No information is provided during ESDD studies. Further information will be given in ESIA.	Material extraction works have not started yet.	08:00-18:00 and single shift (+overtime work)
Service procurement	Environmental Consultancy ("Meriç Mühendislik")	Environmental Consultancy ("Atasar Mühendislik")	Environmental Consultancy	Material extraction works have not started yet.	N/A
Water and Wastewater Management					
Water supply – for drinking purposes	The drinking water needs of the personnel have been met from bottled water.	The drinking water needs of the personnel have been met from bottled water.	The drinking water needs of the personnel have been met from bottled water. There is a water storage tank with a volume of 40 m ³ .	Material extraction works have not started yet.	The drinking water needs of the personnel have been met from bottled water.
Water supply – for personnel usage	The water supply has been made from Hacı Sabancı OIZ. Moreover, Hacı Sabancı OIZ's utility water is obtained by treating water taken from the Ceyhan River.	Water used for the personnel has been purchased and delivered to the facility via tankers.	Water used for the personnel has been purchased and delivered to the facility via tankers. There is a water storage tank with a volume of 40 m ³ .	Material extraction works have not started yet.	Water used for the personnel has been purchased and delivered to the site via IBC tanks.
Water supply – for process	The water used for process have been obtaining from Hacı Sabancı OIZ and whereas groundwater well has been using for irrigation purposes. The license to use the groundwater well is not available and it must be obtained.	Water used in the process has been purchased and delivered to the facility via tankers.	Water used in the process has been purchased and delivered to the facility via tankers.	Material extraction works have not started yet.	Water used in the process has been purchased and delivered to the site via IBC tanks.
Wastewater management	<p>Only domestic wastewater has been generated. There is a biological package wastewater treatment plan (WWTP) with 20 m³/day capacity (see Figure 84). The WWTP project approval letter is available, dated 25.06.2022 and numbered 79694804-110.03.03-E.17593, issued by Adana Provincial Directorate of Environment and Urbanization.</p> <p>Within the scope of the environmental permit on air emission and wastewater discharge, internal monitoring is carried out by taking a sample every 4 months.</p> <p>On the other hand, there is no rainwater collection system.</p>	<p>Domestic wastewater has been stored in a septic tank. Service has been receiving from the municipality for disposal.</p> <p>The wastewater generated in the concrete facility has been collected in staged sedimentation ponds and then reused in the process (see Figure 85)</p>	Domestic wastewater has been stored in a septic tank. Service has been receiving from the municipality for disposal.	Material extraction works have not started yet.	There was no portable toilet in the activity area, employees have been benefiting from the services available nearby.
Raw Material Supply	Bitumen has been providing by KGM. Other raw materials have been supplied from Tatarlı Basalt Quarry and Yılkale Limestone Quarry, which includes crushing/screening plant and asphalt plant) belongs to the 5 th Regional Directorate of Highways and has an "EIA Not Required" certificate, dated 10.12.2015 with decision number 90438820 220-02 E-20151259-949. It	Raw materials have been obtained from the Tatarlı Basalt Quarry, but external purchases also occur. It must be ensured that the quarries and borrow sites from which raw materials are purchased operate in accordance with environmental legislation, including obtaining decisions related to EIA and Environmental Permits.	N/A	N/A	The supply of cement-based building components (grout material) has been carried out through purchasing.

Topic/Issue	Ceyhan Construction and Accommodation Site	Bahçe (Ayran) Concrete Plant	Tatarlı Basalt Quarry	Başpınar Limestone Quarry	TAG Highway – Aslanlı Tunnel – Nurdağı Junction Sub-Project Construction Area
	must be ensured that the quarries and borrow sites from which raw materials are purchased operate in accordance with environmental legislation, including obtaining decisions related to EIA and Environmental Permits.				
Pollution Prevention & Waste Management					
Hazardous Wastes	The generated hazardous wastes including hydraulic oils, engine, transmission and lubricating oils, packaging contaminated with hazardous substances, absorbents, filter materials, cleaning cloths, protective clothing contaminated with hazardous substances and oil filters have been sending to licensed companies after being stored in the temporary waste storage area (except for waste code of 130208, which were stocked). Annual waste declaration was made on Integrated Environmental Information System (“EÇBS”), which is the online system of the Ministry of EUCC.	It has been declared that the facility has EÇBS registration. It is recommended to share waste generation and shipping records. Hazardous waste management practices will be provided in the ESIA.	No information shared/provided during the ESDD studies but will be provided in the ESIA.	Material extraction works have not started yet.	There were no containers on site for hazardous waste.
Non-Hazardous Wastes	Domestic wastes have been collected by Ceyhan Municipality. According to the Monthly Activity Report (February 2024), there is no generation of packaging, excavation and medical wastes. In the office building, recycling bins are available in compliance with zero waste approach (see Figure 87).	Domestic wastes have been collected by Bahçe Municipality. Information about other wastes including package waste and recyclable wastes will be provided in the ESIA.	Due to the absence of a waste collection contract with the municipality, domestic waste is disposed of by company employees in the nearest municipal containers. Information about other wastes including package waste and recyclable wastes will be provided in the ESIA.	Material extraction works have not started yet.	There were no containers on site for non-hazardous waste.
Temporary Waste Storage Area	There was no temporary waste storage area in compliance with the national legislation and international standards. There is no closed area, wastes have been kept in containers, and there were no waste code labels specific to the type of waste. (see Figure 88). Industrial Waste Management Plan valid until 19.04.2024 exist, and Hazardous Substances and Hazardous Waste Compulsory Liability Insurance is valid until 13.07.2024. It was stated that new temporary waste storage area will be established.	There was no temporary waste storage area in compliance with the national legislation and international standards.	There was no temporary waste storage area in compliance with the national legislation and international standards.	No information shared/provided during the ESDD studies but will be provided in the ESIA.	There was no temporary waste storage area in the construction area.
Topsoil	It was stated that the topsoil have been sending to the area where KGM and General Directorate of Forestry were determined.	N/A	N/A	Material extraction works have not started yet.	It was stated that the topsoil have been sending to the area determined by KGM and General Directorate of Forestry. No permit/official letter for construction and excavation wastes storage area was provided.

Topic/Issue	Ceyhan Construction and Accommodation Site	Bahçe (Ayran) Concrete Plant	Tatarlı Basalt Quarry	Başpınar Limestone Quarry	TAG Highway – Aslanlı Tunnel – Nurdağı Junction Sub-Project Construction Area
Excavation wastes	It was stated that the excess excavation material have been sending to the area where KGM and General Directorate of Forestry were determined.	N/A	N/A	Material extraction works have not started yet.	It was informed that the excess excavation material have been sending to the area determined by KGM and General Directorate of Forestry. No permit/official letter for construction and excavation wastes storage area was provided.
Construction wastes	N/A	N/A	N/A	Material extraction works have not started yet.	It was informed that the construction materials have been sending to the area determined by KGM. No permit/official letter for construction and excavation wastes storage area was provided.
Chemical Management	There is chemical use and storage in the facility. The drip tray is available (see Figure 89). On the other hand, although fire extinguishers and MSDSs are present, the spill kit is not available. The facility has been evaluated as out of scope according to BEKRA Regulation.	It was observed during the field visit that there was no chemical storage.	It was stated that chemicals have not been stored.	Material extraction works have not started yet. So, no chemical use was observed during the field visit.	There was no chemical storage on the site. Fuel supply has been done by mobile vehicles.
Soil Contamination Risk	There is a secondary containment structure for the diesel tank. However, for other storage tanks, anti-leakage measures should be taken to prevent soil contamination (see Figure 90 and Figure 91).	No soil contamination was observed during the site visit.	No findings were observed.	Material extraction works have not started yet.	It was observed that the soil in the activity area of Başpınar Viaduct was contaminated due to leakage of cement-based building component (grout material). Chemical substance management must be carried out effectively and secondary containment structures must be used (see Figure 92)
Air Quality and Noise	Electrical infrastructure is available. Besides, there is an emergency generator. Within the scope of the environmental permit on air emission and wastewater discharge, the last air emission measurement was carried out on 25.08.2023. Emission sources include asphalt plant chimneys, hot burners, bunkers and stock areas. To prevent dust formation, there is a water jet system and dust reduction system in the stock area. It was declared that periodic irrigation has been carrying out in unpaved stock areas and access roads. On the other hand, the facility is exempt from obtaining an environmental permit for noise with the letter issued by Adana Provincial Directorate of Environment, Urbanization and Climate Change, dated 14.09.2020 and numbered 73971906-150/E.8381.	Electrical infrastructure is available. Besides, there is no emergency generator. The environmental permit process on air emissions is continuing. After the Environmental Permit Certificate is received, the document should be shared. It has been declared by the environmental consultant that the bunkers will be renovated as closed and dust reduction precautions will be taken. Since the location of the facility is far from residential areas, no significant impact on noise is expected. It was stated by KGM and Contractor that no complaints have been received so far regarding air quality and noise.	Electrical infrastructure is available. Besides, there is no emergency generator. The opinion of the Adana Provincial Directorate of EUCC for environmental permit on air emissions and relevant documents should be shared. By effectively using the Grievance Redressal Mechanism, complaints should be resolved, and necessary mitigating measures should be taken. It was stated by KGM and Contractor that no complaints have been received so far regarding air quality and noise.	Material extraction works have not started yet.	By establishing and effectively using the project specific Grievance Redress Mechanism, complaints should be resolved, and necessary mitigating measures should be taken. It was stated by KGM and Contractor that no complaints have been received so far regarding air quality and noise.

Topic/Issue	Ceyhan Construction and Accommodation Site	Bahçe (Ayran) Concrete Plant	Tatarlı Basalt Quarry	Başpınar Limestone Quarry	TAG Highway – Aslanlı Tunnel – Nurdağı Junction Sub-Project Construction Area
	It was stated by KGM and Contractor that no complaints have been received so far regarding air quality and noise.				
Community Health and Safety					
Security	The facility area was surrounded by fences. There is a security cabin at the entrance (see Figure 93).	The facility area has not been surrounded by fences.	The quarry has not been surrounded by fences.	The quarry has not been surrounded by fences.	It was observed that the roads were closed to transportation in the areas where the activity was carried out.
Information and Warning/Safety Signs	Information and warning signs are also available and found to be sufficient (see Figure 94).	The number of the warning/safety signs should be increased.	Warning and safety signs were detected to be insufficient.	Material extraction works have not started yet.	The number of the warning/safety signs should be increased.
Occupational Health and Safety					
OHS Documents	<p>The Risk Analysis Report was prepared by the contractor company SNH in May 2023</p> <p>The Emergency Response Preparedness Plan was prepared by the contractor company SNH in May 2023</p> <p>Within the scope of annual plans and reports, "Annual Training Plan, Annual Work Plan, and Annual Evaluation Report" have been prepared in January 2024.</p>	<p>The Risk Analysis Report was prepared by the contractor company in March 2024</p> <p>The Emergency Response Preparedness Plan was prepared by the contractor company SNH in March 2024</p> <p>Within the scope of annual plans and reports, "Annual Training Plan, Annual Work Plan, and Annual Evaluation Report" have been prepared in March 2024</p>	<p>The Risk Analysis Report was prepared by the contractor company SNH in May 2023</p> <p>The Emergency Response Preparedness Plan was prepared by the contractor company SNH in May 2023</p> <p>Within the scope of annual plans and reports, "Annual Training Plan, Annual Work Plan, and Annual Evaluation Report" have been prepared in January 2024.</p>	Material extraction works have not started yet.	<p>The Risk Analysis Report was prepared by the contractor company SNH in June 2023</p> <p>The Health and Safety Plan was prepared by the contractor company SNH in July 2023</p> <p>The Emergency Response Preparedness Plan was prepared by the contractor company SNH in June 2023</p> <p>Within the scope of annual plans and reports, "Annual Training Plan, Annual Work Plan, and Annual Evaluation Report" have been prepared.</p>
OHS Training	OHS trainings have been provided and records have been maintained.	OHS trainings have been provided and records have been maintained.	OHS trainings have been provided and records have been maintained by SNH.	Material extraction works have not started yet.	<p>OHS trainings have been provided and records have been maintained.</p> <p>All employees who will work at heights have received 'Working at Heights Training'.</p>
Emergency Drills	A fire and rescue drill was conducted on August 26, 2023.	The Emergency Drill has not been conducted yet.	A fire and rescue drill was conducted on March 13, 2023 by SNH.	Material extraction works have not started yet.	A fire and rescue drill was conducted on August 26, 2023.
Safety of the construction/ accommodation area	<p>At the Ceyhan construction and accommodation site, fire extinguishers are available both in work areas and in accommodation as well as offices.</p> <p>At the Ceyhan construction and accommodation site, emergency assembly area signs, illuminated emergency exit signs, and directional signs are available. Additionally, OHS information and warning signs are also available (see Figure 96).</p> <p>There is a laundry room available in the accommodation areas, and bedsheets are changed with new ones once every 10 days.</p>	<p>The surroundings of the sedimentation pool are not fenced off with barriers, posing a risk of falling (see Figure 85)</p> <p>Electrical periodic maintenance has not been conducted yet, and the electrical panels are not in insulated areas.</p>	<p>The surroundings of the excavation areas have not been enclosed with safety barriers.</p> <p>Electrical periodic maintenance was conducted in August 2024 by SNH.</p>	Material extraction works have not started yet.	A safe distance has not been designated to prevent approaching the high cliffs, and warning signs have not been placed (Figure 97).

Topic/Issue	Ceyhan Construction and Accommodation Site	Bahçe (Ayran) Concrete Plant	Tatarlı Basalt Quarry	Başpınar Limestone Quarry	TAG Highway – Aslanlı Tunnel – Nurdağı Junction Sub-Project Construction Area
	Electrical periodic maintenance was conducted in August 2024. Ergonomics, thermal comfort, natural ventilation, and natural lighting have been prioritized in office and accommodation areas. Wire insect screens are available to protect against flying insects.				
Procurement and Usage of PPE	All employees are provided with work shoes, work clothes, gloves, masks, goggles, and helmets. Additionally, the maintenance team has been provided with harness lanyard.	All employees are provided with work shoes, work clothes, gloves, masks, goggles, and helmets. Additionally, the maintenance team has been provided with harness lanyard.	All employees are provided with work shoes, work clothes, gloves, masks, goggles, and helmets. Additionally, the maintenance team has been provided with harness lanyard.	Material extraction works have not started yet.	All employees are provided with work shoes, work clothes, gloves, masks, goggles, and helmets. Additionally, the maintenance team and working at heights have been provided with harness lanyard.
Occupational Accident	No occupational accidents have occurred at the Ceyhan Construction and Accommodation Site	No occupational accidents have occurred at the Bahçe (Ayran) Concrete Plant	There has been one (1) work accident at the project site. There has been no permanent disability. The accident has been resulted in minor injuries.	Material extraction works have not started yet.	There has been one (1) work accident at the project site. There has been no permanent disability. The accident has been resulted in minor injuries.
Biodiversity Management					
Biodiversity Consideration	The Ceyhan Construction and Accommodation Site is an existing facility. No direct impact is expected from the project.	Although Bahçe (Ayran) Concrete Plant, which is a modified habitat, is an existing facility, the ESIA will include a detailed assessment of flora, fauna and habitats containing potentially threatened species. Detailed evaluation will be given in the ESIA..	Although Tatarlı Basalt Quarry is an existing facility, the ESIA will include a detailed assessment of flora, fauna and habitats containing potentially threatened species.	Although Başpınar Limestone Quarry is an existing facility, the ESIA will include a detailed assessment of flora, fauna and habitats containing potentially threatened species.	The TAG Highway-Aslanlı Tunnel-Nurdağı Junction is an existing road. No direct impact is expected from the project; however, indirect pollution of water resources may occur due to work on river crossings. Necessary measures will be taken to prevent these effects.
Biodiversity Impacts	The Ceyhan Construction and Accommodation Site is an existing facility. No additional impacts on biodiversity are determined.	The Bahçe (Ayran) Concrete Plant is located within Internationally Recognized Areas, and detailed evaluation will be given in the ESIA.	The Tatarlı Basalt Quarry is not located within Legally Protected Areas and Internationally Recognized Areas. Detailed evaluation will be given in the ESIA	The Başpınar Limestone Quarry is located within an Internationally Recognized Area, and detailed evaluation will be given in the ESIA	The TAG Highway-Aslanlı Tunnel-Nurdağı Junction is an existing road. No additional impacts on biodiversity are determined.
Critical Habitats	The Ceyhan Construction and Accommodation Site is an existing facility. No critical habitat is determined.	The Bahçe (Ayran) Concrete Plant is located within Internationally Recognized Areas. As the project is situated within this Internationally Recognized Areas, detailed evaluation will be given in the ESIA	The Tatarlı Basalt Quarry is not located within Legally Protected Areas and Internationally Recognized Areas. Detailed evaluation will be given in the ESIA.	The Başpınar Limestone Quarry is located within an Internationally Recognized Area. Detailed evaluation will be given in the ESIA.	The TAG Highway-Aslanlı Tunnel-Nurdağı Junction is an existing road. No critical habitat is determined.
Natural Habitats	The Ceyhan Construction and Accommodation Site is an existing facility, therefore impact on natural habitats is expected to be low.	The Bahçe (Ayran) Concrete Plant is an active facility, with forest ecosystem in the surrounding, which is a natural habitat. Detailed evaluation will be given in the ESIA.	The Tatarlı Basalt Quarry area, although a portion has been cleared, still contains natural habitats. Detailed evaluation will be given in the ESIA.	The Başpınar Limestone Quarry area, although a portion has been cleared, still contains natural habitats such as patches of forest and woodland-clearing interfaces. Detailed evaluation will be given in the ESIA.	The TAG Highway-Aslanlı Tunnel-Nurdağı Junction is an existing road, therefore impact on natural habitats is expected to be low.
Protected Areas*	The Ceyhan Construction and Accommodation Site is not located within Legally Protected Areas and Internationally Recognized Areas. Therefore, no impact is expected.	The Bahçe (Ayran) Concrete Plant is located in the Amanos Mountains Important Plant Area (IPA) and Amanos Mountains Important Nature Area (INA), Internationally Recognized Areas. Due to the existing facility, the impact on the protected area is considered to be low.	The Tatarlı Basalt Quarry is not located within Legally Protected Areas and Internationally Recognized Areas. Therefore, no impact is expected.	The Başpınar Limestone Quarry is located in the Amanos Mountains Important Plant Area (IPA), an Internationally Recognized Area. Due to the existing road infrastructure, the impact on the protected area is considered to be low.	The TAG Highway-Aslanlı Tunnel-Nurdağı Junction passes through the Amanos Mountains Important Plant Area (IPA), an Internationally Recognized Area. Due to the existing road infrastructure, the impact on the protected area is considered to be low.

Topic/Issue	Ceyhan Construction and Accommodation Site	Bahçe (Ayran) Concrete Plant	Tatarlı Basalt Quarry	Başpınar Limestone Quarry	TAG Highway – Aslanlı Tunnel – Nurdağı Junction Sub-Project Construction Area
Cultural Heritage Management					
Official correspondences	Although it was predicted that there is no known cultural heritage in the area by considering "EIA Not Required" decision, this part will be detailed in the ESIA.	Although it was predicted that there is no known cultural heritage in the area by considering "EIA Out of Scope" decision, this part will be detailed in the ESIA.	This part will be detailed in the ESIA.	This part will be detailed in the ESIA.	According to the official letter, numbered E-71691431-165.99-4528960, from Ministry of Culture and Tourism-General Directorate of Cultural Heritage and Museums, Gaziantep Cultural Heritage Preservation Regional Board Directorate, there are no immovable cultural assets within the scope of Law No. 2863 on the property and its immediate surroundings. However, if any finds or remains that qualify as immovable cultural assets that need to be protected are encountered during the physical and construction interventions to be carried out in the area, the work must be stopped immediately and this must be reported to the nearest Museum Directorate, the headman in the village or the local administrative authorities in other places within 3 (three) days at the latest.

*Maps of the Legally Protected and Internationally Recognized Areas are given in Appendix-5.



Figure 80. Asphalt Plant in Ceyhan Construction and Accommodation Site



Figure 81. Bahçe (Ayran) Concrete Plant



Figure 82. Tatarlı Basalt Quarry



Figure 83. Baspınar Limestone Quarry



Figure 84. Package WWTP in Ceyhan Construction and Accommodation Site



Figure 85. Staged Sedimentation Ponds



Figure 86. Solar Panels in Ceyhan Construction and Accommodation Site



Figure 87. Recycling Bins in Ceyhan Construction and Accommodation Site



Figure 88. Waste Containers in Ceyhan Construction and Accommodation Site



Figure 89. Chemical Storage Area in Ceyhan Const.&Accommodation Site



Figure 90. Diesel Tank in Ceyhan Construction and Accommodation Site



Figure 91. Storage Tanks in Ceyhan Construction and Accommodation Site



Figure 92. Soil Contamination in the activity area of Başpınar Viaduct



Figure 93. Entrance of Ceyhan Construction and Accommodation Site



Figure 94. Information and warning signs in Ceyhan Construction and Accommodation Site



Figure 95. Information and warning signs in the activity area of Başpınar Viaduct



Figure 96. Information and Warning Signs in Ceyhan Construction and Accommodation Site



Figure 97. Working Area in the activity area of Başpınar Viaduct

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4.6 Repair Works of Technological Bridges

4.6.1 General Information

Beylerderesi Bridge

- Enkon İnşaat A.Ş. (ENKON) was assigned as the Contractor through a contract signed with the 8th Regional Directorate of Highways on 16.10.2023 for this sub-project. The commencement date is 20.10.2023.
- The structural bearings and expansion joints of the Beylerderesi Bridge (see Figure 98) will be replaced within the scope of the sub-project. Design works for the required materials were conducted in December 2023. Subsequently, orders of the necessary materials, which are being imported from abroad, have been placed. However, due to a delay in the supply process, replacement activities could not commence as planned. The required materials are awaited for the commencement of construction works.
- There will be no accommodation on-site. Guest house of 8th Regional Directorate of Highways is planned to be used for accommodation. There will not be a camp site within the scope of the sub-project.
- A photograph, taken during the site visit, showing the damage of the bridge is given in Figure 99. A view from Yeşilvadi Reservoir and Beylerderesi Stream is shown in Figure 100.



Figure 98. View of The Beylerderesi Bridge



Figure 99. Damages on the Bridge



Figure 100. Yeşilvadi Reservoir and Beylerderesi Stream under the Beylerderesi Bridge

Tohma Bridge

- Tohma Bridge is also known as Şehit Gaffari Güneş Bridge.
- Enkon İnşaat A.Ş. (ENKON) was assigned as the Contractor through a contract signed with the 8th Regional Directorate of Highways on 16.10.2023 for this sub-project. The commencement date is 20.10.2023.
- The seismic bearings and expansion joints of the Tohma Bridge (see Figure 101) will be replaced within the scope of the sub-project. Design works for the required materials were conducted in December 2023. Subsequently, orders of the necessary materials,

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which are being imported from abroad, have been placed. However, due to a delay in the supply process, replacement activities could not commence as planned. The required materials are awaited for the commencement of construction works.

- There is a railway on the bridge for both freight and passenger transportation.
- Tohma Construction and Accommodation Site will be used within the scope of the sub-project.



Figure 101. View of the Tohma Bridge

Ağın Bridge

- Ağın Bridge is also known as Şehit Mehmet Şevket Uzun Bridge. General views of Ağın Bridge are given in Figure 102 and Figure 103.
- Enkon İnşaat A.Ş. (ENKON) was assigned as the Contractor through a contract signed with the 8th Regional Directorate of Highways on 16.10.2023 for this sub-project. The commencement date is 20.10.2023.
- It is planned to carry out damage detection and repair work for 32 inclined suspension wires. Mobilization works commenced in December 2023, construction works commenced in January 2024 and planned to be completed in May 2024.
- Service is procured from a company named “Freysaş” for material supply and installation/assembly. There is a campsite consisting of a few prefabricated containers used as offices and recreation area (see Figure 104). There is also a small material storage area at the campsite shown in Figure 105.
- No accommodation on-site. Staff working within the scope of the project use teacher's lodge, rental houses and guesthouses for accommodation.



Figure 102. General View of Ağın Bridge -1



Figure 103. General View of Ağın Bridge -2



Figure 104. Ağın Campsite - Offices



Figure 105. Material Storage Area at Ağın Campsite

4.6.2 Assessment of the Social Findings

4.6.2.1 Population Change

Project activities will not cause any population influx or demographic change on local communities, vulnerable groups or gender. However, accommodation areas will need to be

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isolated from local settlement areas, all needs of workers will be met from camp sites, and training defined within the scope of CHS will be provided.

4.6.2.2 Community Health and Safety

Tohma Bridge and Beylerderesi Bridge are actively used. Construction area is far from residential areas. However, there is a container town located in the city park at the exit of the Beylerderesi Bridge.

Considering the proximity of Tohma and Ađın camping areas to residential areas, it is important to provide the following training to workers and security personnel staying in the camping areas.

- SEA/SH
- Gender Based Violence and Harassment (GBVH)
- Workers' rights
- Project standards and human rights
- Community relations with local people
- Use of power (for security)
- CHS
- Social and cultural induction

4.6.2.3 Resettlement and Land Acquisition

There is no need for land acquisition for the Renovation of Technological Bridges Damaged in the Earthquake sub-project activities. In this context, a physical displacement will not be occurred. However, the following information was obtained within the scope of camp site and construction site installation:

Tohma Camp Site is installing on a land which includes a private 2-storey house structure (see Figure 106) belonging to the owner of the construction site parcel.



Figure 106. 2-storey house structure in the Tohma Camp Site Parcel

Source: March 2024 Site Visit Photos



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Since the land owner's previous house was destroyed in the earthquake, he had a house built on this empty parcel of his own after the earthquake and he still lives in this area. The landowner rented the land to the Project by consent in return for an agreement and was not subject to any loss of rights or forced physical resettlement.

4.6.2.4 Loss of Livelihood

Potential involuntary resettlement is not anticipated. However, the effect of affecting economic activities may occur. Situations in which this effect may occur are revealed by the following findings.

For the P5 subproject related to the Tohma Bridge, a land containing a two-storey house structure, which was previously rented temporarily to construction sites, was rented for the Project camp site.

Private land is rented by making a contract and agreeing on the rental price, with the consent and satisfaction of the land owner.

The land owner stated that he carries out animal husbandry and dairy farming on the remaining land and that he has a place to stay and that he takes his animals to graze in the surrounding lands outside the camp site. As a result of the interviews, it was understood that an additional contribution to the household income was made by generating income from renting the land. In this context, camp site activities do not have any impact on daily life and livelihood activities.

A private small-scale fishing activity is carried out under the Ađın Bridge as shown in Figure 107.



Figure 107. Fishing Activity under the Ađın Bridge

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Even though Project Works have a content that will not affect the fishing activity and fishing area, the PAPs carrying out the fishing and the business will be interviewed within the scope of the Project's Resettlement Plan (RP) and ecosystem services impact assessment under the ESIA.

4.6.2.5 Pressure on Infrastructure and Services

Tohma Construction Site: Electrical infrastructure is available, but there is no generator for emergencies. Drinking water is provided from ready-bottled water, whereas mains water is utilized as utility water. Permissions and capacity determinations regarding the infrastructure used must be made. An evaluation should be made with more detailed information regarding the health services to be provided for workers staying in this area.

There is no sewage infrastructure in the region; therefore, ENKON utilizes the septic system of the private 2-storey house shown in Figure 106. This arrangement is made with the land owner in exchange for a fee.

Ağın Construction Site: Any pressure on local infrastructure and services will not be occurred due to the Ağın Construction Site activities. There is no sewage infrastructure in the region, a septic tank will be utilized.

4.6.2.6 Labor and Working Conditions

Tohma Camp Site: As of the beginning of March, there are 5 employees at the construction site, which is under installation, and 3 workers accommodation are provided in this camping area. A cook was employed in the camp area to meet the food needs of the workers. The camp site located in front of Tohma Stream, is approximately 4 km away from the nearest settlements, Sürün Village and Durucasu. As of the first week of March, the administrative building has been completed and a cafeteria exists in the construction site.

Ağın Construction Site: Reinforcement works on the Ağın Bridge continue. There is no accommodation at the construction site and 12-20 personnel work on bridge repair works.

The infrastructure is not ready yet, the septic system will be installed. Currently, the facilities at the nearby petrol station are being used. Approximately 10 workers use the temporary construction site established close to this area. Workers are accommodated in the highways' nursing home, 22 km away from the construction site, and are transported by shuttle service. There are no female employees. Workers have their meals from the outside providers. Temporary accommodation areas have electric radiators and air conditioning.

Since KGM is an official institution, it is subject to the relevant laws, regulations¹³ and conventions. In this context, KGM and all contractors working under it are subject to Labor Law and ILO conventions to which Türkiye is a party¹⁴.

All contractors within the scope of the project are obliged to prohibit child labor, forced labor, and ensure equal treatment and gender equality for employees, including the ILO conventions listed below under the following headings: freedom of association, child labor, forced labor, equal treatment of employees, and gender equality.

- Forced Labor Convention No. 29
- Convention No. 105 on the Abolition of Forced Labor
- Minimum Age Convention No. 138
- No. 182 Urgent Prohibition and Eradication of Worst Forms of Child Labor
- Action Agreement

¹³ <https://www.kgm.gov.tr/Sayfalar/KGM/SiteTr/Kurumsal/KanunMevzuat.aspx>

¹⁴ https://www.ilo.org/sites/default/files/wcmsp5/groups/public/@europe/@ro-geneva/@ilo-ankara/documents/genericdocument/wcms_645630.pdf



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- Convention No. 87 on Freedom of Association and Protection of the Right to Organize
- Convention on the Right to Organize and Collective Bargaining No. 98
- Equal Pay Convention No. 100
- Equality of Treatment (Social Security) Convention No. 118
- Employment Policy Agreement No. 122

In this context, KGM will ensure that the following actions are taken to ensure that all these laws, procedures and agreements are implemented throughout the Project, regulating the management of working conditions and labor relations, including the prevention of Child Labor and Forced Labor.

- Notifying the main contractor and all subcontractors of the contracts, policies and procedures to which they are parties and which they are obliged to comply with,
- Including the contract, policies and procedures and their determined main headings in the training given before starting work and making contractor employee training a part of the induction training.
- Incorporating policies and procedures within the scope of all employee agreements into contracts, either as part of these agreements or by transferring them to codes of conduct.
- Making prohibitions, ethical principles and responsibilities visible in work areas (camp sites, work areas).
- Establishing a grievance mechanism that is accessible to all employees of the Project, including subcontractor employees, and allowing anonymous complaints, and disclosing it to employees.

4.6.3 Stakeholder Engagement and Grievance Redress Mechanism

KGM does not have a stakeholder engagement plan and grievance mechanism that will meet the project requirements and AIIB standards. Within the scope of the Project, no discussions or meetings have been held with stakeholders in the surrounding settlements regarding the Project so far.

The grievance mechanism operated within the scope of the project is as follows:

For the grievance mechanism, worker complaints can be submitted in writing to both the on-site construction site managers and the Contractor's Human Resources department. Requests/complaints received are examined and responded to as soon as possible.

For the grievance mechanism, citizens/institutions must contact both the control offices in charge and the KGM. They can apply to the Regional Directorate of KGM. Requests/complaints received are examined on-site and responded to as soon as possible.

KGM website includes "Complaint Notification Form for Real Persons" and "Complaint Notification Form for Legal Entities" (<https://www.kgm.gov.tr/Sayfalar/KGM/SiteTr/Root/SikayetGeriBildirim.aspx>). Complaint forms allow complaints with open names, but do not allow anonymous complaints to be received.

The grievance mechanism of the contractors and KGM was evaluated. It has been observed that the grievance management and stakeholder participation activities operated by both KGM and the main contractors of the sub-projects do not comply with AIIB standards.

Within the scope of the project, it is proposed to establish both external and employee grievance mechanisms.

Within the scope of the Project, a worker grievance mechanism should be established where anonymous complaints of employees can be received, accessible to all employees free of



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charge, safely and equally, defining the gender-based violence and harassment procedure in accordance with AIIB standards.

The grievance mechanism should be explained to all workers within the scope of the training to be given before they start working.

The grievance mechanism should ensure that complaints are received through complaint boxes in common areas and cafeterias, as well as through tools such as the ethics line and telephone.

SEP (including GRM) will be prepared to develop a gender-sensitive grievance mechanism procedure that includes these and also includes employee complaints, where anonymous complaints can be reported, and to eliminate/close this gap.

4.6.4 Assessment of the Environment, OHS and Biodiversity-Related Findings

Due diligence findings regarding the Repair Works of Technological Bridges sub-project and related facilities are given in Table 12.



Table 12. Due Diligence Findings for Repair Works of Technological Bridges Sub-Project and related facilities

Topic/Issue	Beylerderesi Sub-project Area	Tohma Construction and Accommodation Site and Sub-project Area	Ağın Construction Site and Sub-project Area
Owner/operator of the facility or the works carried out	Owner of the sub-project: 8 th Regional Directorate of Highways Contractor: ENKON	Owner of the sub-project: 8 th Regional Directorate of Highways Contractor: ENKON	Owner of the sub-project: 8 th Regional Directorate of Highways Contractor: ENKON
Specifications and properties of facility or work	The material supply is awaited to commence the repair works.	The material supply is awaited to commence the repair works. There are administrative offices for KGM and ENKON and accommodation areas currently available. Three personnel from ENKON are staying on-site.	No accommodation on-site Office containers Material storage areas Repair works are ongoing at the sub-project area.
EIA Opinion	As per the official letter from Malatya Provincial Directorate of EUCC, dated 21.12.2023 and numbered E-90215094-220.99-8285690, the subproject is exempt from the EIA.	As per the official letter from Malatya Provincial Directorate of EUCC, dated 15.12.2023 and numbered E-90215094-220.03-8235886, the subproject is out of scope in accordance with the national EIA Regulation.	As per the official letter from Elazığ Provincial Directorate of EUCC, dated 14.12.2023 and numbered E-14698725-220.03-8216290, maintenance, repair and renovation operations of the Ağın Bridge were evaluated as out of scope since they are not included in the EIA Regulation Lists.
Environmental Permit	N/A	N/A	N/A
Working hours and shifts	The work has not started yet.	The repair works within the scope of the sub-project have not started yet.	08:00-16:30 with single shift (+overtime work)
Service procurement	The work has not started yet.	The repair works within the scope of the sub-project have not started yet.	OHS Service
Water and Wastewater Management			
Water supply – for drinking purposes	The work has not started yet.	The drinking water needs of the personnel have been met from bottled water.	The drinking water needs of the personnel have been met from bottled water.
Water supply – for personnel usage	The work has not started yet.	Mains water has been used.	Utility water has been delivered to the site by tankers and it was stated that analyzes have been carried out.
Water supply – for process	The work has not started yet.	The repair works within the scope of the sub-project have not started yet.	Process water has been delivered to the site by tankers and it was stated that analyzes have been carried out.
Wastewater management	The work has not started yet.	There is no sewage infrastructure in the region; therefore, ENKON utilizes the septic system of the private 2-storey house. This arrangement is made with the land owner in exchange for a fee.	Wastewater infrastructure has not existed yet, a septic system will be installed.
Raw Material Supply	It will be procured through purchases from abroad.	It will be procured through purchases from abroad.	It will be procured through purchases from abroad.
Pollution Prevention & Waste Management			
Hazardous Wastes	The work has not started yet.	The repair works within the scope of the sub-project have not started yet. It was declared that hazardous waste was not yet generated.	No agreement has been made yet regarding waste disposal facilities. Waste management is not handled properly on-site and related mitigation measures provided in the respective ESMP should be applied to bring the sub-project into compliance with national laws and regulations and AIIB's requirement.
Non-Hazardous Wastes	The work has not started yet.	Domestic wastes have been collected by the municipality. During the site visit, no separate waste bins used for other non-hazardous wastes were observed.	Domestic wastes have been collected by the Ağın Municipality (see Figure 108). During the site visit, no separate waste bins used for other non-hazardous wastes were observed.
Temporary Waste Storage Area	The work has not started yet.	The repair works within the scope of the sub-project have not started yet. No temporary waste storage area was observed during	A temporary waste storage area in compliance with national legislation and international standards has not yet been

Topic/Issue	Beylerderesi Sub-project Area	Tohma Construction and Accommodation Site and Sub-project Area	Ağın Construction Site and Sub-project Area
		the site visit. ENKON declared that a temporary waste storage area will be installed.	constructed. The container and waste code are available for a specific waste (see Figure 109). A spill kit is available on site (see Figure 110).
Topsoil	N/A	N/A	N/A
Excavation wastes	N/A	N/A	N/A
Construction wastes	It is planned to separate construction materials according to their types and allocate them to the Machinery and Chemical Industry (MKE).	It is planned to separate construction materials according to their types and allocate them to the Machinery and Chemical Industry (MKE).	It is planned to separate construction materials according to their types and allocate them to the Machinery and Chemical Industry (MKE).
Chemical Management	The work has not started yet.	The repair works within the scope of the sub-project have not started yet.	There is a chemical storage area and material warehouse. Drip trays have been used (see Figure 111 and Figure 112). The fire extinguishers and spill kits are available at the chemical storage area.
Soil Contamination Risk	The work has not started yet.	The repair works within the scope of the sub-project have not started yet. During the field visit, no soil contamination was detected.	During the field visit, no soil contamination was detected.
Air Quality and Noise Management	The work has not started yet.	There is no use of generator, there is electrical infrastructure. No significant impact is expected in terms of environmental noise and adverse effects on air quality. No complaints were received so far regarding air quality and noise.	There is no use of generator, there is electrical infrastructure. No significant impact is expected in terms of environmental noise and adverse effects on air quality. No complaints were received so far regarding air quality and noise.
Community Health and Safety			
Fencing of the facility area Security cabin	The work has not started yet.	The repair works within the scope of the sub-project have not started yet.	The construction site area has been partially fenced (see Figure 113), there is no security cabin available, and a guard is on duty at night.
Information and Warning/Safety Signs	The work has not started yet.	The repair works within the scope of the sub-project have not started yet.	It is recommended to increase the number of warning signs and information signs.
Occupational Health and Safety			
OHS Documents	The work has not started yet.	There is no Risk Analysis Report to be prepared for the accommodation area. Since accommodation is provided, specific risk analysis reports and emergency intervention plans for accommodation areas should be prepared. Construction OHS documents are not yet available as work has not yet commenced.	Occupational Health and Safety Professional Contracts are available. The Risk Analysis Report was prepared by the contractor company ENKON on 22.02.2024. The Health and Safety Plan was prepared by the contractor company ENKON in February.2024. The Emergency Response Preparedness Plan was prepared by the contractor company ENKON on 22.02.2024. Within the scope of annual plans and reports, "Annual Training Plan, Annual Work Plan, and Annual Evaluation Report" have been prepared. OHS trainings have been provided and records have been maintained.
Emergency Drills	The work has not started yet.	The work has not started yet.	The Emergency Drill has not been conducted yet.

Topic/Issue	Beylerderesi Sub-project Area	Tohma Construction and Accommodation Site and Sub-project Area	Ağın Construction Site and Sub-project Area
Safety of the construction/accommodation area	The work has not started yet.	Work has not started yet. There is no construction site; only accommodation site is available (see Figure 114) Ergonomics, thermal comfort, natural ventilation, and natural lighting have been prioritized in office and accommodation areas (see Figure 115). Wire insect screens are available to protect against flying insects.	The scaffold has been set up for the repair work on the Ağın Bridge (see Figure 116). Traffic is restricted under controlled conditions.
Procurement and Usage of PPE	The work has not started yet.	The work has not started yet.	All employees are provided with work shoes, work clothes, gloves, masks, goggles, and helmets. Additionally, the maintenance team has been provided with harness lanyard.
Occupational Accident	The work has not started yet.	No occupational accidents have occurred at the Tohma accommodation site.	No occupational accidents have occurred at the Ağın construction site and sub-project area.
Biodiversity Management			
Biodiversity Consideration	The Beylerderesi Bridge is an existing bridge. No direct impact is expected from the project; however, indirect pollution of water resources may occur due to work on river crossings. Necessary measures will be taken to prevent these effects.	The Tohma Bridge and Tohma Construction and Accommodation Site is an existing bridge and facility. No direct impact is expected from the project; however, indirect pollution of water resources may occur due to work on reservoir crossings. Necessary measures will be taken to prevent these effects.	The Ağın Bridge and Ağın Construction Site are already existing facilities. No direct impact is expected from the project; however, indirect pollution of water resources may occur due to work on reservoir crossings. Necessary measures will be taken to prevent these effects.
Biodiversity Impacts	The Beylerderesi Bridge is an existing bridge. No additional impacts on biodiversity are determined.	The Tohma Bridge and Tohma Construction and Accommodation Site is an existing bridge and facility. No additional impacts on biodiversity are determined.	The Ağın Bridge and Ağın Construction and Accommodation Site is an existing bridge and facility. No additional impacts on biodiversity are determined.
Critical Habitats	The Beylerderesi Bridge is an existing bridge. No critical habitat is determined.	The Tohma Bridge and Tohma Construction and Accommodation Site is an existing bridge and facility. No critical habitat is determined.	The Ağın Bridge and Ağın Construction and Accommodation Site is an existing bridge and facility. No critical habitat is determined.
Natural Habitats	The Beylerderesi Bridge is an existing bridge, therefore impact on natural habitats is expected to be low.	The Tohma Bridge and Tohma Construction and Accommodation Site is an existing bridge and facility, therefore impact on natural habitats is expected to be low.	The Ağın Bridge and Ağın Construction and Accommodation Site is an existing bridge and facility, therefore impact on natural habitats is expected to be low.
Protected Areas*	The Beylerderesi Bridge is not located within Legally Protected Areas and Internationally Recognized Areas. Therefore, no impact is expected.	The Tohma Bridge and Tohma Construction and Accommodation Site are not located within Legally Protected Areas and Internationally Recognized Areas. Therefore, no impact is expected.	The Ağın Bridge and Ağın Construction and Accommodation Site are not located within Legally Protected Areas and Internationally Recognized Areas. Therefore, no impact is expected.
Cultural Heritage Management			
Official correspondence	As per the official letter from Malatya Provincial Directorate of Culture and Tourism, dated 28.12.2023 and numbered E-28262782-166.99-4592830, since no movable or immovable cultural property falling within the scope of Law No. 2863 was found during the surface examinations carried out by the Museum Directorate experts, there is no objection to carrying out sub-project operations. However, if any finds or remains that qualify as immovable cultural assets that need to be protected are encountered during the physical and construction interventions to be carried out in the area, the work must be stopped immediately and this must be reported to the nearest Museum Directorate, the headman in the village or the local administrative authorities in other places within 3 (three) days at the latest.	As per the official letter from Malatya Provincial Directorate of Culture and Tourism, dated 28.12.2023 and numbered E-28262782-166.99-4592777, in the examinations carried out by the Regional Board Directorate's experts, it was understood that there are no immovable cultural assets within the scope of Law No. 2863 on the property and its immediate surroundings. For this reason, there is no objection to carrying out the subproject.	As per the official letter from Elazığ Provincial Directorate of Culture and Tourism, numbered E-11277799-165.99-4575053, as a result of the examination, it was determined that the Ağın Bridge does not display any cultural property characteristics within the scope of Law No. 2863. However, if any finds or remains that qualify as immovable cultural assets that need to be protected are encountered during the physical and construction interventions to be carried out in the area, the work must be stopped immediately and this must be reported to the nearest Museum Directorate, the mukhtar in the village or the local administrative authorities in other places within 3 (three) days at the latest.

*Maps of the Legally Protected and Internationally Recognized Areas are given in Appendix-5.



Figure 108. Domestic Waste Containers in the Ağın Construction Site



Figure 109. Hazardous Waste Containers in the Ağın Construction Site



Figure 110. Spill Kit in the Ağın Construction Site



Figure 111. Chemical Storage Area in the Ağın Construction Site



Figure 112. Material Warehouse in the Ağın Construction Site



Figure 113. Surrounding of the Ağın Construction Site



Figure 114. Tohma Accommodation Site



Figure 115. Office Room in Tohma Accommodation Site



Figure 116. The scaffold set up at the Ağın Bridge

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5 ENVIRONMENTAL AND SOCIAL ACTION PLAN

The fundamental aim of Environmental and Social Action Plan (ESAP) is to identify the proposed actions for ensuring the implementation of actions related to environmental, social, occupational health and safety, labor, and working conditions in accordance with national legislation and international standards.

E&S findings are provided in Section 4 for each sub-project. Additionally, a general summary of these issues, in terms of the contractors' capacity and management, is as follows:

- During the site visit, it was observed that all sub-projects had OHS specialists either employed by the contractor or receiving consultancy services in this regard.
- In terms of environmental issues, it is known that some sub-projects received environmental consultancy services. However, as mentioned in this report, it has been observed that compliance with national legislation requirements is insufficient. Considering the visual situation on site, environmental consultants should be more actively involved in the field, conduct internal audits, and take necessary corrective and preventive actions.
- From a social perspective, there is no appointed expert on public relations or grievance redress mechanisms in place for contractors, and an active grievance redress mechanism is not available. It was stated by KGM and the Contractors that no written or verbal complaints regarding environmental and social issues have been received so far within the scope of the project. This issue is confirmed by the social surveys conducted by the social team, which indicate there are no unresolved or outstanding complaints.
- No ES legacy issues were identified during the due diligence studies, except for the environmental permits listed in the ESAPs prepared for each sub-project, which can be obtained by the responsible party within the timeframe specified in the respective ESAP (see Appendix-1 for P1, Appendix-2 for P2, Appendix-3 for P3, and Appendix-4 for P5).
- It should be noted that the devastation experienced in the region following the February 6 earthquake and the necessity to urgently address emergency needs have caused some delays in compliance with national legislation. Additionally, during the site visit, it was observed that the contractors were not aware of their roles and responsibilities within the scope of the AIIB loan and the requirements of international standards, leading to ineffective management of E&S issues.
- The necessary actions to address all the deficiencies mentioned in this report are provided in the relevant ESAP and the ESMPs prepared for each sub-project. Following the sharing of these documents with the contractors by KGM RIU, the adequacy of the contractors on E&S issues should be reassessed during the next E&S monitoring activities conducted by the Supervision Consultant.

Based on the findings of the E&S due diligence, this section sets out the proposed corrective actions to bring the sub-projects into compliance with national legislation and AIIB's requirements by incorporating the corrective actions into the ESAP as well as specifying a timeline, responsible entities, and resources to achieve and maintain compliance.

The separate ESAPs prepared specifically for the subprojects under construction (P1, P2, P3 and P5, for details see Table 7) are given in Appendix-1, Appendix-2, Appendix-3 and Appendix-4, respectively.



APPENDIX-1 ESAP FOR THE SUB-PROJECT P1

ESAP No.	Action	Environmental and Social Risks (Liabilities and Benefits)	Requirements	Resources, Investment Needs, Responsibility	Timetable	Target and Evaluation Criteria
ESS 1: Environmental and Social Assessment and Management						
General						
P1-1	Obtaining EIA decisions for planned new facilities, if any, within the scope of the EIA Regulation	Managing the environmental and social risks of the project in an effective way	National Legislation	The contractor under the supervision of the Borrower (KGM RIU)	For planned facilities: Before starting the operation	Obtaining all EIA opinions and submitting them to the Bank
P1-2	Completion of the missing environmental permit process for Tatarlı Basalt Quarry, Başpınar Limestone Quarry to cover all components along with Bahçe (Ayran) concrete plant and for each planned asphalt plant, concrete plant, mechanical plant/crusher in the activity areas; and submitting them to the Bank	Managing the environmental and social risks of the project in an effective way	National Legislation	The contractor under the supervision of the Borrower (KGM RIU)	For existing facilities: Within 1 month after Signing the Loan Agreement For planned facilities: Before starting the operation	Obtaining all permissions and submitting them to the Bank
P1-3	Preparation of the Environmental and Social Impact Assessment (ESIA) Report including Environmental and Social Management Plan (ESMP)	Managing the environmental and social risks of the project in an effective way	AIIB ESS 1	Borrower (KGM RIU) / Environmental Consultant Firm to be approved by the Bank	Before Project approval	Preparation of the ESIA report / Implementation during construction and operation period
P1-4	Implementation of the requirements of the Environmental and Social Management Plan (ESMP) including mitigation measures and monitoring program for each environmental, social and OHS related issues, prepared specifically for the sub-project	Managing the environmental and social risks of the project in an effective way	AIIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Implementation throughout the construction period	Effective implementation during the construction period by eliminating non-compliances against project standards
P1-5	In case raw materials are supplied from the quarries/borrow sites operated by third parties (such as Yılankale Limestone Quarry), ensuring that those have all relevant environmental permits within the scope of national legislation	Managing the environmental and social risks of the project in an effective way	National Legislation	The contractor under the supervision of the Borrower (KGM RIU)	Implementation throughout the construction period	Documentation (permits and/or official letters)
P1-6	Ensuring that the material storage areas along with construction and excavation waste storage areas being used have the necessary permits and approval letters	Managing the environmental and social risks of the project in an effective way	National Legislation	The contractor under the supervision of the Borrower (KGM RIU)	Timeline for completion of the missing documents (permits/approval letters): Within 1 month after Signing the Loan Agreement Implementation throughout the construction period	Documentation (permits and/or official letters)
P1-7	Ensuring that all personnel receive EHS training	Managing the environmental, social, OHS and community related risks of the project in an effective way	National Legislation AIIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Implementation throughout the construction period	Training records
P1-8	Conducting periodic E&S Monitoring studies to check the compliance of project activities with national legislation and AIIB ESSs by submitting these reports to the Bank	Managing the environmental and social risks of the project in an effective way	National Legislation AIIB ESS 1	KGM RIU as Supervision Consultant	Biannually monitoring during the construction period	Submission of Environmental & Social Monitoring Reports to the Bank
P1-9	Conducting periodic internal E&S Monitoring studies to check the compliance of project activities with national legislation and AIIB ESSs by submitting these reports to KGM	Managing the environmental and social risks of the project in an effective way	National Legislation AIIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Monthly reporting during the construction period	Internal audit reports

ESAP No.	Action	Environmental and Social Risks (Liabilities and Benefits)	Requirements	Resources, Investment Needs, Responsibility	Timetable	Target and Evaluation Criteria
P1-10	Ensuring the compliance of the contractor activities with the project standards is included in the contract terms	Managing the environmental and social risks of the project in an effective way	National Legislation AIB ESS 1	Borrower (KGM RIU)	Within 1 month after Signing the Loan Agreement	Including the practices in contractor(s) contracts
P1-11	Identification of responsibilities for the effective management of environmental, social and OHS issues	Effective management of the environmental and social risks of the project	National Legislation AIB ESS 1	Borrower (KGM RIU) and the contractor under the supervision of the Borrower (KGM RIU)	Within 1 month after Signing the Loan Agreement	Organizational structure and internal audit reports
Chemical Management						
P1-12	Making and/or renewing BEKRA Notification when necessary for areas where chemical storage is carried out and/or planned to be carried out via the MoEUCC's online platform	Managing the environmental and social risks of the project in an effective way	National Legislation	The contractor under the supervision of the Borrower (KGM RIU)	In case of the chemical storage or usage	Documentation
P1-13	Taking necessary precautions during the storage of chemical and hazardous materials for each activity site	Minimizing the risks that threaten effective OHS management and community health and safety	National Legislation AIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Implementation throughout the construction period	Internal audits and visual observations
Water and Wastewater Management						
P1-14	Obtaining the usage license for the groundwater well at Ceyhan Construction and Accommodation Site and for the new wells to be drilled/needed during the construction works	Managing the environmental and social risks of the project in an effective way	National Legislation	The contractor under the supervision of the Borrower (KGM RIU)	For the existing well: Within 1 month after Signing the Loan Agreement For new/planned groundwater wells: Before using the groundwater well	Obtaining a usage license
P1-15	Making necessary analysis in case of drinking water supplied from wells	Protection of employee health	National Legislation WBG General EHS Guidelines/WHO Criteria	The contractor under the supervision of the Borrower (KGM RIU)	Quarterly analysis	Compliance of the analysis results with the criteria of Regulation on Water Intended for Human Consumption and international standards
P1-16	Preventing the discharge of wastewater into the receiving environment without treatment, storing it in leak-proof septic tanks and ensuring its disposal in licensed facilities (for the Package WWTP in the Ceyhan Construction and Accommodation Site, taking a sample every four (4) months and making analyzes)	Minimizing the risks that threaten receiving environment	National Legislation AIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Implementation throughout the construction period	Wastewater disposal records Compliance of the analysis results of the effluent (for the existing package WWTP)
Waste Management						
P1-17	Establishment of appropriate temporary waste storage area for each waste generated area	Managing the environmental, social, OHS and community related risks of the project in an effective way	National Legislation AIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Within 1 month after Signing the Loan Agreement	Compliance with project standards/requirements
P1-18	Ensuring that non-hazardous and hazardous wastes are separately collected, temporarily stored in appropriate containers/areas and disposed of by licensed disposal companies / Keeping waste records and making waste declarations and shipping notifications via online platform of MoEUCC (EÇBS/Waste Management Application)	Waste reduction, resource conservation and effective waste management Ensuring proper hazardous and non-hazardous waste management to prevent soil,	National Legislation AIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Implementation throughout the construction period	Waste records Waste declaration and shipping notifications Related contracts

ESAP No.	Action	Environmental and Social Risks (Liabilities and Benefits)	Requirements	Resources, Investment Needs, Responsibility	Timetable	Target and Evaluation Criteria
		surface water and groundwater pollution				
Air Quality and Noise Management						
P1-19	Preparation of air emission measurement reports for the existing facilities (such as asphalt plant, concrete plant, mechanical plants/crusher, quarry/borrow site etc.) subject to the air emission permit and also in case a generator usage exceeds 500 hours/year	Detecting the level of air quality	Regulation on Control of Industrial Air Pollution WBG General and Sectoral EHS Guidelines	The contractor under the supervision of the Borrower (KGM RIU)	Implementation during the operation period of the respective existing facilities	Preparation of air emission measurement reports, Compliance of air emission results with the limit values
P1-20	In case of complaints, conducting noise and air quality measurements at the closest sensitive receptors	Detecting the level of ambient air quality and noise	Environmental Noise Control Regulation Regulation on Control of Industrial Air Pollution WBG General and Sectoral EHS Guidelines	The contractor under the supervision of the Borrower (KGM RIU)	Implementation during the construction period (in case of complaints)	Complaint records, Compliance of the ambient noise and air quality measurement results with the limit values
P1-21	Periodic maintenance and repair work to minimize the noise caused by the vehicles and equipment used in the construction phase	Minimizing environmental noise	Environmental Noise Control Regulation	The contractor under the supervision of the Borrower (KGM RIU)	Implementation during the construction period	Maintenance-repair records
OHS Management						
P1-22	Recording Occupational Accidents / Preparing OHS Performance Reports / Reporting All Kinds of OHS sourced Occupational Accident Statistics together with Root Cause Analysis	Managing risks arising from OHS	National Legislation AIIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Throughout the construction period	Timely reporting OHS Performance and Occupational Accident Statistics
P1-23	Ensuring safe working conditions, especially for Bahçe (Ayran) Concrete Plant, by fencing the surroundings of the sedimentation pools and providing insulated areas for electrical panels, as well as conducting periodic maintenance of electrical equipment; and for Tatarlı Basalt Quarry by enclosing excavation areas with safety barriers.	Managing risks arising from OHS	National Legislation AIIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Within 1 month after Signing the Loan Agreement	Documentation Internal audit reports Maintenance records
P1-24	Conducting emergency drills for each activity area	Managing risks arising from OHS	National Legislation AIIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Throughout the construction period	Documentation
P1-25	In addition to OHS training, the following trainings will be included in the basic annual training plan and provided to all employees. All employees will have received this training before starting work. - Workers' rights - Social Gender-Based Discrimination, Violence and Sexual Harassment - Grievance mechanism	An effective labor management	National Legislation AIIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Before workers start working During the construction period	Inclusion of training subjects in the Annual Training Plan Providing target training to all employees

ESAP No.	Action	Environmental and Social Risks (Liabilities and Benefits)	Requirements	Resources, Investment Needs, Responsibility	Timetable	Target and Evaluation Criteria
	<ul style="list-style-type: none"> - Code of Conduct - Social and Cultural induction - Use of power (for security) - Community health and safety measures - Vulnerable Groups in the Project Aol - HR policy requirements according to the AIIB 					
Community Health and Safety						
P1-26	Placing safety and traffic signs visibly on the access roads near and around the project site along; ensuring presence of warning signs and barriers around each activity area	Minimizing the risks that threaten effective traffic management and community health and safety	National Legislation AIIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Within 1 month after Signing the Loan Agreement for closure of the non-compliances Implementation during the construction period	Statistics of possible accidents and unsafe situations
P1-27	<p>CHS - Traffic Risks Management</p> <p>Prepare a driver training plan to ensure that all drivers (including the sub-contractors' drivers) are provided with the traffic and road safety trainings</p> <p>Prepare driver code of conduct and the disciplinary procedures</p> <p>Evaluate training plan's performance and effectiveness and make the required improvements when necessary</p> <p>Provide regular safe driving training courses to all drivers</p>	An effective traffic management	AIIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	During the construction period	Inclusion of training subjects in the Annual Training Plan Providing target training to all drivers
P1-28	<p>CHS - Traffic Risks Management</p> <p>Provide information to the local settlements and stakeholders on road safety, traffic measures and Project health and safety measures</p> <p>Provide health and safety information related to the Project CHS risks to children, elderly, women, non-Turkish speakers, disabled people, illiterate PAPs living in the Project Aol including pedestrian safety.</p>	An effective traffic management and stakeholder engagement	AIIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	During the construction period	Inclusion of information meeting topics in the SEP Providing necessary information on traffic, health and safety to all targeted groups Consultation and information meetings, registration of participants
Biodiversity Management						
P1-29	Avoiding the use of personnel vehicles, work machines and other vehicles outside the designated routes as much as possible and ensuring that all vehicles do not interfere with the natural life outside the project area.	Ensuring the protection of biodiversity	National Legislation AIIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Implementation during the construction period	Including relevant provisions in the Traffic Management Plan
P1-30	Implementation of the necessary mitigation measures to avoid accidental damages to habitats.	Ensuring the protection of habitats	AIIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Implementation during the construction period	No accidental damages to habitats
P1-31	Ensure that the necessary measures are implemented to mitigate and manage potential impacts to sensitive wildlife species	Impact mitigation and management	AIIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Implementation during the construction period	Impacts to habitats and species appropriately mitigated and managed
Culture Heritage Management						
P1-32	In case of a possible chance finding, notification of the related Museum Directorate	Managing the cultural heritage related risks of the project in an effective way	National Legislation	The contractor under the supervision of the Borrower (KGM RIU)	Implementation during the construction period	Official correspondence

ESAP No.	Action	Environmental and Social Risks (Liabilities and Benefits)	Requirements	Resources, Investment Needs, Responsibility	Timetable	Target and Evaluation Criteria
			AIIB ESS 1			
P1-33	Providing information on intangible cultural heritages (handicraft, weaving, agriculture and animal husbandry, etc.) defined or not defined in the national legislation and not harming these elements	Protection of intangible cultural heritage	National Legislation AIIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Implementation during the construction period	Impacts to intangible heritage avoided
Management of Labor and Social Issues						
P1-34	Preparing the stakeholder engagement plan including Grievance Redress Mechanism Procedure according to the AIIB standards.	Positive communication with the surrounding communities, efficient stakeholder engagement and managing the environmental and social risks of the project in an effective way.	National Legislation AIIB ESS 1	Borrower (KGM RIU) / Consultant Firm	Before Project approval	Submission of the plan to AIIB in appropriate standards
P1-35	Appoint a Contractor CLO to implement and manage the SEP and GRM of the Project on site.	Positive communication with the surrounding communities, efficient stakeholder engagement	AIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Within 1 month after Signing the Loan Agreement	Hiring an appropriate CLO for the Project on the Contractor site
P1-36	Establishment of the External Grievance Redress Mechanism (GRM) specific to External Stakeholders of the Project GRM and complaints line to be developed in a way to track GBVH issues. GBVH focal points shall be assigned and trained to manage GBVH related complaints. The necessary application forms, tracking forms and registration and tracking log for the grievance mechanism will be developed. This log will contain all the information defined in the complaint mechanism procedure. All external complaints will be recorded in this log and managed in accordance with the procedure, and the entire complaint management process will be recorded and closed.	Positive communication with the surrounding communities, efficient stakeholder engagement and managing the environmental and social risks of the project in an effective way. Prevention of gender-based violence and harassment	National Legislation AIIB ESS 1	Borrower (KGM RIU) / Consultant Firm	Established before Project approval and implemented throughout the construction period	Submission of the plan to AIIB in appropriate standards
P1-37	Disclose SEP & GRM along with AIIB's PPM on website and in the local settlements Holding a SEP & GRM as well as AIIB's PPM introduction meeting Update the SEP & GRM according to the stakeholder feedback	Positive communication with the surrounding communities, efficient stakeholder engagement and managing the environmental and social risks of the project in an effective way.	National Legislation AIIB ESS 1	Borrower (KGM RIU) / Consultant Firm	Established and disclosed before Project approval	SEP & GRM of the Project ESIA published on the Project website along with AIIB's PPM and distributed to the local communities SEP introduction meeting to the Stakeholders of the Project Update and disclose the final SEP & GRM according to the stakeholder feedback
P1-38	Annually review and update the SEP & GRM	Sustaining the positive communication with the surrounding communities, efficient stakeholder engagement and managing	National Legislation AIIB ESS 1	Borrower (KGM RIU)	Annually	Disclosure of the reviewed and updated SEP & GRM in web site annually

ESAP No.	Action	Environmental and Social Risks (Liabilities and Benefits)	Requirements	Resources, Investment Needs, Responsibility	Timetable	Target and Evaluation Criteria
		the environmental and social risks of the project in an effective way.				
P1-39	Ensuring the implementation of External Grievance Redress Mechanisms	An effective grievance mechanism	AIIB ESS 1	Borrower (KGM RIU)	Monthly & Quarterly	Monitoring and reporting the GRM records to AIIB monthly and quarterly
P1-40	Prepare a security management procedure in line with AIIB ESF, including but not limited to the following tools: security management policy, security guard's code of conduct, training plans and program, community relations, tracking system.	An effective labor management	National Legislation AIIB ESS 1	Borrower (KGM RIU)	Within 1 month after Signing the Loan Agreement	Submission of the plan to AIIB in appropriate standards Training topics are included in the annual Training Plan All Security are provided the target trainings
P1-41	Ensure all workers (both for sub-contractors) are informed and have access to the contracts and Code of Conduct	An effective labor management	National Legislation AIIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Within 1 month after Signing the Loan Agreement and implemented throughout the construction period	Submission of the draft of the contracts and CoC of the workers (both for sub-contractors)
P1-42	Establishment of the Workers Grievance Redress Mechanism (GRM) including GBVH issues. The necessary application forms, tracking forms and registration and tracking log for the grievance mechanism will be developed. This log will contain all the information defined in the complaint mechanism procedure. All workers complaints will be recorded in this log and managed in accordance with the procedure, and the entire complaint management process will be recorded and closed.	An effective workers grievance mechanism	National Legislation AIIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Within 1 month after Signing the Loan Agreement and implemented throughout the construction period	Submission of the Workers GRM to AIIB in appropriate standards, including GBVH issues, application forms, tracking forms and registration and tracking log.
P1-43	Ensuring the implementation of Worker's Grievance Redress Mechanisms All developed forms are located in the common areas with complaint boxes The grievance mechanism will be disclosed and explained in detail to all workers. The person responsible for the workers grievance mechanism will be appointed	An effective workers grievance mechanism	AIIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Monthly & Quarterly	Monitoring and reporting the GRM records to AIIB monthly and quarterly
ESS 2: Involuntary Resettlement						
It is envisaged that no physical or economic resettlement will occur.						

APPENDIX-2 ESAP FOR THE SUB-PROJECT P2

ESAP No.	Action	Environmental and Social Risks (Liabilities and Benefits)	Requirements	Resources, Investment Needs, Responsibility	Timetable	Target and Evaluation Criteria
ESS 1: Environmental and Social Assessment and Management						
General						
P2-1	Obtaining EIA decisions for planned new facilities, if any, within the scope of the EIA Regulation	Managing the environmental and social risks of the project in an effective way	National Legislation	The contractor under the supervision of the Borrower (KGM RIU)	For planned facilities: Before starting the operation	Obtaining all EIA opinions and submitting them to the Bank
P2-2	Completion of the missing environmental permit process for Kizilkaya Quarry and concrete plant at Antakya-Reyhanlı Road Construction Area to cover all components and for each planned asphalt plant, concrete plant, mechanical plant/crusher in the activity areas; and submitting them to the Bank	Managing the environmental and social risks of the project in an effective way	National Legislation	The contractor under the supervision of the Borrower (KGM RIU)	For existing facilities: Within 1 month after Signing the Loan Agreement For planned facilities: Before starting the operation	Obtaining all permissions and submitting them to the Bank
P2-3	Preparation of the Environmental and Social Impact Assessment (ESIA) Report including Environmental and Social Management Plan (ESMP)	Managing the environmental and social risks of the project in an effective way	AIIB ESS 1	Borrower (KGM RIU) / Environmental Consultant Firm to be approved by the Bank	Before Project approval	Preparation of the ESIA report / Implementation during construction and operation period
P2-4	Implementation of the requirements of the Environmental and Social Management Plan (ESMP) including mitigation measures and monitoring program for each environmental, social and OHS related issues, prepared specifically for the sub-project	Managing the environmental and social risks of the project in an effective way	AIIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Implementation throughout the construction period	Effective implementation during the construction period by eliminating non-compliances against project standards
P2-5	In case raw materials are supplied from the quarries/borrow sites operated by third parties (such as Opal quarry and Bozkayalar quarry), ensuring that those have all relevant environmental permits within the scope of national legislation	Managing the environmental and social risks of the project in an effective way	National Legislation	The contractor under the supervision of the Borrower (KGM RIU)	Implementation throughout the construction period	Documentation (permits and/or official letters)
P2-6	Ensuring that the material storage areas along with construction and excavation wastes storage areas being used have the necessary permits and approval letters	Managing the environmental and social risks of the project in an effective way	National Legislation	The contractor under the supervision of the Borrower (KGM RIU)	Timeline for completion of the missing documents (permits/approval letters): Within 1 month after Signing the Loan Agreement Implementation throughout the construction period	Documentation (permits and/or official letters)
P2-7	Ensuring that all personnel receive EHS training	Managing the environmental, social, OHS and community related risks of the project in an effective way	National Legislation AIIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Implementation throughout the construction period	Training records
P2-8	Conducting periodic E&S Monitoring studies to check the compliance of project activities with national legislation and AIIB ESSs and submitting them to the Bank	Managing the environmental and social risks of the project in an effective way	National Legislation AIIB ESS 1	KGM RIU as Supervision Consultant	Biannually monitoring during the construction period	Submission of Environmental & Social Monitoring Reports to the Bank
P2-9	Conducting periodic internal E&S Monitoring studies to check the compliance of project activities with national legislation and AIIB ESSs and submitting them to KGM	Managing the environmental and social risks of the project in an effective way	National Legislation AIIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Monthly reporting during the construction period	Internal audit reports

ESAP No.	Action	Environmental and Social Risks (Liabilities and Benefits)	Requirements	Resources, Investment Needs, Responsibility	Timetable	Target and Evaluation Criteria
P2-10	Ensuring the compliance of the contractor activities with the project standards is included in the contract terms	Managing the environmental and social risks of the project in an effective way	National Legislation AIB ESS 1	Borrower (KGM RIU)	Within 1 month after Signing the Loan Agreement	Including the practices in contractor(s) contracts
P2-11	Identification of responsibilities for the effective management of environmental, social and OHS issues	Effective management of the environmental and social risks of the project	National Legislation AIB ESS 1	Borrower (KGM) and the contractor under the supervision of the Borrower (KGM RIU)	Within 1 month after Signing the Loan Agreement	Organizational structure and internal audit reports
Chemical Management						
P2-12	BEKRA Notification for areas where chemical storage is carried out via the MoEUCC's online platform	Managing the environmental and social risks of the project in an effective way	National Legislation	The contractor under the supervision of the Borrower (KGM RIU)	Within 1 month after Signing the Loan Agreement	Documentation
P2-13	Taking necessary precautions during the storage of chemical and hazardous materials for each activity site to prevent soil contamination	Minimizing the risks that threaten effective OHS management and community health and safety	National Legislation AIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Implementation throughout the construction period	Internal audits and visual observations
Water and Wastewater Management						
P2-14	Obtaining the usage license for the groundwater wells at Kizilkaya Construction and Accommodation Site as well as Hatay Airport Road sub-project area and for the new wells to be drilled/needed during the construction works	Managing the environmental and social risks of the project in an effective way	National Legislation	The contractor under the supervision of the Borrower (KGM RIU)	For the existing wells: Within 1 month after Signing the Loan Agreement For new/planned groundwater wells: Before using the groundwater well	Obtaining a usage license
P2-15	Making necessary analysis in case of drinking water supplied from wells	Protection of employee health	National Legislation WBG General EHS Guidelines/WHO Criteria	The contractor under the supervision of the Borrower (KGM RIU)	Quarterly analysis	Compliance of the analysis results with the criteria of Regulation on Water Intended for Human Consumption and international standards
P2-16	Preventing the discharge of wastewater into the receiving environment without treatment, storing it in leak-proof septic tanks and ensuring its disposal in licensed facilities	Minimizing the risks that threaten receiving environment	National Legislation AIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Implementation throughout the construction period	Wastewater disposal records Compliance of the analysis results of the effluent (in case package WWTP exists/established)
Waste Management						
P2-17	Establishment of appropriate temporary waste storage area for each waste generated area and rehabilitation of the existing one at Kizilkaya Construction and Accommodation Site	Managing the environmental, social, OHS and community related risks of the project in an effective way	National Legislation AIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Within 1 month after Signing the Loan Agreement (both for existing and newly established temporary waste storage areas)	Compliance with project standards/requirements
P2-18	Ensuring that non-hazardous and hazardous wastes are separately collected, temporarily stored in appropriate containers/areas and disposed of by licensed disposal companies / Keeping waste records and making waste declarations and shipping notifications via online platform of MoEUCC (EÇBS/Waste Management Application)	Waste reduction, resource conservation and effective waste management Ensuring proper hazardous and non-hazardous waste management to prevent soil, surface water and groundwater pollution	National Legislation AIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Implementation throughout the construction period	Waste records Waste declaration and shipping notifications Related contracts

ESAP No.	Action	Environmental and Social Risks (Liabilities and Benefits)	Requirements	Resources, Investment Needs, Responsibility	Timetable	Target and Evaluation Criteria
Air Quality and Noise Management						
P2-19	Preparation of air emission measurement reports for Kızılkaya Quarry in line with the environmental permit to be renewed, if requested by the Provincial Directorate of EUCC and also in case a generator usage exceeds 500 hours/year	Detecting the level of air quality	Regulation on Control of Industrial Air Pollution WBG General and Sectoral EHS Guidelines	The contractor under the supervision of the Borrower (KGM RIU)	Implementation during the operation period of the respective existing facilities	Preparation of air emission measurement reports, Compliance of air emission results with the limit values
P2-20	In case of complaints, conducting noise and air quality measurements at the closest sensitive receptors	Detecting the level of ambient air quality and noise	Environmental Noise Control Regulation Regulation on Control of Industrial Air Pollution WBG General and Sectoral EHS Guidelines	The contractor under the supervision of the Borrower (KGM RIU)	Implementation during the construction period (in case of complaints)	Complaint records, Compliance of the ambient noise and air quality measurement results with the limit values
P2-21	Periodic maintenance and repair work to minimize the noise caused by the vehicles and equipment used in the construction phase.	Minimizing environmental noise	Environmental Noise Control Regulation	The contractor under the supervision of the Borrower (KGM RIU)	Implementation during the construction period	Maintenance-repair records
OHS Management						
P2-22	Recording Occupational Accidents / Preparing OHS Performance Reports / Reporting All Kinds of OHS sourced Occupational Accident Statistics together with Root Cause Analysis	Managing risks arising from OHS	National Legislation AIB ESS 1	The contractor under the supervision of the Borrower (KGM) RIU	Throughout the construction period	Timely reporting OHS Performance and Occupational Accident Statistics
P2-23	Ensuring safe working conditions, especially for Kızılkaya Quarry by installing warning signs, and for Hatay Airport Road sub-project area by providing safety barriers and warning signs around the excavation areas and by encouraging the use of safety harnesses	Managing risks arising from OHS	National Legislation AIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Within 1 month after Signing the Loan Agreement	Documentation Internal audit reports Maintenance records
P2-23	Conducting emergency drills for each activity area	Managing risks arising from OHS	National Legislation AIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Throughout the construction period	Documentation
P2-25	In addition to OHS training, the following trainings will be included in the basic annual training plan and provided to all employees. All employees will have received this training before starting work. <ul style="list-style-type: none"> - Workers' rights - Social Gender-Based Discrimination, Violence and Sexual Harassment - Grievance mechanism - Code of Conduct - Social and Cultural induction - Use of power (for security) - Community health and safety measures - Vulnerable Groups in the Project Aol 	An effective labor management	National Legislation AIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Before workers start working During the construction period	Inclusion of training subjects in the Annual Training Plan Providing target training to all employees

ESAP No.	Action	Environmental and Social Risks (Liabilities and Benefits)	Requirements	Resources, Investment Needs, Responsibility	Timetable	Target and Evaluation Criteria
	- HR policy requirements according to the AIIB					
Community Health and Safety						
P2-26	Placing safety and traffic signs visibly on the access roads near and around the project site along; ensuring presence of warning signs and barriers around each activity area	Minimizing the risks that threaten effective traffic management and community health and safety	National Legislation AIIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Within 1 month after Signing the Loan Agreement for closure of the non-compliances Implementation during the construction period	Statistics of possible accidents and unsafe situations
P2-27	CHS - Traffic Risks Management Prepare a driver training plan to ensure that all drivers (including the sub-contractors' drivers) are provided with the traffic and road safety trainings Prepare driver code of conduct and the disciplinary procedures Evaluate training plan's performance and effectiveness and make the required improvements when necessary Provide regular safe driving training courses to all drivers	An effective traffic management	AIIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	During the construction period	Inclusion of training subjects in the Annual Training Plan Providing target training to all drivers
P2-28	CHS - Traffic Risks Management Provide information to the local settlements and stakeholders on road safety, traffic measures and Project health and safety measures Provide health and safety information related to the Project CHS risks to children, elderly, women, non-Turkish speakers, disabled people, illiterate PAPs living in the Project Aol including pedestrian safety.	An effective traffic management and stakeholder engagement	AIIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	During the construction period	Inclusion of information meeting topics in the SEP Providing necessary information on traffic, health and safety to all targeted groups Consultation and information meetings, registration of participants
Biodiversity Management						
P2-29	Avoiding the use of personnel vehicles, work machines and other vehicles outside the designated routes as much as possible and ensuring that all vehicles do not interfere with the natural life outside the project area.	Ensuring the protection of biodiversity	National Legislation AIIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Implementation during the construction period	Including relevant provisions in the Traffic Management Plan
P2-30	Implementation of the necessary mitigation measures to avoid accidental damages to habitats.	Ensuring the protection of habitats	AIIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Implementation during the construction period	No accidental damages to habitats
P2-31	Ensure that the necessary measures are implemented to mitigate and manage potential impacts to sensitive wildlife species (specifically <i>Gazella gazella</i> and <i>Hyaena hyaena</i> around Kizilkaya Construction and Accommodation Site)	Impact mitigation and management	AIIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Implementation during the construction period	Impacts to habitats and species appropriately mitigated and managed.
Culture Heritage Management						
P2-32	Obtaining final approval from the Cultural Heritage Preservation Regional Board Directorates for "Hassa-Kırıkhan Road" and "Antakya-Reyhanlı Road" based on previous correspondence conducted prior to activities to be carried out in the protected areas; Providing necessary documents and/or additional studies	Managing the environmental and social risks of the project in an effective way	National Legislation	The contractor under the supervision of the Borrower (KGM RIU)	Within 1 month after Signing the Loan Agreement	Obtaining all final approval opinions of institutions and submitting them to the Bank

ESAP No.	Action	Environmental and Social Risks (Liabilities and Benefits)	Requirements	Resources, Investment Needs, Responsibility	Timetable	Target and Evaluation Criteria
	requested by relevant institutions; Ensuring no works will be carried out in these areas without receiving a final opinion letter from the relevant institution					
P2-33	In case of a possible chance finding, notification of the related Museum Directorate	Managing the cultural heritage related risks of the project in an effective way	National Legislation AIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Implementation during the construction period	Official correspondence
P2-34	Providing information on intangible cultural heritages (handicraft, weaving, agriculture and animal husbandry, etc.) defined or not defined in the national legislation and not harming these elements	Protection of intangible cultural heritage	National Legislation AIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Implementation during the construction period	Impacts to intangible heritage avoided
Management of Labor and Social Issues						
P2-35	Preparing the stakeholder engagement plan including Grievance Redress Mechanism Procedure according to the AIB standards.	Positive communication with the surrounding communities, efficient stakeholder engagement and managing the environmental and social risks of the project in an effective way.	National Legislation AIB ESS 1	Borrower (KGM RIU) / Consultant Firm	Before Project Approval	Submission of the plan to AIB in appropriate standards
P2-36	Appoint a Contractor CLO to implement and manage the SEP and GRM of the Project on site.	Positive communication with the surrounding communities, efficient stakeholder engagement	AIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Within 1 month after Signing the Loan Agreement	Hiring an appropriate CLO for the Project on the Contractor site
P2-37	Establishment of the External Grievance Redress Mechanism (GRM) specific to External Stakeholders of the Project Grievance mechanism and complaints line to be developed in a way to track GBVH issues. GBVH focal points shall be assigned and trained to manage GBVH related complaints: The necessary application forms, tracking forms and registration and tracking log for the grievance mechanism will be developed. This log will contain all the information defined in the complaint mechanism procedure. All external complaints will be recorded in this log and managed in accordance with the procedure, and the entire complaint management process will be recorded and closed.	Positive communication with the surrounding communities, efficient stakeholder engagement and managing the environmental and social risks of the project in an effective way. Prevention of gender-based violence and harassment	National Legislation AIB ESS 1	Borrower (KGM RIU) / Consultant Firm	Established before Project approval and implemented throughout the construction period	Submission of the plan to AIB in appropriate standards
P2-38	Disclose SEP & GRM along with AIB's PPM on website and in the local settlements Holding a SEP & GRM as well as AIB's PPM introduction meeting Update the SEP & GRM according to the stakeholder feedback	Positive communication with the surrounding communities, efficient stakeholder engagement and managing the environmental and social risks of the project in an effective way.	National Legislation AIB ESS 1	Borrower (KGM RIU) / Consultant Firm	Established and disclosed before Project approval	SEP & GRM of the Project ESIA published on the Project website along with AIB's PPM and distributed to the local communities SEP introduction meeting to the Stakeholders of the Project Update and disclose the final SEP & GRM according to the stakeholder feedback

ESAP No.	Action	Environmental and Social Risks (Liabilities and Benefits)	Requirements	Resources, Investment Needs, Responsibility	Timetable	Target and Evaluation Criteria
P2-39	Annually review and update the SEP & GRM	Sustaining the positive communication with the surrounding communities, efficient stakeholder engagement and managing the environmental and social risks of the project in an effective way.	National Legislation AIIB ESS 1	Borrower (KGM RIU)	Annually	Disclosure of the reviewed and updated SEP & GRM in web site annually
P2-40	Ensuring the implementation of External Grievance Redress Mechanisms	An effective grievance mechanism	AIIB ESS 1	Borrower (KGM RIU)	Monthly & Quarterly	Monitoring and reporting the GRM records to AIIB monthly and quarterly
P2-41	Security Prepare a security management procedure in line with AIIB ESF, including but not limited to the following tools: security management policy, security guard's code of conduct, training plans and program, community relations, tracking system.	An effective labor management	National Legislation AIIB ESS 1	Borrower (KGM RIU)	Within 1 month after Signing the Loan Agreement	Submission of the plan to AIIB in appropriate standards Training topics are included in the annual Training Plan All security are provided the target trainings
P2-42	Ensure all workers (both for sub-contractors) are informed and have access to the contracts and Code of Conduct	An effective labor management	National Legislation AIIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Within 1 month after Signing the Loan Agreement and implemented throughout the construction period	Submission of the draft of the contracts and CoC of the workers (both for sub-contractors)
P2-43	Establishment of the Workers Grievance Redress Mechanism (GRM) including GBVH issues. The necessary application forms, tracking forms and registration and tracking log for the grievance mechanism will be developed. This log will contain all the information defined in the complaint mechanism procedure. All workers complaints will be recorded in this log and managed in accordance with the procedure, and the entire complaint management process will be recorded and closed.	An effective workers grievance mechanism	National Legislation AIIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Within 1 month after Signing the Loan Agreement and implemented throughout the construction period	Submission of the Workers GRM to AIIB in appropriate standards, including GBVH issues, application forms, tracking forms and registration and tracking log.
P2-44	Keeping access to passageways and livestock access roads used by local people open at all times through mutual consultations with local people; Providing alternative crossing routes in case temporary restrictions arise	The emergence of negative effects that restrict and hinder local people's livelihoods and daily life	AIIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Monthly & Quarterly	Records of actions taken and alternative solutions provided Monitoring and reporting the GRM records to AIIB monthly and quarterly
P2-45	Measures will be taken to prevent the negative effects of dust on society, livelihoods and daily life, and the impact of dust on the Project transportation roads, including the Construction Site, should be monitored and measured due to heavy vehicle traffic and excavation works. Measures should be taken to minimize dust and traffic risks in these areas in the relevant Project ESMP and sub-management plans.	Negative impact of dust on community health, livelihoods and daily life	AIIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Monthly & Quarterly	Monitoring and reporting the GRM records to AIIB monthly and quarterly Providing dust measurements that show that the dust impact remains within safe limits

ESAP No.	Action	Environmental and Social Risks (Liabilities and Benefits)	Requirements	Resources, Investment Needs, Responsibility	Timetable	Target and Evaluation Criteria
P2-46	<p>Ensuring the implementation of Worker's Grievance Redress Mechanisms</p> <p>All developed forms are located in the common areas with complaint boxes</p> <p>The grievance mechanism will be disclosed and explained in detail to all workers.</p> <p>The person responsible for the workers grievance redress mechanism will be appointed</p>	An effective workers grievance mechanism	AIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Monthly & Quarterly	Monitoring and reporting the GRM records to AIB monthly and quarterly
ESS 2: Involuntary Resettlement						
It is envisaged that no physical or economic resettlement will occur.						

APPENDIX-3 ESAP FOR THE SUB-PROJECT P3

ESAP No.	Action	Environmental and Social Risks (Liabilities and Benefits)	Requirements	Resources, Investment Needs, Responsibility	Timetable	Target and Evaluation Criteria
ESS 1: Environmental and Social Assessment and Management						
General						
P3-1	Obtaining EIA decisions for planned new facilities, if any, within the scope of the EIA Regulation	Managing the environmental and social risks of the project in an effective way	National Legislation	The contractor under the supervision of the Borrower (KGM RIU)	For planned facilities: Before starting the operation	Obtaining all EIA opinions and submitting them to the Bank
P3-2	Completion of the missing environmental permit process for Kuruyer Construction and Accommodation Site to cover all components and for each planned asphalt plant, concrete plant, mechanical plant/crusher (if any) in the activity areas; and submitting them to the Bank	Managing the environmental and social risks of the project in an effective way	National Legislation	The contractor under the supervision of the Borrower (KGM RIU)	For existing facilities: Within 1 month after Signing the Loan Agreement For planned facilities: Before starting the operation	Obtaining all permissions and submitting them to the Bank
P3-3	Preparation of the Environmental and Social Impact Assessment (ESIA) Report including Environmental and Social Management Plan (ESMP)	Managing the environmental and social risks of the project in an effective way	AiIB ESS 1	Borrower (KGM RIU) / Environmental Consultant Firm to be approved by the Bank	Before Project approval	Preparation of the ESIA report / Implementation during construction and operation period
P3-4	Implementation of the requirements of the Environmental and Social Management Plan (ESMP) including mitigation measures and monitoring program for each environmental, social and OHS related issues, prepared specifically for the sub-project	Managing the environmental and social risks of the project in an effective way	AiIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Implementation throughout the construction period	Effective implementation during the construction period by eliminating non-compliances against project standards
P3-5	In case raw materials are supplied from the quarries/borrow sites operated by third parties (such as from companies operating in Kuruyer Limestone Quarries), ensuring that those have all relevant environmental permits within the scope of national legislation	Managing the environmental and social risks of the project in an effective way	National Legislation	The contractor under the supervision of the Borrower (KGM RIU)	Implementation throughout the construction period	Documentation (permits and/or official letters)
P3-6	Ensuring that the material storage areas along with construction and excavation wastes storage areas being used have the necessary permits and approval letters	Managing the environmental and social risks of the project in an effective way	National Legislation	The contractor under the supervision of the Borrower (KGM RIU)	Timeline for completion of the missing documents (permits/approval letters): Within 1 month after Signing the Loan Agreement Implementation throughout the construction period	Documentation (permits and/or official letters)
P3-7	Ensuring that all personnel receive EHS training	Managing the environmental, social, OHS and community related risks of the project in an effective way	National Legislation AiIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Implementation throughout the construction period	Training records
P3-8	Conducting periodic E&S Monitoring studies to check the compliance of project activities with national legislation and AiIB ESSs and submitting them to the Bank	Managing the environmental and social risks of the project in an effective way	National Legislation AiIB ESS 1	KGM RIU as Supervision Consultant	Biannually monitoring during the construction period	Submission of Environmental & Social Monitoring Reports to the Bank
P3-9	Conducting periodic internal E&S Monitoring studies to check the compliance of project activities with national legislation and AiIB ESSs and submitting them to KGM	Managing the environmental and social risks of the project in an effective way	National Legislation AiIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Monthly reporting during the construction period	Internal audit reports



ESAP No.	Action	Environmental and Social Risks (Liabilities and Benefits)	Requirements	Resources, Investment Needs, Responsibility	Timetable	Target and Evaluation Criteria
P3-10	Ensuring the compliance of the contractor activities with the project standards is included in the contract terms	Managing the environmental and social risks of the project in an effective way	National Legislation AIB ESS 1	Borrower (KGM RIU)	Within 1 month after Signing the Loan Agreement	Including the practices in contractor(s) contracts
P3-11	Identification of responsibilities for the effective management of environmental, social and OHS issues	Effective management of the environmental and social risks of the project	National Legislation AIB ESS 1	Borrower (KGM) and the contractor under the supervision of the Borrower (KGM RIU)	Within 1 month after Signing the Loan Agreement	Organizational structure and internal audit reports
Chemical Management						
P3-12	BEKRA Notification for areas where chemical storage is carried out via the MoEUCC's online platform	Managing the environmental and social risks of the project in an effective way	National Legislation	The contractor under the supervision of the Borrower (KGM RIU)	In case of the chemical storage or usage	Documentation
P3-13	Taking necessary precautions during the storage of chemical and hazardous materials for each activity site	Minimizing the risks that threaten effective OHS management and community health and safety	National Legislation AIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Implementation throughout the construction period	Internal audits and visual observations
Water and Wastewater Management						
P3-14	Obtaining the usage license for the groundwater well at Kuruyer Construction and Accommodation Site and for the new wells to be drilled/needed during the construction works	Managing the environmental and social risks of the project in an effective way	National Legislation	The contractor under the supervision of the Borrower (KGM RIU)	For the existing well: Within 1 month after Signing the Loan Agreement For new/planned groundwater wells Before using the groundwater well	Obtaining a usage license
P3-15	Making necessary analysis in case of drinking water supplied from wells	Protection of employee health	National Legislation WBG General EHS Guidelines/WHO Criteria	The contractor under the supervision of the Borrower (KGM RIU)	Quarterly analysis	Compliance of the analysis results with the criteria of Regulation on Water Intended for Human Consumption and international standards
P3-16	Preventing the discharge of wastewater into the receiving environment without treatment, storing it in leak-proof septic tanks and ensuring its disposal in licensed facilities	Minimizing the risks that threaten receiving environment	National Legislation AIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Implementation throughout the construction period	Wastewater disposal records Compliance of the analysis results of the effluent (in case package WWTP exists/established)
Waste Management						
P3-17	Establishment of appropriate temporary waste storage area for each waste generated area	Managing the environmental, social, OHS and community related risks of the project in an effective way	National Legislation AIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Before starting activities during the construction period	Compliance with project standards/requirements
P3-18	Ensuring that non-hazardous and hazardous wastes are separately collected, temporarily stored in appropriate containers/areas and disposed of by licensed disposal companies / Keeping waste records and making waste declarations and shipping notifications via online platform of MoEUCC (EÇBS/Waste Management Application)	Waste reduction, resource conservation and effective waste management Ensuring proper hazardous and non-hazardous waste management to prevent soil, surface water and groundwater pollution	National Legislation AIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Implementation throughout the construction period	Waste records Waste declaration and shipping notifications Related contracts

ESAP No.	Action	Environmental and Social Risks (Liabilities and Benefits)	Requirements	Resources, Investment Needs, Responsibility	Timetable	Target and Evaluation Criteria
Air Quality and Noise Management						
P3-19	Preparation of air emission measurement reports for the existing facilities (for asphalt plant, concrete plant and mechanical plant at Kuruyer Construction and Accommodation Site) subject to the air emission permit and also in case a generator usage exceeds 500 hours/year	Detecting the level of air quality	Regulation on Control of Industrial Air Pollution WBG General and Sectoral EHS Guidelines	The contractor under the supervision of the Borrower (KGM RIU)	Implementation during the operation period of the respective existing facilities	Preparation of air emission measurement reports, Compliance of air emission results with the limit values
P3-20	In case of complaints, conducting noise and air quality measurements at the closest sensitive receptors	Detecting the level of ambient air quality and noise	Environmental Noise Control Regulation Regulation on Control of Industrial Air Pollution WBG General and Sectoral EHS Guidelines	The contractor under the supervision of the Borrower (KGM RIU)	Implementation during the construction period (in case of complaints)	Complaint records, Compliance of the ambient noise and air quality measurement results with the limit values
P3-21	Periodic maintenance and repair work to minimize the noise caused by the vehicles and equipment used in the construction phase	Minimizing environmental noise	Environmental Noise Control Regulation	The contractor under the supervision of the Borrower (KGM RIU)	Implementation during the construction period	Maintenance-repair records
OHS Management						
P3-22	Recording Occupational Accidents / Preparing OHS Performance Reports / Reporting All Kinds of OHS sourced Occupational Accident Statistics together with Root Cause Analysis	Managing risks arising from OHS	National Legislation AIIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Throughout the construction period	Timely reporting OHS Performance and Occupational Accident Statistics
P3-23	Ensuring safe working conditions, especially for Kuruyer Construction and Accommodation Site and Antakya-Samandağ Road sub-project area by providing warning/information signs	Managing risks arising from OHS	National Legislation AIIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Within 1 month after Signing the Loan Agreement	Documentation Internal audit reports Maintenance records
P3-24	Conducting emergency drills for each activity area	Managing risks arising from OHS	National Legislation AIIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Throughout the construction period	Documentation
P3-25	In addition to OHS training, the following trainings will be included in the basic annual training plan and provided to all employees. All employees will have received this training before starting work. <ul style="list-style-type: none"> - Workers' rights - Social Gender-Based Discrimination, Violence and Sexual Harassment - Grievance mechanism - Code of Conduct - Social and Cultural induction - Use of power (for security) - Community health and safety measures - Vulnerable Groups in the Project Aol 	An effective labor management	National Legislation AIIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Before workers start working During the construction period	Inclusion of training subjects in the Annual Training Plan Providing target training to all employees

ESAP No.	Action	Environmental and Social Risks (Liabilities and Benefits)	Requirements	Resources, Investment Needs, Responsibility	Timetable	Target and Evaluation Criteria
	- HR policy requirements according to the AIIB					
Community Health and Safety						
P3-26	Placing safety and traffic signs visibly on the access roads near and around the project site along; ensuring presence of warning signs and barriers around each activity area	Minimizing the risks that threaten effective traffic management and community health and safety	National Legislation AIIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Implementation during the construction period	Statistics of possible accidents and unsafe situations
P3-27	CHS - Traffic Risks Management Prepare a driver training plan to ensure that all drivers (including the sub-contractors' drivers) are provided with the traffic and road safety trainings Prepare driver code of conduct and the disciplinary procedures Evaluate training plan's performance and effectiveness and make the required improvements when necessary Provide regular safe driving training courses to all drivers	An effective traffic management	AIIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	During the construction period	Inclusion of training subjects in the Annual Training Plan Providing target training to all drivers
P3-28	CHS - Traffic Risks Management Provide information to the local settlements and stakeholders on road safety, traffic measures and Project health and safety measures Provide health and safety information related to the Project CHS risks to children, elderly, women, non-Turkish speakers, disabled people, illiterate PAPs living in the Project Aol including pedestrian safety.	An effective traffic management and stakeholder engagement	AIIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	During the construction period	Inclusion of information meeting topics in the SEP Providing necessary information on traffic, health and safety to all targeted groups Consultation and information meetings, registration of participants
Biodiversity Management						
P3-29	Avoiding the use of personnel vehicles, work machines and other vehicles outside the designated routes as much as possible and ensuring that all vehicles do not interfere with the natural life outside the project area.	Ensuring the protection of biodiversity	National Legislation AIIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Implementation during the construction period	Including relevant provisions in the Traffic Management Plan
P3-30	Implementation of the necessary mitigation measures to avoid accidental damages to habitats.	Ensuring the protection of habitats	AIIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Implementation during the construction period	No accidental damages to habitats
P3-31	Ensure that the necessary measures are implemented to mitigate and manage potential impacts to sensitive wildlife species	Impact mitigation and management	AIIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Implementation during the construction period	Impacts to habitats and species appropriately mitigated and managed.
Culture Heritage Management						
P3-32	Obtaining final approval from the Cultural Heritage Preservation Regional Board Directorates for "Antakya-Samandağ Road" based on previous correspondence conducted prior to activities to be carried out in the protected areas; Providing necessary documents and/or additional studies requested by relevant institutions; Ensuring no works will be carried out in these areas without receiving a final opinion letter from the relevant institution	Managing the environmental and social risks of the project in an effective way	National Legislation	The contractor under the supervision of the Borrower (KGM RIU)	Within 1 month after Signing the Loan Agreement	Obtaining all final approval opinions of institutions and submitting them to the Bank

ESAP No.	Action	Environmental and Social Risks (Liabilities and Benefits)	Requirements	Resources, Investment Needs, Responsibility	Timetable	Target and Evaluation Criteria
P3-33	In case of a possible chance finding, notification of the related Museum Directorate	Managing the cultural heritage related risks of the project in an effective way	National Legislation AIIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Implementation during the construction period	Official correspondence
P3-34	Providing information on intangible cultural heritages (handicraft, weaving, agriculture and animal husbandry, etc.) defined or not defined in the national legislation and not harming these elements	Protection of intangible cultural heritage	National Legislation AIIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Implementation during the construction period	Impacts to intangible heritage avoided
Management of Labor and Social Issues						
P3-35	Preparing the stakeholder engagement plan including Grievance Redress Mechanism Procedure according to the AIIB standards.	Positive communication with the surrounding communities, efficient stakeholder engagement and managing the environmental and social risks of the project in an effective way.	National Legislation AIIB ESS 1	Borrower (KGM RIU) / Consultant Firm	Before Project approval	Submission of the plan to AIIB in appropriate standards
P3-36	Appoint a Contractor CLO to implement and manage the SEP and GRM of the Project on site.	Positive communication with the surrounding communities, efficient stakeholder engagement	AIIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Within 1 month after Signing the Loan Agreement	Hiring an appropriate CLO for the Project on the Contractor site
P3-37	Establishment of the External Grievance Redress Mechanism (GRM) specific to External Stakeholders of the Project Grievance mechanism and complaints line to be developed in a way to track GBVH issues. GBVH focal points shall be assigned and trained to manage GBVH related complaints: The necessary application forms, tracking forms and registration and tracking log for the grievance mechanism will be developed. This log will contain all the information defined in the complaint mechanism procedure. All external complaints will be recorded in this log and managed in accordance with the procedure, and the entire complaint management process will be recorded and closed.	Positive communication with the surrounding communities, efficient stakeholder engagement and managing the environmental and social risks of the project in an effective way. Prevention of gender-based violence and harassment	National Legislation AIIB ESS 1	Borrower (KGM RIU) / Consultant Firm	Established before Project approval and implemented throughout the construction period	Submission of the plan to AIIB in appropriate standards
P3-38	Disclose SEP & GRM along with AIIB's PPM on website and in the local settlements Holding a SEP & GRM as well as AIIB's PPM introduction meeting Update the SEP & GRM according to the stakeholder feedback	Positive communication with the surrounding communities, efficient stakeholder engagement and managing the environmental and social risks of the project in an effective way.	National Legislation AIIB ESS 1	Borrower (KGM RIU) / Consultant Firm	Established and disclosed before Project approval	SEP & GRM of the Project ESIA published on the Project website along with AIIB's PPM and distributed to the local communities SEP introduction meeting to the Stakeholders of the Project Update and disclose the final SEP & GRM according to the stakeholder feedback

ESAP No.	Action	Environmental and Social Risks (Liabilities and Benefits)	Requirements	Resources, Investment Needs, Responsibility	Timetable	Target and Evaluation Criteria
P3-39	Annually review and update the SEP & GRM	Sustaining the positive communication with the surrounding communities, efficient stakeholder engagement and managing the environmental and social risks of the project in an effective way.	National Legislation AIIB ESS 1	Borrower (KGM RIU)	Annually	Disclosure of the reviewed and updated SEP & GRM in web site annually
P3-40	Ensuring the implementation of External Grievance Redress Mechanisms	An effective grievance mechanism	AIIB ESS 1	Borrower (KGM RIU)	Monthly & Quarterly	Monitoring and reporting the GRM records to AIIB monthly and quarterly
P3-41	Include the separate showers, toilets, dining halls and social areas for men and women for the Camp site.	Improve working conditions	AIIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Within 1 month after Signing the Loan Agreement	Documentation Internal audit reports
P3-43	Prepare a security management procedure in line with AIIB ESF, including but not limited to the following tools: security management policy, security guard's code of conduct, training plans and program, community relations, tracking system.	An effective labor management	National Legislation AIIB ESS 1	Borrower (KGM RIU)	Within 1 month after Signing the Loan Agreement	Submission of the plan to AIIB in appropriate standards Training topics are included in the annual Training Plan All security are provided the target trainings
P3-44	Ensure all workers (both for sub-contractors) are informed and have access to the contracts and Code of Conduct	An effective labor management	National Legislation AIIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Within 1 month after Signing the Loan Agreement and implemented throughout the construction period	Submission of the draft of the contracts and CoC of the workers (both for sub-contractors)
P3-45	Establishment of the Workers Grievance Redress Mechanism (GRM) including GBVH issues. The necessary application forms, tracking forms and registration and tracking log for the grievance mechanism will be developed. This log will contain all the information defined in the complaint mechanism procedure. All workers complaints will be recorded in this log and managed in accordance with the procedure, and the entire complaint management process will be recorded and closed.	An effective workers grievance mechanism	National Legislation AIIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Within 1 month after Signing the Loan Agreement and implemented throughout the construction period	Submission of the Workers GRM to AIIB in appropriate standards, including GBVH issues, application forms, tracking forms and registration and tracking log.
P3-46	Ensuring the implementation of Worker's Grievance Redress Mechanisms All developed forms are located in the common areas with complaint boxes The grievance mechanism will be disclosed and explained in detail to all workers. The person responsible for the workers grievance mechanism will be appointed	An effective workers grievance mechanism	AIIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Monthly & Quarterly	Monitoring and reporting the GRM records to AIIB monthly and quarterly
ESS 2: Involuntary Resettlement						
P3-47	Preparation of the RAP including LRP according to the AIIB standards	Avoid or minimize physical displacement and mitigate adverse social and economic	National Legislation AIIB ESS 2	Borrower (KGM RIU)	Prior to construction and during construction	Submission of the plan to AIIB in appropriate standards

ESAP No.	Action	Environmental and Social Risks (Liabilities and Benefits)	Requirements	Resources, Investment Needs, Responsibility	Timetable	Target and Evaluation Criteria
		impacts from construction activities				
P3-48	Disclosure and update the RAP including LRP	Avoid or minimize physical displacement and mitigate adverse social and economic impacts from construction activities	National Legislation AIB ESS 2	Borrower (KGM RIU)	Prior to construction and during construction	Disclosure of the updated RAP including LRP
P3-49	Implementing the LRP	Avoid or minimize physical displacement and mitigate adverse social and economic impacts from construction activities	AIB ESS 2	Borrower (KGM RIU)	During construction	Implementation the Plan according to the schedule Monitoring and reporting the implementation process monthly and quarterly to the AIB

APPENDIX-4 ESAP FOR THE SUB-PROJECT P5

ESAP No.	Action	Environmental and Social Risks (Liabilities and Benefits)	Requirements	Resources, Investment Needs, Responsibility	Timetable	Target and Evaluation Criteria
ESS 1: Environmental and Social Assessment and Management						
General						
P4-1	Preparation of the Environmental and Social Impact Assessment (ESIA) Report including Environmental and Social Management Plan (ESMP)	Managing the environmental and social risks of the project in an effective way	AIIB ESS 1	Borrower (KGM RIU) / Environmental Consultant Firm to be approved by the Bank	Before Project approval	Preparation of the ESIA report / Implementation during construction and operation period
P4-2	Implementation of the requirements of the Environmental and Social Management Plan (ESMP) including mitigation measures and monitoring program for each environmental, social and OHS related issues, prepared specifically for the sub-project	Managing the environmental and social risks of the project in an effective way	AIIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Implementation throughout the construction period	Effective implementation during the construction period by eliminating non-compliances against project standards
P4-3	Ensuring that all personnel receive EHS training	Managing the environmental, social, OHS and community related risks of the project in an effective way	National Legislation AIIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Implementation throughout the construction period	Training records
P4-4	Conducting periodic E&S Monitoring studies to check the compliance of project activities with national legislation and AIIB ESSs and submitting them to the Bank	Managing the environmental and social risks of the project in an effective way	National Legislation AIIB ESS 1	KGM RIU as Supervision Consultant	Biannually monitoring during the construction period	Submission of Environmental & Social Monitoring Reports to the Bank
P4-5	Conducting periodic internal E&S Monitoring studies to check the compliance of project activities with national legislation and AIIB ESSs and submitting them to KGM	Managing the environmental and social risks of the project in an effective way	National Legislation AIIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Monthly reporting during the construction period	Internal audit reports
P4-6	Ensuring the compliance of the contractor activities with the project standards is included in the contract terms	Managing the environmental and social risks of the project in an effective way	National Legislation AIIB ESS 1	Borrower (KGM RIU)	Within 1 month after Signing the Loan Agreement	Including the practices in contractor(s) contracts
P4-7	Identification of responsibilities for the effective management of environmental, social and OHS issues	Effective management of the environmental and social risks of the project	National Legislation AIIB ESS 1	Borrower (KGM RIU) and the contractor under the supervision of the Borrower (KGM RIU)	Within 1 month after Signing the Loan Agreement	Organizational structure and internal audit reports
Chemical Management						
P4-8	BEKRA Notification for areas where chemical storage is carried out via the MoEUCC's online platform	Managing the environmental and social risks of the project in an effective way	National Legislation	The contractor under the supervision of the Borrower (KGM RIU)	Within 1 month after Signing the Loan Agreement	Documentation
P4-9	Taking necessary precautions during the storage of chemical and hazardous materials for each activity site	Minimizing the risks that threaten effective OHS management and community health and safety	National Legislation AIIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Implementation throughout the construction period	Internal audits and visual observations
Water and Wastewater Management						
P4-10	In case of groundwater use, obtaining a usage license for each well	Managing the environmental and social risks of the project in an effective way	National Legislation	The contractor under the supervision of the Borrower (KGM RIU)	Before using the groundwater well	Obtaining a usage license

ESAP No.	Action	Environmental and Social Risks (Liabilities and Benefits)	Requirements	Resources, Investment Needs, Responsibility	Timetable	Target and Evaluation Criteria
P4-11	Making necessary analysis in case of drinking water supplied from wells	Protection of employee health	National Legislation WBG General EHS Guidelines/WHO Criteria	The contractor under the supervision of the Borrower (KGM RIU)	Quarterly analysis	Compliance of the analysis results with the criteria of Regulation on Water Intended for Human Consumption and international standards
P4-12	Preventing the discharge of wastewater into the receiving environment without treatment, storing it in leak-proof septic tanks and ensuring its disposal in licensed facilities	Minimizing the risks that threaten receiving environment	National Legislation AIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Implementation throughout the construction period	Wastewater disposal records Compliance of the analysis results of the effluent (in case package WWTP exists/established)
Waste Management						
P4-13	Establishment of appropriate temporary waste storage area for each waste generated area	Managing the environmental, social, OHS and community related risks of the project in an effective way	National Legislation AIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Within 1 month after Signing the Loan Agreement	Compliance with project standards/requirements
P4-14	Ensuring that non-hazardous and hazardous wastes are separately collected, temporarily stored in containers/areas and disposed of by licensed disposal companies / Keeping waste records and making waste declarations and shipping notifications via online platform of MoEUCC (EÇBS/Waste Management Application)	Waste reduction, resource conservation and effective waste management Ensuring proper hazardous and non-hazardous waste management to prevent soil, surface water and groundwater pollution	National Legislation AIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Implementation throughout the construction period	Waste records Waste declaration and shipping notifications Related contracts
Air Quality and Noise Management						
P4-15	Preparation of air emission measurement reports in case a generator is used, and its usage exceeds 500 hours/year	Detecting the level of air quality	Regulation on Control of Industrial Air Pollution WBG General and Sectoral EHS Guidelines	The contractor under the supervision of the Borrower (KGM RIU)	Implementation during the operation period of the generator(s) (if any)	Preparation of air emission measurement reports, Compliance of air emission results with the limit values
P4-16	In case of complaints, conducting noise and air quality measurements at the closest sensitive receptors	Detecting the level of ambient air quality and noise	Environmental Noise Control Regulation Regulation on Control of Industrial Air Pollution WBG General and Sectoral EHS Guidelines	The contractor under the supervision of the Borrower (KGM RIU)	Implementation during the construction period (in case of complaints)	Complaint records, Compliance of the ambient noise and air quality measurement results with the limit values
P4-17	Periodic maintenance and repair work to minimize the noise caused by the vehicles and equipment used in the construction phase.	Minimizing environmental noise	Environmental Noise Control Regulation	The contractor under the supervision of the Borrower (KGM RIU)	Implementation during the construction period	Maintenance-repair records

ESAP No.	Action	Environmental and Social Risks (Liabilities and Benefits)	Requirements	Resources, Investment Needs, Responsibility	Timetable	Target and Evaluation Criteria
OHS Management						
P4-18	Recording Occupational Accidents / Preparing OHS Performance Reports / Reporting All Kinds of OHS sourced Occupational Accident Statistics together with Root Cause Analysis	Managing risks arising from OHS	National Legislation AIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Throughout the construction period	Timely reporting OHS Performance and Occupational Accident Statistics
P4-19	Preparation of the specific Risk Analysis Reports and Emergency Intervention Plans for accommodation areas at Tohma Construction and Accommodation Site	Managing risks arising from OHS	National Legislation AIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Within 1 month after Signing the Loan Agreement	Documentation
P4-20	Conducting emergency drills for each activity area	Managing risks arising from OHS	National Legislation AIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Throughout the construction period	Documentation
P4-21	In addition to OHS training, the following trainings will be included in the basic annual training plan and provided to all employees. All employees will have received this training before starting work. <ul style="list-style-type: none"> - Workers' rights - Social Gender-Based Discrimination, Violence and Sexual Harassment - Grievance mechanism - Code of Conduct - Social and Cultural induction - Use of power (for security) - Community health and safety measures - Vulnerable Groups in the Project Aol - HR policy requirements according to the AIB 	An effective labor management	National Legislation AIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Before workers start working During the construction period	Inclusion of training subjects in the Annual Training Plan Providing target training to all employees
Community Health and Safety						
P4-22	Placing safety and traffic signs visibly on the access roads near and around the project site along; ensuring presence of warning signs and barriers around each activity area; eliminating the non-compliances in Tohma Construction and Accommodation Site by establishing a security cabin, providing a fully fenced site and increasing the number of the warning/safety signs	Minimizing the risks that threaten effective traffic management and community health and safety	National Legislation AIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Within 1 month after Signing the Loan Agreement Implementation during the construction period	Statistics of possible accidents and unsafe situations
P4-23	CHS - Traffic Risks Management Prepare a driver training plan to ensure that all drivers (including the sub-contractors' drivers) are provided with the traffic and road safety trainings Prepare driver code of conduct and the disciplinary procedures Evaluate training plan's performance and effectiveness and make the required improvements when necessary Provide regular safe driving training courses to all drivers	An effective traffic management	AIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	During the construction period	Inclusion of training subjects in the Annual Training Plan Providing target training to all drivers
P4-24	CHS - Traffic Risks Management	An effective traffic management and stakeholder engagement	AIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	During the construction period	Inclusion of information meeting topics in the SEP

ESAP No.	Action	Environmental and Social Risks (Liabilities and Benefits)	Requirements	Resources, Investment Needs, Responsibility	Timetable	Target and Evaluation Criteria
	Provide information to the local settlements and stakeholders on road safety, traffic measures and Project health and safety measures Provide health and safety information related to the Project CHS risks to children, elderly, women, non-Turkish speakers, disabled people, illiterate PAPs living in the Project Aol including pedestrian safety.					Providing necessary information on traffic, health and safety to all targeted groups Consultation and information meetings, registration of participants
Biodiversity Management						
P4-25	Avoiding the use of personnel vehicles, work machines and other vehicles outside the designated routes as much as possible and ensuring that all vehicles do not interfere with the natural life outside the project area.	Ensuring the protection of biodiversity	National Legislation AIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Implementation during the construction period	Including relevant provisions in the Traffic Management Plan
P4-26	Implementation of the necessary mitigation measures to avoid accidental damages to habitats and manage potential impacts to water bodies.	Ensuring the protection of habitats and water bodies	AIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Implementation during the construction period	No accidental discharges into the water bodies and damages to habitats
Culture Heritage Management						
P4-27	In case of a possible chance finding, notification of the related Museum Directorate	Managing the cultural heritage related risks of the project in an effective way	National Legislation AIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Implementation during the construction period	Official correspondence
P4-28	Providing information on intangible cultural heritages (handicraft, weaving, agriculture and animal husbandry, etc.) defined or not defined in the national legislation and not harming these elements	Protection of intangible cultural heritage	National Legislation AIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Implementation during the construction period	Impacts to intangible heritage avoided
Management of Labor and Social Issues						
P4-29	Preparing the stakeholder engagement plan including Grievance Redress Mechanism Procedure according to the AIB standards.	Positive communication with the surrounding communities, efficient stakeholder engagement and managing the environmental and social risks of the project in an effective way.	National Legislation AIB ESS 1	Borrower (KGM RIU) / Consultant Firm	Before Project approval	Submission of the plan to AIB in appropriate standards
P4-30	Appoint a Contractor CLO to implement and manage the SEP and GRM of the Project on site.	Positive communication with the surrounding communities, efficient stakeholder engagement	AIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Within 1 month after Signing the Loan Agreement	Hiring an appropriate CLO for the Project on the Contractor site
P4-31	Establishment of the External Grievance Redress Mechanism (GRM) specific to External Stakeholders of the Project Grievance mechanism and complaints line to be developed in a way to track GBVH issues. GBVH focal points shall be assigned and trained to manage GBVH related complaints: The necessary application forms, tracking forms and registration and tracking log for the grievance mechanism will be developed. This log will contain all the information defined in the complaint mechanism procedure.	Positive communication with the surrounding communities, efficient stakeholder engagement and managing the environmental and social risks of the project in an effective way. Prevention of gender-based violence and harassment	National Legislation AIB ESS 1	Borrower (KGM RIU) / Consultant Firm	Established before Project approval and implemented throughout the construction period	Submission of the plan to AIB in appropriate standards

ESAP No.	Action	Environmental and Social Risks (Liabilities and Benefits)	Requirements	Resources, Investment Needs, Responsibility	Timetable	Target and Evaluation Criteria
	All external complaints will be recorded in this log and managed in accordance with the procedure, and the entire complaint management process will be recorded and closed.					
P4-32	Disclose SEP & GRM on website along with AIIB's PPM and in the local settlements Holding a SEP & GRM as well as AIIB's PPM introduction meeting Update the SEP & GRM according to the stakeholder feedback	Positive communication with the surrounding communities, efficient stakeholder engagement and managing the environmental and social risks of the project in an effective way.	National Legislation AIIB ESS 1	Borrower (KGM RIU) / Consultant Firm	Established and disclosed before Project approval	SEP & GRM of the Project ESIA published on the Project website along with AIIB's PPM and distributed to the local communities SEP introduction meeting to the Stakeholders of the Project Update and disclose the final SEP & GRM according to the stakeholder feedback
P4-33	Annually review and update the SEP & GRM	Sustaining the positive communication with the surrounding communities, efficient stakeholder engagement and managing the environmental and social risks of the project in an effective way.	National Legislation AIIB ESS 1	Borrower (KGM RIU)	Annually	Disclosure of the reviewed and updated SEP & GRM in web site annually
P4-34	Ensuring the implementation of External Grievance Redress Mechanisms	An effective grievance mechanism	AIIB ESS 1	Borrower (KGM RIU)	Monthly & Quarterly	Monitoring and reporting the GRM records to AIIB monthly and quarterly
P4-35	Security Prepare a security management procedure in line with AIIB ESF, including but not limited to the following tools: security management policy, security guard's code of conduct, training plans and program, community relations, tracking system.	An effective labor management	National Legislation AIIB ESS 1	Borrower (KGM RIU)	Within 1 month after Signing the Loan Agreement	Submission of the plan to AIIB in appropriate standards Training topics are included in the annual Training Plan All Security are provided the target trainings
P4-36	Ensure all workers (both for sub-contractors) are informed and have access to the contracts and Code of Conduct	An effective labor management	National Legislation AIIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Within 1 month after Signing the Loan Agreement and implemented throughout the construction period	Submission of the draft of the contracts and CoC of the workers (both for sub-contractors)
P4-37	Establishment of the Workers Grievance Redress Mechanism (GRM) including GBVH issues. The necessary application forms, tracking forms and registration and tracking log for the grievance mechanism will be developed. This log will contain all the information defined in the complaint mechanism procedure. All workers complaints will be recorded in this log and managed in accordance with the procedure, and the entire complaint management process will be recorded and closed.	An effective workers grievance mechanism	National Legislation AIIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Within 1 month after Signing the Loan Agreement and implemented throughout the construction period	Submission of the Workers GRM to AIIB in appropriate standards, including GBVH issues, application forms, tracking forms and registration and tracking log.

ESAP No.	Action	Environmental and Social Risks (Liabilities and Benefits)	Requirements	Resources, Investment Needs, Responsibility	Timetable	Target and Evaluation Criteria
P4-38	<p>Ensuring the implementation of Worker's Grievance Redress Mechanisms</p> <p>All developed forms are located in the common areas with complaint boxes</p> <p>The grievance mechanism will be disclosed and explained in detail to all workers.</p> <p>The person responsible for the workers grievance redress mechanism will be appointed</p>	An effective workers grievance mechanism	AIB ESS 1	The contractor under the supervision of the Borrower (KGM RIU)	Monthly & Quarterly	Monitoring and reporting the GRM records to AIB monthly and quarterly
ESS 2: Involuntary Resettlement						
P4-2.1	<p>Assessment of the Project impacts on the fishing activities around the Ađın Bridge and husbandry/agricultural livelihood surrounding the Tohma Construction Site impact area within the scope of ESIA will be included.</p>	Avoid or minimize economic impacts from construction activities	<p>National Legislation</p> <p>AIB ESS 2</p>	Borrower (KGM RIU)	Prior to construction and during construction	Submission of the assessment with in the ESIA

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APPENDIX-5 MAPS OF THE LEGALLY PROTECTED AND INTERNATIONALLY RECOGNIZED AREAS

