We Value Nature and Society

2019 ENVIRONMENTAL AND SOCIAL PERFORMANCE REPORT

1915 ÇANAKKALE

1915ÇANAKKALE
BRIDGE AND MOTORWAY PROJECT

2019 ENVIRONMENTAL AND SOCIAL PERFORMANCE REPORT

CONTENS

1. About the Report

As the 1915Çanakkale Bridge and Motorway Project, we are pleased to present our environmental and social management approach and 2019 performance to all our stakeholders through our 1915Çanakkale 2019 Environmental and Social Performance Report (Report). We aim to bring our performance to the attention of our society regularly in line with our material issues by supporting our environmental and social impact with updated data annually.

Considering the requirements determined by the Project Environmental and Social Impact Assessment and the United Nations Sustainable Development Goals, we are working with all our strength to contribute to a sustainable future for next generations, by improving transportation opportunities and managing our environmental impact in the most effective way. In this Report, we transparently disclosed our environmental and social performance for the period 01.01.2019-31.12.2019, especially the positive contributions of our Project to the economy such as employment opportunities, environmental impact management, biodiversity activities and socially beneficial investments.

“ÇOK A.Ş.” and “Company” expressions are used in the Report in order to represent the Çanakkale Otoyol Köprüsü İnşaat Yatırım İşletme A.Ş., and the investment, project, observation, supervision and improvement actions that are realized during the project phase used for the content on this report. In addition to our goal of continuously improving our environmental and social performance every year, we are determined to share the results with our stakeholders through our Report.

In addition to regularly communicating with our stakeholders, it is of great importance for us to convey our current activities in a timely and transparent manner. Our stakeholders can access the PDF version of our report on our website. We present the details of the environmental and social impacts of activities since the beginning of our project in this Report.

2. CEO's Message

Our Esteemed Stakeholders,

We left behind another year in which we successfully carried out the works for the construction and operation of the 1915Çanakkale Bridge and Motorway Project. As Çanakkale Otoyol ve Köprüsü Inşaat Yatırım ve Işletme A.Ş. (the "ÇOK A.Ş."), we see it as an important responsibility to conduct each operation in a manner consistent with our environmental and social responsibilities and we are happy to inform you about the environmental and social activities implemented in our Project in 2019.

In line with our Environmental and Social Project Culture established after the preparation of the Environmental Impact Assessment (EIA) Report conforming with the national legislation and the Environmental and Social Impact Assessment (ESIA) Report in compliance with the international standards, we continue to implement best practices to achieve our goals and constantly improve our environmental and social performance.

With the publication of our second Annual Environmental and Social Performance Report, we aim to share, in a transparent and accurate manner, how exactly we approach and manage the Project's environmental and social impacts. In this report, we explain various practices in relation to biodiversity, climate change, use of resources, public communication, social support programs and archaeology which we carried out in 2019 to attain the highest level of environmental and social standards for the Project. We believe in the importance of these practices to be known by the public in order to ensure increased recognition of our environmental and social efforts as an exemplary PPP Project in the making.

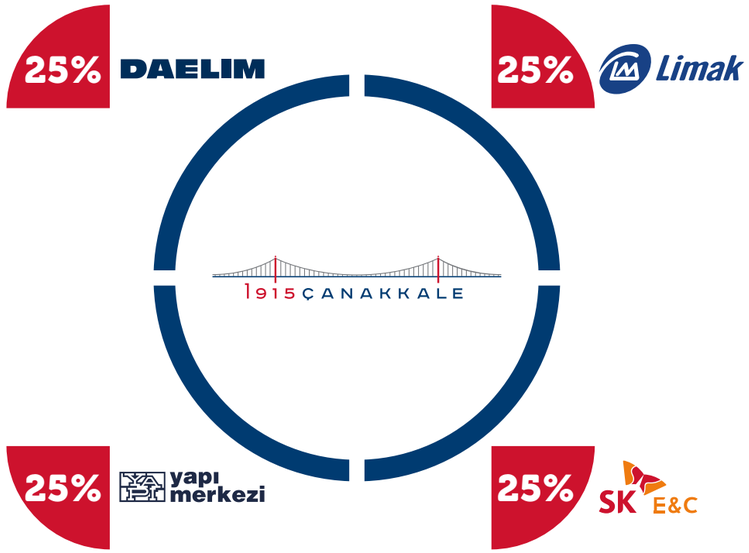
As ÇOK A.Ş., we are proud and happy to be able to share our environmental and social practices with you. We are committed to keeping all our communication channels continually open and in sharing our journey. We will be working diligently towards the completion of the 1915Çanakkale Bridge and Motorway Project in a manner most advantageous to all involved. I would like to thank all of our stakeholders for their invaluable support and extend our gratitude to every single individual who has contributed to this achievement.

Best regards,

Mustafa Tanrıverdi
CEO

3. About the Company

General Directorate of Highways has assigned a consortium of Turkish and Korean companies within the framework of the Public Private Sector Cooperation model adopted in the 1915Çanakkale Bridge and Motorway Project. 1915Çanakkale Bridge and Motorway Project and Çanakkale Otoyol ve Köprüsü Inşaat Yatırım ve Işletme A.Ş. is a joint venture company established by the consortium partners. The company has four partners: Limak and Yapı Merkezi from Turkey and Daelim and SK E&C from South Korea. The project consists of two different parts: 1915Çanakkale Bridge and Malkara - Çanakkale Motorway. The aforementioned four partner companies of ÇOK A.Ş. have established two separate sub-structures for bridge and highway by establishing an Engineering, Procurement, and Construction firm named DLSY JV.



About Daelim

Daelim Group is one of Korea's largest corporate companies, that was established in 1939 with 13 affiliated companies operating in the fields of construction, power generation, trade, logistics, manufacturing and entertainment. Daelim Tic. Ltd. Şti/ is one of the main subsidiaries of the Daelim Group and a worldwide EPC (engineering, procurement and construction) contractor and petrochemical company. In addition to its large-scale projects in 35 different countries and an asset portfolio of $18 billion, Daelim ranked 79th in the ENR top International Contractors list organized by the international construction industry magazine ENR (Engineering News Record) in 2019.

Daelim successfully constructed 5 suspension bridges and 11 cable-tensioned bridges so far, and it is among the world's leading companies with its bridge construction expertise. Daelim's suspension bridges include the Yi Sunsin Bridge in Yeosu/ Gwangyang in October 2012 being the largest suspension bridge in South Korea and fifth longest suspension bridge globally.

Daelim also attaches importance to social responsibility activities with its exemplary corporate citizen identity. Considering the requirements of the construction industry and the competencies of Daelim Group affiliates, it carries out social activities focused on creating value in the society to share happiness, love, culture, and wishes.

About Limak

Limak was founded in 1976 as a construction company and operates both in domestic and international markets as one of Turkey's leading companies. Limak's commercial activities include construction, electricity generation and distribution, cement production, airport and port constructions. It was also ranked 67th in the ENR top International Contractors list in 2019; this rating reflects the nature and scale of the company's EPC contracts. These EPC contracts include the 150 million passenger capacity Istanbul Airport project and the Kuwait International Airport Project that is worth $4.3 billion. Limak Construction is the main operating unit of Limak Group.

Limak with a proven success record, has took part in strong negotiations with authorities. In addition, Limak has advanced management techniques; that increased its value with high efficiency and fast implementation. Limak signed multiple Public Private Partnership projects both domestic and international. After successfully completing Istanbul Sabiha Gökçen Airport, Limak also took part in the construction of Istanbul Airport Public Private Partnership project which is one of the largest airports in the world. Limak is also the main contractor of the International Kuwait Airport Project.

Limak also continues social investments, as well as its economic activities at the top speed. Limak Education Culture and Health Foundation was established in 2016, in order to collect all social responsibility and aid projects that are being conducted by the Group for years and ensure their continuation in a more corporate and effective manner. The quality of the services Limak offers has been certified by a range of international awards and certificates both domestically and internationally. Limak operates with the principle of maximum efficiency and effectiveness and with high social responsibility awareness in all sectors, with its experienced and trained human resources.

About SK E&C

SK E&C was established in 1977 and belongs to the 3rd largest Korean conglomerate, the SK Group. SK E&C is the flagship of the construction business of the SK Group. SK E&C was ranked 57th in the top International Contractors ENR Ranking in 2018 and is a global top-tier EPC Contractor in oil & gas, petrochemical, power, civil and housing sectors.

SK E&C has a deep understanding of the region and insight into project development based on the successful execution of a number of strategic projects in Turkey including the Eurasia Subsea Tunnel Project (developer and EPC contractor) and the Yavuz Sultan Selim Bridge (3rd Bosporus Bridge) project (as EPC contractor).

Voluntary services for community welfare are also of great importance for SK E&C. In addition to sustainable development, contributing to social welfare is among the priorities of the company. Sustainable business activities of SK E&C are carried out under the motto of "Build a Dream" and focus on environmental problems and overcoming obstacles for social welfare.

About Yapı Merkezi

Yapı Merkezi was established in 1965 as a contracting company in Turkey and has become one of the leading actors in the infrastructure and construction sectors, focusing on general contracting, mass transit systems, prefabrication, prestressing, pipe production, railway, subway, special purpose buildings, strengthening & restoration and Public Private Partnerships. In addition to Yapı Merkezi's landmark projects and remarkable participation in Turkey's infrastructure and construction sector, Yapı Merkezi also has a strong presence in the international arena actively carrying out projects in Middle East and Africa. Yapı Merkezi was ranked 77th in the top International Contractors ENR Ranking in 2019.

Over the years Yapı Merkezi has demonstrated an ability and capacity to build mega construction projects earlier than scheduled, to budget and at the quality targeted. Yapı Merkezi's successful presence in the structuring and management of PPP and BOT projects is evident in its recent success of the Eurasia Tunnel (along with SK E&C). It has also strong relationships with many international financial institutions.

Yapı Merkezi, with a strong awareness of sustainable development, aims to eliminate or reduce the negative effects of all its activities on the environment and society. Yapı Merkezi determined its policies to help leave an environment so that future generations can meet their needs. On the journey of social responsibility activities, which they set out with a motto of "We are Responsible to Our Age and Our Society", they continue to work in many different areas such as education, culture and arts, environment, and international peace.

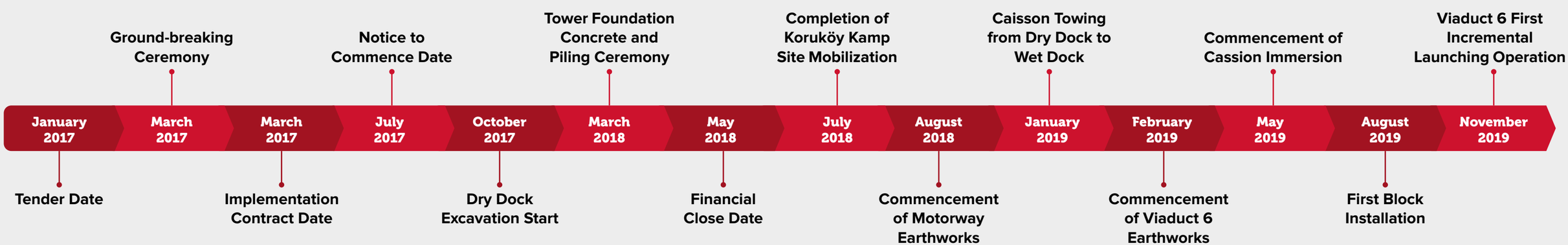
4. About the Project

1915Çanakkale Bridge and Motorway Project is among one of the most important infrastructure investments of Turkey. As the Project that connects the two sides of the Çanakkale Strait that is two times longer than the Istanbul Strait, it is expected to contribute to the economic acceleration in Thrace and Western Anatolian Region where important service, industry, and tourism companies are located in Turkey. In addition, it is aimed to direct the hauling mobility coming from the EU countries especially Bulgaria and Greece to Aegean, Western Anatolia, and Western Mediterranean. Furthermore, it is expected that the Project will remarkably facilitate the transit by reducing the traveling time at the Çanakkale Strait down to four minutes where strait passages could take between 1.5 hours up to 5 hours due to the long ferry queues and heavy traffic, especially in summer months and holiday periods. The Project will contribute to the tourism sector by reducing the distance between the European countries and tourist destinations such as Izmir, Aydın, and Antalya. 1915Çanakkale Bridge and Motorway Project will allow an increase in the capacity of freight and passenger transportation, as well as traveling comfort, saving time and offering maximum passenger safety.

The Project is a member of Permanent International Association of Road Congress (PIARC). Continuing to encourage and facilitate global debate and information exchange on road and road transport for more than 100 years, PIARC now has 122 government members worldwide and has an advisory status to the United Nations Economic and Social Council. Project's membership to PIARC is very significant in terms of information exchange and collaborations at the international level.

1915Çanakkale Bridge and Motorway Project

Project Milestones



Awards Received

The 1915Çanakkale Bridge and Motorway Project that will be the longest central span suspension bridge achieved many successes that can be described as a “reference” in its financing process, besides its technical and engineering achievements.
A total of 2.3 billion Euros of credit, 70% from the Lenders abroad, has been granted to the Project. Project partners aim to invest in the Project more than 900 million Euros capital investment. 1915Çanakkale Bridge Project is now counted among the world’s few select projects with its diverse financing structure and has been awarded 11 global finance awards so far:

- **Project Finance International (PFI) Awards**
  Turkish Financing Award of the Year
- **Islamic Finance News (IFN) Awards**
  Project and Infrastructure Financing Award of the Year
- **Infrastructure Journal Global (IJ Global) Awards**
  Turkey Bonds & Loans Awards
- **Turkey Bonds & Loans Awards**
  Project Financing Award of the Year
  Infrastructure Financing of the Year
- **Proximo Finance Awards**
  Best EMEA ECA Backed Deal of the Year
- **EMEA Finance Awards:**
  Europe’s Best Project Financing Award
  Europe’s Best Public – Private Sector Cooperation Project
  Best Project Financing
  Best Road Project
- **EMEA Awards**
  Best Syndicated Loan

Project Highlights

88 km

TOTAL PROJECT LENGTH

4,608 m

BRIDGE LENGTH

2,023 m

CENTRAL SPAN OF THE BRIDGE

4

NUMBER OF VIADUCTS

12

NUMBER OF JUNCTIONS

4

NUMBER OF SERVICE AREAS

318 m

BRIDGE TOWER HEIGHT

7

NUMBER OF TOLL PLAZA

Turkey's "Vision 2023" will attain one of its principal objectives.

The Project will play an important role in its target towards improvement of motorways across the country as dictated in the Vision 2023 Master Plan, the statement of Turkey's push for national development.

Motorway integration of Western Turkey will be completed.

The Project constitutes the pivotal central segment of the 324 km Kınalı-Tekirdağ – Çanakkale- Savaştepe Motorway Project, thus tying the connections of the motorway chain encircling the Marmara Sea when it connects to the Gebze-Izmir Motorway.

A new alternative to the Bosphorus passage.

The heavy transit traffic load of Istanbul between Europe and Anatolia will be eased. The traffic load currently concentrated in Western Anatolia across the Istanbul-centred West - East axis will be balanced towards a Southerly route along the Western shores of the Marmara Sea.

Manufacturing, commerce and service industries in Thrace and Western Anatolia will gain momentum.

Faster and cost-effective freight transport will not only strengthen the economic activity of this region inhabited by an industrious population but also their social bonds.

Domestic and international tourism will be energized.

Commercial relations as well as cultural interaction with the European countries, the Balkans and especially Greece and Bulgaria will be impacted positively. Connection of the Kınalı - Tekirdağ - Çanakkale - Balıkesir Motorway to the Gebze - Izmir Motorway near the city of Balıkesir will shorten the distance from tourism centers such as Izmir, Aydın and Antalya to the European countries, thus helping the tourism industry.

Delivery periods and costs will be reduced in transportation, hence generating advantages in foreign trade.

As soon as the Project is launched, vehicle management costs and travel times will be improved. When the obstacles in transport are overcome, travel time and costs will be reduced for export and import industries.

The Project will provide continuous employment in both the construction and the management phases.

By employing thousands of individuals throughout the construction and management periods and by stimulating various industries, the Project will contribute significantly to the Turkish economy.

Çanakkale will embrace a monumental project befitting its glorious history and its stance in the 21st century.

Çanakkale will be crowned with a visually appealing and modern suspension bridge matching the city's prominence and dynamics.

The bridge has a great strategic significance, as well as engineering. Our bridge, with its 2023-meters central span, is the longest central span suspension bridge of the World and its total length will be 4 thousand and 608 meters with the side spans and viaducts. Its height has been determined as approximately 318 meters, representing the 18th day of the 3rd month, with our aim to respectfully keep the legacy of Çanakkale Victory alive for generations.

Sustainability in 1915Çanakkale Bridge and Motorway Project with Numbers

The calculation of the first phase of the afforestation study, which is planned to be carried out in two phases, was completed in 2019. The number of trees to be planted in the first phase was calculated as 432,215 in line with the commitment to plant 5 trees for each affected tree, which is within the scope of the international Environmental and Social requirements of the Project. Calculation studies for the second phase are ongoing and it is planned to be finalized in 2021.

1,054 *Pinna nobilis* individuals whose population has been decreasing, were transplanted to safer areas in 2018 together with Çanakkale Onsekiz Mart University's Underwater Research and Application Center. After the first underwater monitoring, it has been observed that 95% of the population was alive. One year after the transplantation, one more underwater monitoring will be conducted to observe their survival rate. Also, annual underwater monitoring activities are being carried out to track their latest status.

Passive Acoustic Monitoring and Marine Mammal Observation studies were conducted for eight months in 2018 in order to prevent marine mammals from being affected by underwater noise caused by pile driving operations. 43 sightings and nine acoustic detections are carried out for the mammals. Approximately 200 marine mammals have been spotted which led to a total of 2 hours and 11 minutes project downtime.

Our ecologist, responsible for the investigation and management of the effects of the 1915Çanakkale Bridge and Motorway Project on biodiversity, organizes field trips of 10 Thousand Steps per day for rare plants and wild animals. As part of the rare plants' conversation efforts along the motorway route, the seeds are collected and sent to the Turkish Seed Gene Bank. The seed counting activities continue and more than 6,000 seeds have been collected in 2019.

To conserve the cultural heritage, 88 km motorway route has been walked step by step and the Cultural heritages in a 200-meter width have been identified. Archeogeophysics studies have been carried out in high potential areas where likely cultural heritage can be found.

In 2018 and 2019, 99% of complaint cases have been closed that were reported by our stakeholders. 180 out of 183 complaints coming from men have been resolved, while all 17 complaints from women have been resolved. As of the end of 2019, 567 meetings have been held including 471 public consultation meetings, 47 women meetings, five meetings with disadvantaged groups and meetings on other topics.

5. Environmental and Social Performance Management

As of the mid-18th century, increasing consumption of resources due to the industrial revolution, urbanization and the increase in population density, global warming, environmental pollution, and the rapid exploitation of natural resources have caused some negative consequences in environmental and social terms. These changing conditions negatively affect all countries around the world and oblige everyone to take responsibility to eliminate or minimize these conditions for the future. These problems not only affect the future of individuals but also organizations and investments. In the 1915Çanakkale Bridge and Motorway Project, we strive to leave a liveable legacy to the future generations through our sustainability activities while addressing the needs of the society in line with being the assurance of Turkey's bright future.

In the 1915Çanakkale Bridge and Motorway Project, we continue our Project with the actions we have taken in line with environmental and social awareness. In accordance with the national legislation, Project's Environmental Impact Assessment (EIA) report was approved before. Following the approval of EIA Report, Environmental and Social Impact Assessment (ESIA) study in line with IFC Performance Standards was conducted by ERM GmbH (Environmental Resources Management) in order to identify environmental and social impacts of our Project in more detail and determine associated mitigation practices.

Following that the public consultation process was carried out in 32 locations (villages and districts in Gelibolu, Lapseki and Malkara) for 30 days with the attendance of approximately 1,000 individuals (including local community members, authorities, and NGOs). Purpose of this process was to obtain concerns and comments from the public and integrate their feedback into the final ESIA Report.

In this process, the aim is to collect the opinions and comments of the public and to reflect their feedback to the final version of ESIA report. Thus, it is aimed to create an effective and reliable infrastructure for the implementation stages by integrating the views of our stakeholders into our ESIA report. After the finalization of the ESIA Package (including the Final ESIA Report), an Environmental and Social Action Plan was prepared by ARUP – Lenders' Environmental and Social Consultant. Efficient and effective implementation of the activities available in this Action Plan is important for the environmental and social performance of the Project stages. In 2019, our environmental and social performance was audited by ARUP through quarterly visits, environmental and social reports, and communication activities. Our project continues to be carried out in compliance with the determined Environmental and Social Requirements to a significant extent.

E&S Timeline

Planing Phase

Identification of applicable E&S requirements, regulations and standarts

April 2017

Environmental and Social Impact Assessment (ESIA)

January 2018

Public Consultation Process

March 2018

Finalization of Environmental and Social Due Diligence

March 2018

Finalization of ESIA, ESMP and ESAP

August 2018

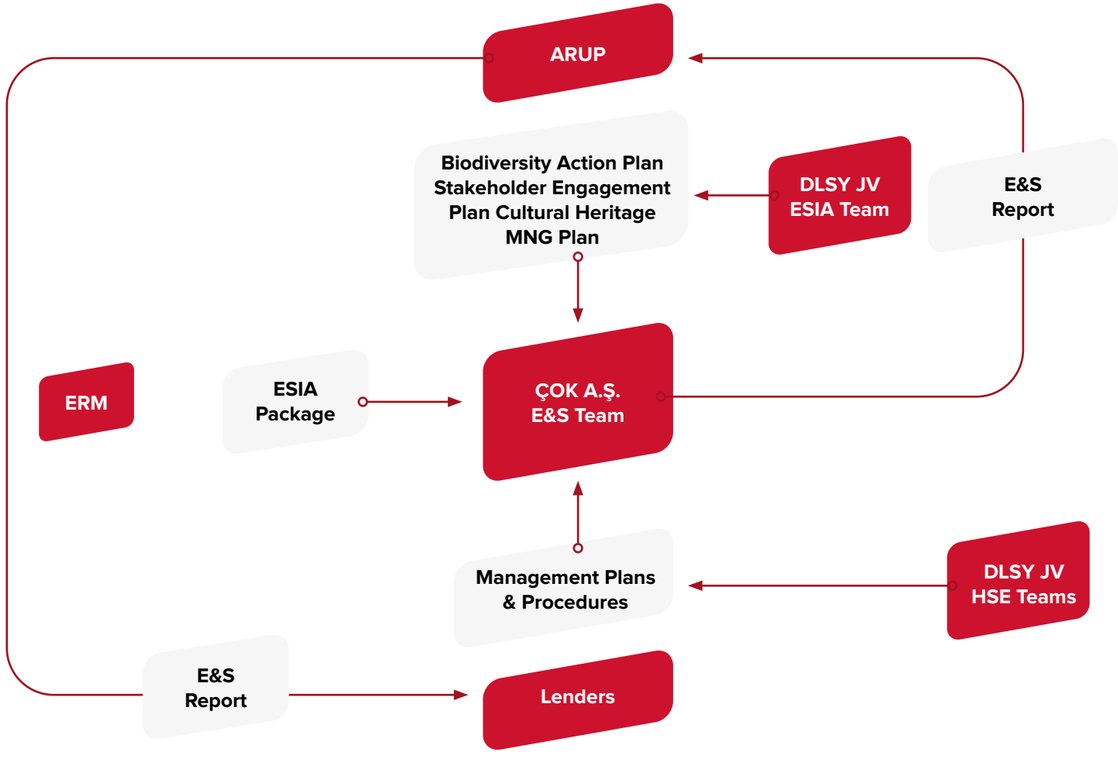
Finalization of S-LACRP and CLAP

May 2019

Start of CLAP Implementation

Implementation

1915Çanakkale Bridge and Motorway Project Environmental and Social Performance Management Network



Corporate Sustainability Approach

As Çanakkale Otoyol ve Köprüsü Inşaat Yatırım Işletme A.Ş., we aim to act with an understanding of health, safety, social and environmental awareness throughout the project. With the guidance of our Health, Safety, Security and Environment and Social Policy implemented in the 1915Çanakkale Bridge and Motorway Project, effective risk management, legal compliance and meeting stakeholder expectations are ensured in the design, construction, and operation phases of the Project. Necessary actions to improve our project processes effectively and eliminate undesirable situations such as accidents are defined within the scope of the respective Policy. We take the necessary precautions to provide a safe working environment for our employees by giving importance to providing working conditions in accordance with international standards.

In order to ensure the social development and welfare, we carry out various activities with the aim of establishing effective communication with the society and ensuring its safety. As a part of our way of doing business, we carry out our work in a way that respects both nature and people.

Under the leadership of our Environment and Social Affairs Team, an Environmental and Social Management System is operated in the organization to comply with the guidance, assistance, and audit steps due to the international standards that we follow. In this regard, our ESIA team (ecologists, archaeologists, and public relations experts) manages the environmental and social matters such as Community Level Assistance Program, conservation of archaeological heritage, biodiversity, and stakeholder engagement. HSE and Environment teams are supported through providing them with necessary vehicles, resources and information and the audits are carried out regarding fulfilling the environmental and social responsibilities. In the construction phase, the practices such as waste management, resource control, air quality and climate, noise and vibration, water quality and soil pollution are regularly monitored. Regular environmental and social performance reporting are conducted for our stakeholders based on the information provided by the DLSY JV teams. Meanwhile the Community Level Assistance Program and the issues regarding the local people affected by the expropriation are managed under the responsibility of ÇOK A.Ş., with the assistance of DLSY JV teams.

1915Çanakkale Bridge and Motorway Project that connects 2 continents aims to serve humanity by following sustainability principles at local and global scale and to direct its environmental and social practices by considering the core principles of United Nations Sustainable Development Goals in all Project processes. SDG 9: Industry, Innovation and Infrastructure is among the SDGs that we serve through our overall Project targets, practices, and the social benefits after the Project completion.

IFC Performance Standards

In our project processes, we implement and regularly report Environmental and Social Impact Assessment actions in line with IFC (International Finance Corporation) Performance Standards, which are presented in detail in the table below.

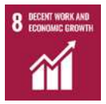
	IFC Performance Standard	Applied IFC Performance Standard Requirement	Respective ÇOK A.Ş. Practice
	Assessment and Management of Environmental and Social Risks and Impacts	Environmental and social responsibility is critically important in today's global economy. An environmental and social management system (ESMS) helps companies integrate plans and standards into their core operations—so they can anticipate environmental and social risks posed by their business activities and avoid, minimize, and compensate for such impacts, as necessary. A good management system provides for consultation with stakeholders and a means for complaints from workers and local communities to be addressed.	Managing the Environmental and Social risks and impacts in compliance with the legal regulations and IFC Performance Standards, Environmental and Social Impact Assessment and Environmental and Social Action Plan practices, Environmental and Social Management Plan and Environmental and Social Management System based on ESIA
	Labour and Working Conditions	For any business, its workforce is its most valuable asset. A sound worker-management relationship is key to the success of any enterprise. PS2 asks that companies treat their workers fairly, provide safe and healthy working conditions, avoid the use of child, or forced labour, and identify risks in their primary supply chain.	Grievance mechanism for workers, Occupational Health and Safety, No Child Labour and non-forced labor, equal rights for immigrant workers, ensuring works accommodation in compliance with local regulations and IFC/EBRD Worker Accommodation Guideline
	Resource Efficiency and Pollution Prevention	Industrial activity and urbanization can increase levels of pollution that may threaten people's health and the environment. PS3 guides companies to integrate practices and technologies that promote energy efficiency, use resources-including energy and water-sustainably, and reduce greenhouse gas emissions.	Energy and water saving efforts, noise and vibration level measurements, Waste management, Environment Management Plan, Water and Air Quality Measurements, GHG Management Study, Environmental Drainage Design and Climate Change Risk Assessment
	Community Health, Safety, and Security	Business activities and infrastructure projects may expose local communities to increased risks and adverse impacts related to worksite accidents, hazardous materials, spread of diseases, or interactions with private security personnel. PS4 helps companies adopt responsible practices to reduce such risks including through emergency preparedness and response, security force management, and design safety measures.	Public Health and Safety Procedure
	Land Acquisition and Involuntary Resettlement	When companies seek to acquire land for their business activities, it can lead to relocation and loss of shelter or livelihoods for communities or individual households. Involuntary resettlement occurs when affected people do not have the right to refuse land acquisition and are displaced, which may result in long-term hardship and impoverishment as well as social stress. PS5 advises companies to avoid involuntary resettlement wherever possible and to minimize its impact on those displaced through mitigation measures such as fair compensation and improvements to and living conditions. Active community engagement throughout the process is essential.	No involuntary resettlement (forcing people permanently/temporarily resettle without their consent), No trespassing to lands until the legal permission processes completed, Community Level Assistance Program and Additional Immovable Property Acquisition, Compensation and Resettlement Plan
	Biodiversity Conservation and Sustainable Management of Living Natural Resources	Biodiversity loss can result in critical reductions in the resources provided by the earth's ecosystems, which contribute to economic prosperity and human development. This is especially relevant in developing countries where natural resource-based livelihoods are often prevalent. PS6 recognizes that protecting and conserving biodiversity, maintaining ecosystem services, and managing living natural resources adequately are fundamental to sustainable development.	No harm to plants and animals with critical importance and in natural spaces. Not moving wild and invasive plant species to new places, biodiversity conversation activities, Biodiversity Action Plan, Passive Acoustic Monitoring and Marine Mammals Observation, Bird Observation and Important Bird Zone Practice, transplantation of Pinna Nobilis that is a marine species endemic to the Mediterranean region
	Cultural Heritage	Cultural heritage encompasses properties and sites of archaeological, historical, cultural, artistic, and religious significance. It also refers to unique environmental features and cultural knowledge, as well as intangible forms of culture embodying traditional lifestyles that should be preserved for current and future generations. PS8 aims to guide companies in protecting cultural heritage from adverse impacts of project activities and supporting its preservation. It also promotes the equitable sharing of benefits from the use of cultural heritage.	No harm to coincidental archaeological remains, Not moving or harming the cultural findings, Cultural Heritage Management Plan, Collaboration with Edirne and Çanakkale Cultural Heritage Conservation Regional Committees and Tekirdağ and Çanakkale Archaeology Museums

Equator Principles

Equator Principles are the guiding principles that were introduced by the IFC which is the private sector branch of the World Bank. The Principles address the social responsibility and management of environmental risks in Project financing. In the context of 1915Çanakkale Bridge and Motorway Project, the requirements of the Equator Principles III (June 2013) are adopted. Accordingly, the ESIA process has been carried out and disclosed to the public. The Environmental and Social Management Plan prepared following the ESIA is implemented throughout the Project.

United Nations Sustainable Development Goals

The 1915Çanakkale Bridge and Motorway Project, which connects the continents, directs its environmental and social practices by considering the basic requirements of the United Nations Sustainable Development Goals (SDGs). It aims to serve humanity with sustainability principles in local and global dimensions. Throughout the project, our goals, practices, and the benefits to our society as a result of the Project are the main SDGs that we serve with Goal 9: Building Resilient Infrastructures, Supporting Inclusive and Sustainable Industrialization and Strengthening Innovation.

Main Environmental and Social Activities	Related SDG	SDG Target
• Local Recruitment Practices		8.5, 8.6
• Community Level Assistance Program and Public Relations Projects		6.B, 8.3, 8.6, 11.1, 11.2, 11.7, 16.6, 16.7, 16.10, 17.7
• Social Commitments and Occupational Health and Safety Practices Regarding Workers		8.8, 12.4
• Local Resource Utilization and Local Procurement Practices • Submitting the Annual Environmental and Social Performance Report to stakeholders		12.2, 12.6, 12.7
• Waste Management • Reducing Energy and Water Consumption • Emission Management • Prevention of Dust Pollution • Prevention of Noise Pollution • Afforestation Efforts		12.2, 12.5, 13.1, 15.2
• Biodiversity Action Plan		14.1, 14.3, 15.7
• Cultural Heritage Management Plan		8.9, 11.4

Environmental and Social Action Plan

We carry out our environmental and social performance management within the framework of the respective Action Plan. We are working to realize our goals determined in line with this plan, within the prescribed time intervals. We implement our environmental and social impact actions with the help of our teams in the field, especially on issues such as the creation of environmental and social management plans of our construction and operation processes, stakeholder engagement plan, occupational health and safety, conservation of resources, energy efficiency, evaluation of greenhouse gases and noise pollution.

Environmental and Social Action Plan Progress Table as of the end of 2019

Status	As the end of 2018	As the end of 2019
High Performance Required Actions	1	0
Full Compliantly Continuing / Completed Actions	38	51
Compliantly Continuing Actions	14	9
Actions Requiring Priority	11	4
Not Compliant Actions	0	0
Actions	9	9

With the environmental and social capacity building trainings we organized in 2019, all our units work in coordination to ensure the systematic development of knowledge and skills related to the environmental and social management requirements of our Project. Increasing the general expertise and awareness level of our Project in environmental and social issues is the main purpose of our capacity building trainings. Our training subjects include the main topics of Equator Principles, IFC Performance Standards, Occupational Health and Safety practices, Environment, Ecology, Archaeology, Public Relations and Social Commitments for Workers. **In 2019, detailed information on our environmental and social activities was provided to 201 employees with 24 capacity building trainings for various levels.**

Environmental, Health and Safety Inspections and Practices

In our Project, environmental, health and safety inspections are carried out periodically for the bridge and motorway. Inspection findings and results are evaluated through assigned committees and meetings in line with our continuous improvement principle, and the necessary actions are followed up. The current situation for 2019 can be seen in the table below:

Number of inspections made by the company	Bridge	17
	Motorway	23
Number of inspections made by the contractor	Bridge	290
	Motorway	794
Number of subcontractor committee meetings	Bridge	63
	Motorway	47
Number of OHS and Environment Committee meetings	Bridge	12
	Motorway	13

6. Environmental Performance Management and Combating Climate Crisis

In the 1915Çanakkale Bridge and Motorway Project, we strive to apply strategies to minimize our greenhouse gas emissions to manage climate-related risks.

According to the 2020 Global Risk Report published by the World Economic Forum (WEF), climate-related risks are seen among the top 5 risks in terms likelihood in the long-term. These risks are namely human-made environmental disasters, biodiversity loss, natural disasters, climate action failure and extreme weather. The direct connection of all these risks with climate demonstrate the seriousness of the climate crisis that we face globally and locally. In the 1915Çanakkale Bridge and Motorway Project, we strive to apply strategies to minimize our greenhouse gas emissions to manage climate-related risks.

According to research, construction structures consume 30% of material resources and 40% of energy resources, while 35% of the CO2 emissions that cause global warming are suggested to originate from the construction sector*. Considering the possible environmental impacts of the Project, we make our environmental performance management, which includes water management, noise management, biodiversity conservation, reduction of the amount of waste generated during the Project process and sustainable resource use practices, one of our business priorities.

A gap analysis was conducted in 2019 by assessing the responses of Project staff and field observations towards the seven main articles (Article 4 – 10) of the ISO 14001:2015 Environmental Management System document. It was shown that the Environmental Management System was well applied in the Project and the employees were adequately aware of the requirements of the system.

Water Treatment

We manage our potential impact on the components such as the Çanakkale Strait, lakes, streams, irrigation systems, municipal water pipelines and groundwater resources in the Project area in accordance with the IFC Performance Standards and Equator Principles. We strive to minimize the short-, mid- and long-term impacts and risks that are determined during the Project construction.

In the 1915Çanakkale Bridge and Motorway Project, our main water consumption areas are sanitation, catering, concrete applications, tool cleaning on-site, irrigation of the site, water trucks and tire washing.
In order to effectively monitor our water use, municipal water consumption, bottled water and ground water consumptions are monitored.

		2018		2019	
Water Density Indicator	**Unit**	**Bridge**	**Motorway**	**Bridge**	**Motorway**
Municipal Water Consumption	m^3/employee-hour	0.059	0.015	0.072	0.019
Groundwater Consumption*	m^3/employee-hour	-	-	0.003	0.001
Total Water Consumption	m^3/employee-hour	0.059	0.015	0.075	0.021
Total Wastewater Discharge	m^3/employee-hour	0.083	0.014	0.078	0.010

In 2019, 5% reduction of water density per employee-hour water consumption was aimed compared to the previous year. The Water Density Indicator is accepted as a trend that is expected to deviate in parallel with ongoing construction activities.
The measures and actions to reduce the Project's water consumption are as follow:

- Pulverized irrigation system has been used for dust suppression systems in the facilities and the existing system has also been used in the water trucks to save water usage.
- Mixer washing water in concrete plants are reused during the production through having them purified in the sedimentation tanks.
- The water that is used for vehicle washing and is physical-purified, also used for tire washing. Auto-stop hose nozzles helped to save water during vehicle washing.
- The water needed for the field irrigation and production have been primarily provided by the water masses collected from rainwater.
- To prevent excess water use in places like kitchens, bathrooms and toilets, the employees have been provided with necessary trainings to raise their awareness. Also, warning banners have been placed in the relevant places.
- Water consumption controls have been periodically conducted and reported in the Project fields.
- Drainage from excavations is collected and settled to remove suspended materials prior to discharge in accordance with required permits.
- Sensitive areas of rivers and drains will be protected from the impacts of vehicles and other construction activities via fencing.
- Construction activities will be scheduled in accordance with meteorological forecasting to prevent erosion and erosion related water contamination.
- All drainage structures are designed to prevent uncontrolled wastewater discharge.
- Treated wastewater are reused where possible.
- Construction equipment are cleaned far from the surface water resources.
- Wastewater is discharged in accordance with national and international limits.
- Groundwater resources are used with the awareness of the responsible consumption of resources and with the approval of DSI (State Hydraulic Works).
- Fuelling activities do not take place within excavation-sites. Where heavy equipment cannot be moved to appropriate fuelling points, impervious surface (such as drip-trays) is used to prevent accidental releases to groundwater aquifers.

Drainage Design Study

The main purpose of the drainage design study carried out with expert consultants in 2019 includes reviewing the discharge points determined on the Project route, assessing the design standards according to the standards specified in the Environmental and Social Impact Assessment (ESIA) Report, defining the sensitivity, and classifying. By reviewing the relationship between drainage design and receiving environment, the compliance with current national and international legislation and standards, including IFC Guidelines and Performance Standards, has been checked for each discharge point.

Within the scope of the study, the Assessment of Climate Change Risks covering 5, 50 and 100-year periods for the Project life cycle is also taken as a basis. As part of the 1915Çanakkale Bridge and Motorway Project, the indirect environmental impacts of drainage design have been determined by utilizing the published reports and articles on the effects of climate change, especially on the Marmara and Ergene Regions. A literature review was conducted to find future climate predictions for Çanakkale and Tekirdağ Region.

The risk assessment summarizing potential climate risks and their impacts on the Project is based on the method adapted from the New South Wales (NSW) Transport Climate Risk Assessment Guidelines. In the framework of this method, future projections based on RCP 4.5 and RCP 8.5 scenarios have been used. These scenarios are emphasized by the Intergovernmental Panel on Climate Change (IPCC) 5th Assessment Report and by the report published by the General Directorate of Meteorology in 2015, as well as they are widely employed in the climate predictions.

In these scenarios, the seasonal precipitation variations of Marmara and Ergene Basins have been taken into the account for Çanakkale Region. In the risk assessment, possible consequences of climate change on public health and safety, environment and operational reliability of road drainage systems were taken into account. It is planned to include the results of the study for the protection of sensitive areas and mitigating the effects of climate change in the drainage design of the Project after 2020.

Energy Monitoring and GHG Emissions

The climate crisis rapidly impacts our planet as the examples of extreme weather events, temperature rise, change of precipitation regimes and melting glaciers demonstrate. GHG emissions, that are released due to human activities, are the major reason of the climate crisis. According to the United Nations Framework Convention on Climate Change (UNFCCC) data, the CO2 concentration in the atmosphere reached to the record level in history with 411.57 parts per million (ppm) as of June 2019. Reducing the emissions is among the first actions that can be taken to mitigate the effects of the climate crisis. Within the framework of Project operations, we regularly monitor our energy consumption and we strive to reduce our emissions related to our energy consumption.

Energy Monitoring

The reasons such as rapid population increase, unplanned urbanization, increase in raw material consumption due to industrial activities increase the demand for energy, hence GHG emissions increase accordingly. This situation causes global consequences such as the depletion of ozone layer and climate change. Some energy consumption monitoring and reduction practices implemented during the execution of the project are as follows:

- Energy consumption is tracked by bills. Drivers keep bills and transmit them to DLSY JV in case of fuel purchase from outside of construction-site.
- The engines of vehicles and equipment will be switched off if not operated.
- The engines of the machines and vehicles must be kept off when they are not in use.
- Photocells will be used wherever appropriate as much as possible.
- When applicable, energy saving equipment will be preferred.

Project's resource and energy consumption has been monitored and internally reported on a quarterly basis throughout the year 2019.

In order to effectively monitor the energy consumption, diesel, electricity, and natural gas consumptions are calculated:

		2018		2019	
Energy Density Indicator	**Unit**	**Bridge**	**Motorway**	**Bridge**	**Motorway**
Diesel Consumption Density	litre/employee-hour	0.090	0.202	0.432	2.228
Electricity Consumption Density	kWh/employee-hour	0.068	0.257	1.419	0.287
Natural Gas Consumption Density	m^3/employee-hour	0.685	0.458	0.106	0.035

In 2019, the aim is to reduce the energy consumption density per employee-hour by 5% compared to 2018. Density indicator is accepted as a trend that is expected to deviate in parallel with ongoing construction activities. The actions and measures taken in the Project in line with the realization of the goal are as follows:

- With the start of marine works, electricity consumption was replaced by diesel fuel consumption in the second quarter of the year.
- In order to reduce the number of shuttles and allow more personnel to be transported at once during the marine related works, large passenger boats are rented instead of the small boats used previously.
- Energy saving bulbs have been used where possible.
- Diesel fuel vehicles are preferred.
- •onstruction machine parking areas have been created and vehicles have been enabled to work in shorter distances.
- Signs were erected and trainings were provided to ensure the speed limits in the use of vehicles.
- Fuel tanks have been sealed to prevent any leakage.
- Trainings have been provided to raise the awareness among the vehicle operators to not leave the engine on when the machinery is not in use.
- Heat insulation has been done in the camp site to reduce the natural gas use.

GHG Emissions Monitoring

First studies in relation to greenhouse gas (GHG) assessment were conducted by ERM in compliance with IFC Performance Standard 3 within the scope of Environmental and Social Impact Assessment (ESIA) dated 2018. The potential GHG emissions have been calculated with the assumption of 5.5 years of construction period and within the scope of the previous assessment, through utilizing the data from public sources and Project plans. Where no data are available, reasonable assumptions are made to understand the magnitude of emissions for a given activity. It is indicated clearly where these assumptions are made, and what methods are used in the ESIA Report which is publicly disclosed in our Project website.

The GHG Assessment has been updated by ERM to cover the 45-month construction process, in light of the initial predictions made in ESIA and the data collected from the field in the first year of the Project.

Project's GHG Emission resources of are listed below according to scopes:

Scope 1: Direct emissions from fuel combustion of construction machinery on site including generators, Project-related vehicles, production of concrete and asphalt.
Scope 2: Indirect emissions associated with purchased electricity used on site and at worker camps.
Scope 3: Emissions from the production materials used during construction provided by third parties.

The GHG emissions belonging to two different periods run by ERM are as in the table below:

Scope	**Emission Sources**	5.5-Year Projection Calculation Realized in the ESIA Period in 2018 (t CO_2e)	GHG Assessment Update for 45 Months Realized in 2019 (t CO_2e)	
		Bridge & Motorway	Bridge	Motorway
Scope 1	**Diesel**	50,000	4,088	2,470
	Diesel (Hauling)	100,000	0.113	28,460
	Asphalt and Concrete Production	300,000	-	-
	Natural gas	-	2,475	2,450
TOTAL SCOPE 1 EMISSIONS		450,000	6,680	33,380
Scope 2	**Electricity**	5,000	6,563	1,180
TOTAL SCOPE 2 EMISSIONS		5,000	6,563	1,180
Scope 3	**Cement**	-	45,375	136,950
	Steel	130,000	13,550	165,300
	Aggregate and Admixture	-	-	62,230
TOTAL SCOPE 3 EMISSIONS		130,000	58,930	364,480
TOTAL (Scope 1 & 2 & 3)		585,000	471,213	
TOTAL (Scope 1 & 2)		455,000	47,803	
TOTAL (Scope 1 & 2) – Yearly Average		80,000	12,760	

As a result of the updated calculations in 2019, it was seen that the construction of the Project will be completed with lower emission values than predicted in 2018. It has been determined that this difference is due to a number of factors such as forecast about fuel consumption, shorter construction time, and some of the materials needed are reduced.

Since the annual average of Scope 1 and Scope 2 emissions does not exceed the 100,000 t CO_2e threshold of the Equator Principles, an alternative analysis was not required. In addition, it is planned to monitor energy consumption for continuous performance improvement and to implement necessary practices to reduce greenhouse gas emissions. Besides, an annual average of 25,000 t CO_2e calculated in the Greenhouse Gas Emission Assessment Update is below the voluntary reporting emission threshold of the Equator Principles. However, practices will continue to reduce greenhouse gas emissions by monitoring energy consumption throughout the Project.

Waste Management

Another important component of our environmental impact is to control the waste generated as a result of the resources used during the Project and to take the necessary actions. The environmental impacts of the Project, including waste management, have been determined in the Environmental and Social Impact Assessment stage in accordance with IFC Performance Standard 3. The Project waste management covers the process such as extraction of resources, disposal of bulk materials, transport of materials and wastes, disposal of construction waste and routine waste of the operations. Implementing an effective waste management system during the project is important to keep the potential impacts that may arise as low as possible.

- WASTE AVOIDANCE Minimizing the amount of material that needs to be generated and managed in the first place.
- RE-USE ON-SITE Where possible, the reuse of excavated materials and operational waste within the Project site is to be maximized. This reduces the need to import materials onto the site, reduces the need to find off-site re-use or disposal locations and the associated materials handling and transport issues, reduces fuel use and minimizes the Project footprint, as well as keeping the employee costs at minimum.
- RE-USE OFF-SITE Where all attempts to re-use excavated materials on-site have been exhausted, re-use opportunities must be found off-site.
- DISPOSAL Disposal is the last and least preferable management option to be considered.

Based on the Waste Management Hierarchy principles provided above, a Waste Management Procedure was prepared in accordance with the mitigation measures indicated in ESIA. Measures are as follows:

- Wastes and secondary materials are not disposed to the locations and facilities that have no authorization but only to authorized (licensed by the designated government authority) locations and facilities only.
- Waste generation is reduced whenever practicable
- Materials are purchased in bulk or in reusable/returnable containers to minimize packaging waste or empty containers waste.
- Various steps are taken to minimize the leaks and spills.
- Non-hazardous or less hazardous material alternatives will be preferred where available.
- Materials are reused whenever practicable.
- Good housekeeping practices are implemented.
- Wastes are stored properly.
- All wastes (wood, steel, plastics, and paper) are segregated. Hazardous, non-hazardous, and recyclable materials are not mixed for disposal or treatment.
- In cases where there is a risk of leakage of materials, including contaminated rainwater run-off, waste containers are placed in secondary containment.

As part of Waste Management, packaging waste, domestic waste, metal waste and medical waste are monitored. Waste generation in 2019 is provided in the Table below:

		2018		2019	
Monitoring Indicator	**Unit**	**Bridge**	**Motorway**	**Bridge**	**Motorway**
Packaging Waste Amount	kg	80,212	14,176	52,707	25,710
Packaging Waste Density	kg/employee-hour	0.017	0.019	0.009	0.004
Domestic Waste Amount	kg	1,035,580	416,640	1,272,000	1,164,000
Domestic Waste Amount	kg/employee-hour	0.230	0.550	0.207	0.198
Metal Waste Amount	kg	1,331,390	7,640	1,840,000	744,000
Metal Waste Density	kg/employee-hour	0.296	0.010	0.299	0.126
Medical Waste Amount	kg	90	22	198	234
Medical Waste Density*	kg/employee-hour	-	-	-	-
Total Waste Amount	kg	2,447,272	438,478	3,164,840	1,933,674
Total Waste Density	kg/employee-hour	0.643	0.579	0.515	0.328

*Medical Waste Density is intentionally left blank as the medical waste amount is very low.

The improvement rate in waste generation per employee-hour in 2019, compared to 2018, demonstrates our effective waste management performance. Project actions for waste reduction in 2019 are as follows:

- Various trainings have been provided regarding separate collection of recyclable wastes and hazardous waste at the source.
- The introduction of the landfills was carried out during the field controls.
- New waste collection points have been established in order to collect waste efficiently.
- By increasing the number of containers where packaging wastes can be stored in camping sites and field work areas, mixing of packaging wastes with domestic wastes has been prevented.
- Two-sided printing of papers except important documents is ensured.
- Trainings were organized to increase the life cycle of existing products.
- Efforts have been made to ensure the reuse of non-hazardous wastes.
- Wholesale purchasing was preferred to prevent the amount of packaging waste.
- The asphalt and concrete waste were used by the local municipalities to improve village roads

Noise Management

Initial assessment on noise impacts of the 1915Çanakkale Bridge and Motorway Project was conducted during the ESIA period. Baseline measurements were carried out in six locations throughout the Project route in order to determine the noise level prior to construction activity and effectively monitor the noise levels during the construction process.

Noise monitoring activities are conducted monthly in accordance with the IFC Environment, Health and Safety Guide. The results are assessed according to the following principles identified by the IFC Standards:

- Noise levels should not exceed 55 dBA in the day times (07:00 – 22:00) and 45 dBA in the nights (22:00 – 07:00)
- In cases that baseline results are above 45/55 dBA thresholds, noise levels should not increase by more than 3 dBA compared to noise baseline data.

Obtained data are being used by the HSE and Environment departments regarding regular noise monitoring activities. In addition to noise impact regarding the construction period of the Project, its operation phase was evaluated as well. Noise modelling has been made to prevent noise that may occur during the operation period. According to the identified noise impact assessment study, final impact dimensions for all recipient points were identified based on the years 2023 and 2033. Final impact significance and the highest day and night limit overruns were measured. Mitigation measures will be designed after the assessment phase for regions with the final impact size as “Major” and “Moderate”. For the regions with minor impact, social monitoring is suggested. At the end of the study, it is found that there is only one settlement expected to experience major/moderate noise impact in relation to operation of the Motorway. Recommended measures are planned to be incorporated into the project design in 2020.

Biodiversity Conservation

We carry out biodiversity conversation efforts throughout the Project lifetime with due diligence, for the sustainability of many elements that is vital in terms of health, economic activities, conservation of natural resources and agricultural activities.

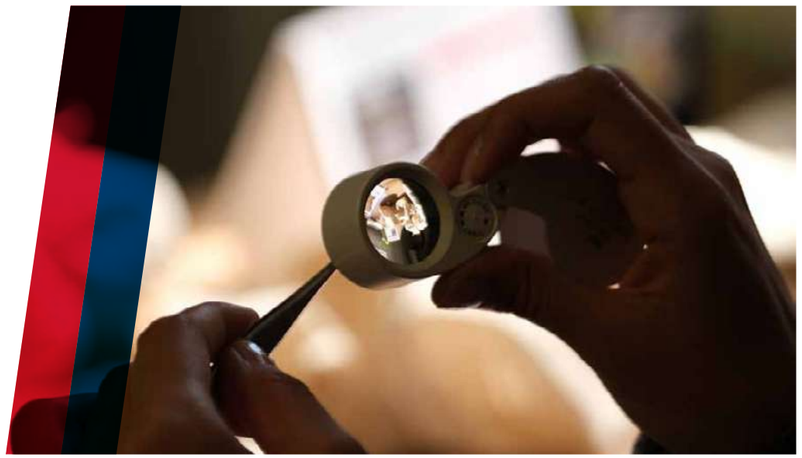
Biodiversity impacts of the Project were determined during the Environmental and Social Impact Assessment (ESIA) period and a Biodiversity Action Plan (BAP) was prepared in April 2018 in order to manage and control the Project activities that may pose biodiversity-related risks in accordance with the IFC Performance Standard 6. BAP outlines the potential impacts in three groups as terrestrial ecology, freshwater ecology and marine ecology based on the area of influence.

Terrestrial Ecology
The area of influence is defined as the 1,000 m buffer along the length (88 km from Malkara to Çanakkale) of the Project, consisting of 500 m buffer zones in either sides of the Project.

Freshwater Ecology
The area of influence is the zone originating from the intersection between the Project and the identified significant freshwater resources.

Marine Ecology
The area of influence is defined as the intersection between the 1915Çanakkale Bridge and its associated construction areas and the marine environment.

With the aim of reducing our impact on biological diversity, we continue our efforts in the light of various activities and the guidance of ecology experts. You can see the good practices below that we have implemented in this context:



Long-term deforestation and increasing CO2 concentration are among the major factors that cause biodiversity loss and climate crisis. 1915Çanakkale Bridge and Motorway Project carries out afforestation activities by determining commitments with the awareness of its responsibility to act against the threat of deforestation. In this regard, a “Tree Calculation Report” has been prepared in 2019 as part of the Environmental and Social Impact Assessment to designate the forest areas and number of trees to be affected by the Project.

The calculation method for the number of affected trees and deforestation areas trees in the lands affected by the Project was approved by ARUP in March 2019 and used in determining the afforestation commitments of the Project. The tree calculation project is planned to be carried out in two phases.

After the Phase 1 investigations, it was designated that a total of 86,443 trees, 69,897 in forest lands and 16,546 in private lands, will be affected by the Project. It is aimed to plant 5 new trees for each affected tree. In this context, the total number of trees to be planted has been calculated as 432,215. Tree calculations are ongoing for the Phase 2 process to be clarified in 2021.

Pinna nobilis (fan mussel) is a marine species endemic to the Mediterranean region and it is under strict protection according to the European Council Directive 92/43/EEC due to significant decline in population. As part of our biodiversity conversation efforts, 1,054 Pinna nobilis individuals were transplanted in 2018 in Çanakkale Strait where these species densely live. Transplantation study was carried out together with Çanakkale Onsekiz Mart University. An underwater study was conducted to determine the Pinna nobilis population and a transplantation plan was created by the university experts. One month after the transplantation, underwater monitoring activities were carried out to check their condition and adaptation to their new habitat. After the first underwater monitoring, it has been observed that 95% of the population was alive. One year after the transplantation, one more underwater monitoring conducted to observe their survival rate. An underwater monitoring is also planned in 2020.

10 thousand steps for Rare Plants and Wild Animals

While conducting our project, we carry out ecological studies for both aquatic life and terrestrial life and strive to protect biodiversity. In the Environmental and Social Impact Assessment Report prepared as part of the Project, three rare species were identified on the highway route Ferulago confusa, Rorippa thracica and Thymus atticus. To protect these species, their seeds are collected throughout the motorway route and sent to the Turkish Seed Gene Bank. As part of the Project Soil Erosion, Recycling and Landscape Management Plan, the type and quantity records of the seeds that have been collected at the post-construction landscape work and used as a result of the seed collecting and counting efforts are recorded to the Seed Collection Record. The seed counting activities are continuing and more than 6,000 seeds have been collected in 2019.

In order to protect numerous wild animal species in the region, it has been decided to take various actions for the safety of animals and drivers in the motorway work plans. It is planned to build an ecological bridge closed to human and vehicle crossings; thus, the motorway works do not disrupt the passage of wild animal groups and hunting activities.

7. Social Performance Management and Creating Social Value

Transparent Stakeholder Engagement

The significance of the 1915Çanakkale Bridge and Motorway Project is tremendously important in terms of improving the motorways across the country that is envisaged in the Vision 2023 Master Plan which is the blueprint of Turkey's national development vision. Numerous stakeholder groups have engaged each other via various communication channels in our Project.

First stakeholder engagement activities related to our Project were carried out in 2016, after the approval of Environmental Impact Assessment process. Then in January 2018, a Public Consultation Process was conducted within the scope of Environmental and Social Impact Assessment process in line with IFC Performance Standards (30-days formal period, 30-days extension), and the Project documents including ESIA disclosed to public comment. 68 NGOs have been invited to the process and approximately 1,000 people participated in the events. Stakeholder opinions and feedback formed the basis of the Stakeholder Engagement Plan.

Within the scope of the Stakeholder Engagement Plan of 1915Çanakkale Bridge and Motorway Project;

- Insights given into the Project documents and the way to acquire them to the directly affected population, other interested stakeholders, and the community,
- As part of the Public Consultation Process, the stakeholders and other relevant stakeholder groups those affected by the Project at any scale are informed. Project Affected Persons (PAP) are provided information about the Public Consultation Process,
- Explained how these opinions and feedbacks were addressed within the finalization of the ESIA Report,
- Detailed information on our grievance mechanism is provided.

Platform of dialogue and frequency of dialogue for each stakeholder group is presented in the table below:

Stakeholders	Platform of Dialogue	Frequency of Dialogue
Governmental Authorities	Reports	Monthly
	Meetings	Monthly
	Special events (fair, seminar, convention, etc.)	Case-basis
	Official letters	Continuous
	E-mail	Continuous
	Media (TV, newspaper, etc.)	Continuous
	Social media	Continuous
	Website	Continuous
Project Employees	Social activities	At least once a year
	Coordination meetings	Monthly
	All hands meetings	Quarterly
	Newsletters	Quarterly
	Social media	Continuous
	Website	Continuous
	E-mail	Continuous
	Employment Policy Document	Continuous
	Code of Conduct	Continuous
	Health, Safety, Environment and Social Relations Policy	Continuous
	Trainings	Continuous
	Work health and safety meetings	Monthly
	Worker grievance mechanism	Continuous
	Ethics Hotline	Continuous
Prospective Customers	Special events (fair, seminar, convention, etc.)	At least once a year
	Media (TV, newspaper, etc.)	Continuous
	Social media	Continuous
	Website	Continuous
	Call Center	Continuous
	Project Information Hotline	Continuous
Local People (including Project Affected Persons - PAP)	Face-to-face meetings	Daily
	Public Consultation Meetings	During ESIA Period
	Forms and informative reports	At least once a year
	Community Level Assistance Program	Throughout construction
	Media (TV, newspaper, etc.)	Continuous
	Social media	Continuous
	Website	Continuous
	Call Center	Continuous
	Project Information Hotline	Continuous
	Community grievance mechanism	Continuous
Non-Governmental Organizations (NGOs)	Public Consultation Meetings	During ESIA Period
	Informative reports	Case-basis
	Media (TV, newspaper, etc.)	Continuous
	Social media	Continuous
	Website	Continuous
	Call Center	Continuous
	Project Information Hotline	Continuous
Sponsors (Daelim, Limak, SK E&C, Yapı Merkezi)	Meetings	Monthly
	Newsletters	Quarterly
	Reports	At least weekly basis
	E-mail	Continuous
	Social media	Continuous
	Website	Continuous

Stakeholders	Platform of Dialogue	Frequency of Dialogue
Lenders and Lenders' Consultants	Reports	Monthly
	Meetings, teleconference	Continuous
	Document submittal	Continuous
	Newsletters	Quarterly
	E-mail	Continuous
	Media (TV, newspaper, etc.)	Continuous
	Social Media	Continuous
	Website	Continuous
Business Partners (Consultants, subcontractors, suppliers, service providers, etc.)	Meetings	Case-basis
	E-mail	Case-basis
	Employment Policy Document	Continuous
	Code of Conduct	Continuous
	Health, Safety, Environment and Social Policy	Continuous
	Inspections / audits	Monthly
	Trainings	Continuous
	Work health and safety meetings	Monthly
	Worker grievance mechanism	Continuous
	Worker satisfaction surveys	Quarterly
	Project Information Hotline	Continuous
	Media (TV, newspaper, etc.)	Continuous
	Social media	Continuous
	Website	Continuous
Academics	Technical visits	Case-basis
	Media (TV, newspaper, etc.)	Continuous
	Website	Continuous
	Call Center	Continuous
	Project Information Hotline	Continuous

One of our communication tools is the grievance mechanism within the scope of stakeholder engagement. The grievance mechanism platforms are as following that are introduced to allow the Project affected stakeholders and other relevant stakeholders to share their complaints, questions, and opinions.

- Sharing the grievance forms with villagers
- Project Information Hotline
- Direct mail contact to the Project Office
- Submittal of questions and feedback in person through community liaison officers

You can contact us regarding your questions, feedbacks, and complaints about the Project via the form on www.1915canakkale.com website, info@1915canakkale.com e-mail address or Project hotline: 0850 281 44 88.

Community Level Assistance Program

CLAP's primary focus is to complement the compensation that has been or will be paid by KGM in accordance with Turkish legislation for lost land and assets and to enable households to continue or replace reduced livelihoods or adopt new ways of gaining a livelihood. Together with our Lead Implementation Partner Sustainable Rural and Urban Development Association (SÜRKAL), we started to implement this program as of May 2019 in 32 settlements identified as being located within the 500 m corridor (both sides of the centreline).

Four programs have been identified in the framework of Community Level Assistance Program. Main objectives of the programs are listed below:

Program 1 - Skills Development and Access to Markets

- To deliver capacity building and vocational trainings for all interested individuals in the target settlements.
- To encourage the vulnerable groups to participate in the Community Level Assistance Programs.
- To support the affected stakeholder groups (farmers, fishermen, etc.) to access different sources of livelihood.
- To deliver on job trainings and demonstrative applications for income generating activities.
- To provide trainings and support to rural enterprises, NGOs and related institutions.

Program 2 - Institutional Capacity Building

- To deliver capacity building trainings to existing organizations in target settlements.
- To renovate a number of secondary schools in the project area.

Program 3 - Natural Resource and Sustainable Energy Sources

- To provide trainings to communities and local institutions on efficient use of natural resources and their conservation.
- To disseminate the use of alternative energy sources whose environmental impact are lower.
- To design and implement an environmental awareness campaign and raising the environmental awareness.

Program 4 - Community health, safety, and wellbeing

- To raise environmental awareness on waste and their disposal at the settlements
- To inform the vulnerable groups, elderly, women, and youth regarding how to improve their health conditions.
- To promote all activities for overall wellbeing.

To shape the Community Level Assistance Program, a Community Needs Assessment (CNA) has been carried out in 2019 in 5 settlements of Gelibolu district and 4 settlements in Lapseki district via focus group meetings. A total of 191 people attended the meetings, 71 women and 120 men, in 9 settlements. The results of the assessment are carefully considered in creating the detailed implementation plans to make the most of the Community Level Assistance Program for the local people.

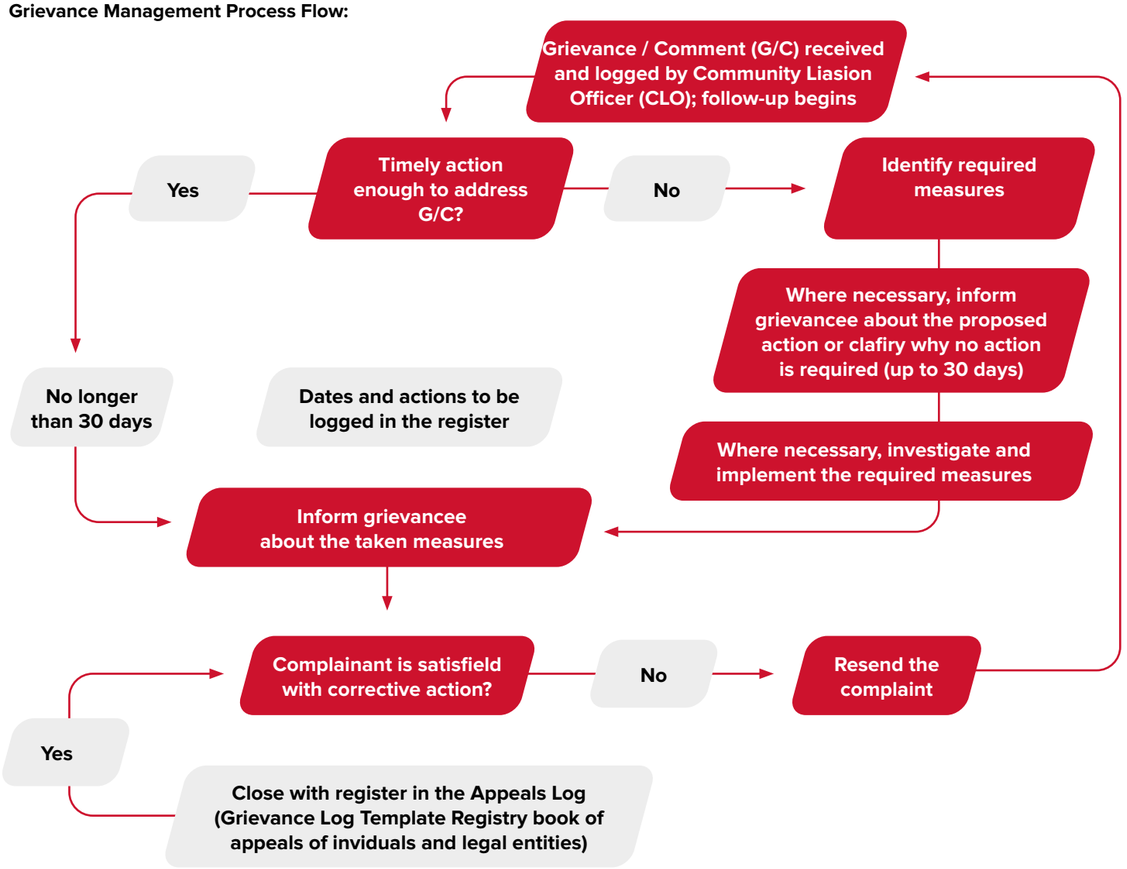
More details about the activities as part of the Community Level Assistance Program whose field implementation began in May 2019.

- Forage Crop Breeding Trainings were provided to increase the capacity of the households dealing with livestock breeding in the project area. 5 women and 150 men attended the trainings from 9 settlements and all attendees received the seed support. 6,000 kg of rye seeds were distributed and planted on an area of 1,203 decares in 155 households. Some plantings were checked in 2019 and seed production was found to be normal.
- 70 saplings were purchased to be planted by the river in Cevizli Village. During the planting of the saplings, the Project team carried out planting and conservation activities with the local people.
- In order to support the local agriculture, necessary agricultural equipment such as tomato crushing machine, pulveriser and feed grinder were provided to neighbouring villages of the Project. Project Committees were established in order to ensure the correct use of agricultural tools and equipment purchased for the common use of villages.
- Pest control trainings have been provided in order to prevent unwanted insects such as Mediterranean fruit fly and vinegar fly. 80 people attended these trainings in total. 182 apple vinegar and 159 traps have been distributed after the trainings.
- 322 water containers and pesticides were distributed to farmers.
- The Project team conducted research with Associate Professor Dr. Ufuk Coşgun on products and aromatic plant diversity. During the research, numerous interviews were made with villages and public institutions and a research report was prepared as a result of these interviews. An implementation plan has been prepared for 2020.
- A total of 14 producers were given beekeeping training, and after the training, beekeeping equipment was provided.
- A market assessment study has been done under the lead of Prof. Dr. Bülent Gülçubuk and a Market Assessment Report has been prepared in September 2019.
- It is planned to provide practical support to producers in addition to theoretical training in the fight against diseases that negatively affect fruit and vegetable growing activities.
- As part of the renovation works of Çimendere Primary School, the internal and external walls were repaired and painted, and the roof was repaired.
- The construction of the bus stop for students in Yülüce has started and the concrete floor has been completed. The stop construction is planned to be completed in the next reporting period.
- In order to support the fishing activities in the region, 600 packages (1,559.77 kg) of fishing net were purchased and delivered to 30 members of Gelibolu District Fisheries Cooperative in exchange of minutes.
- In Koruköy, an 800-meter-long water line has been opened for the producers dealing with agriculture and livestock to use the water resources in the field effectively and efficiently.

Community Engagement Activities

We value our relationship with local people, and we see them as our neighbours.
The feedback, complaints, comments, and requests are carefully noted and managed in accordance with the process. While evaluating the complaints, necessary actions are taken in line with the principles of fairness and transparency.

Grievance Management Process Flow:



Our community liaison officers organize various interviews and meetings with the villages in the Project area to effectively learn about the grievances.

Table of Community Engagement Activities

Community Engagement Activities	2018	2019
Number of Consultation Meetings with the Locals	220	300
Number of Women Gatherings	14	33
Percentage of Dealing with Public Complaints	99%	99%
Number of Complaints from Women	8	9
Number of Complaints from Men	61	122

Ethics Management

Due to the wide range of the Project impact area and involvement of numerous companies and employees in the 1915Çanakkale Bridge and Motorway Project, defining the Project's ethic values and code of conduct protocols is a necessity. The Project Code of Conduct aims to transfer the commitments covering the construction phase to workers and have them to recognize the important ethics subjects. The Project Code of Conduct is a sort of guidance in terms of properly fulfilling the responsibilities by respective persons in the Project and conserving the moral values.

The Project Code of Conduct that is applicable for all employees, subcontractors, and consultants of DLSY JV, is developed in line with IFC Performance Standard 2: Labour and Working Conditions, which outlines the requirements of working conditions and management of worker relationship, protecting the work force, occupational health and safety, workers engaged by third parties and supply chain. In this regard, the Project's Ethics Management is performed in line with an internationally accepted guideline. The Project Code of Conduct is revised if needed after the yearly review carried out under the responsibility of Human Resources and Administrative Affairs Department.

As part of the policy implementation, inappropriate acts are reported via the Worker Grievance Mechanism by the Project workers, and the process of complaint evaluation and penalty determination is conducted by taking Project Reward and Punishment Procedure as the basis.
1915Çanakkale Bridge and Motorway Project's Code of Conduct is applied with the principles below;

- Carrying out the Project activities in accordance with the legal framework
- Respecting the individual rights and cultural differences
- Honesty in establishing business relations
- Acting honest, respectful, and responsible in the exchange of ideas and opinions
- Avoiding any kind of abuse, bullying and disturbing behaviours
- Acting objectively and avoiding using the Project's name, corporate identity, reputation, and power for personal benefit
- Sharing the information consciously and avoiding using and share of confidential information and/or document
- Not giving and accepting gifts
- Complying the Project's Work Health and Safety principles
- Taking responsibility in the environmental activities of the Project
- Keeping the work environment respectful, health, safe and clean
- Good relations with the local people and avoiding any kind of activities that may cause disturbance

Within the scope of the Project, working and employment conditions are guaranteed with the Work Force, Working Conditions, and Occupational Health and Safety Policies within the Employment Policy Document. In this regard, the rules and principles have been defined, namely No Permission for Child Labour, Prevention of Forced Labour, Non-Discrimination and Equal Opportunity, Prioritization of Local Resource Use, Workers' Organizations, Wages, Benefits and Working Conditions, General Occupational Health and Safety Rules, Education and Continuous Awareness Opportunities, Worker Accommodation and Protection of Contractor Rights.

Human Resources Management

We work with the aim of creating value for the society by securing the rights of our employees with the Project Employment Policy. We believe that the first step of our Project's success is employee happiness. We aim to create a fair and equitable work environment where our employees can receive regular training, increase their skills and competencies, respect human rights, support equality of opportunity without discrimination. In the Project, where an objective and transparent approach is adopted throughout all human resources processes starting from recruitment, all employees are provided with equal opportunities, regardless of age, gender, belief, ethnic origin or any other personal characteristic, and practices that evoke discrimination or discrimination are not allowed.

2019 Field Employees Demographic*

Bridge

Company	Technical Personnel	Administrative Personnel	Blue-Collar	Subtotal
DLSY JV Employees	293	143	173	609
Subcontractors	237	273	1,261	1,771
Grand Total	530	416	1,434	2,380

Motorway

Company	Technical Personnel	Administrative Personnel	Blue-Collar	Subtotal
DLSY JV Employees	204	57	101	362
Subcontractors	205	117	1,566	1,888
Grand Total	409	174	1,667	2,250

2019 ÇOK A.Ş. Employee Demographics*

Department	Number of Employees
Management	4
Contract and Administration	10
Technical	7
Finance	7
Ankara Office	2
TOTAL	30

*Contains the data belonging to the reports prepared on a monthly basis as of 2019.

Employee Proportion In Different Categories*	
ÇOK A.Ş. Employees	
Female	32%
Male	68%
DLSY JV Employees	
Bridge	62%
Motorway	38%
Subcontracted Employees	
Bridge	36%
Motorway	64%
All Employees	
Local Employment	19%
Foreign Employees	3%
Female Employees	6%

*Calculated according to September, October, and November 2019 statistics.

The happiness of our employees was measured through the “Employee Satisfaction Survey” conducted in February, August, and November 2019. The project’s human resources management and opportunities offered to employees are reviewed according to the results of the survey. The survey conducted with a total of 841 employees and 42 subcontractors; It allows us to collect feedback from our employees on many different issues from the grievance mechanism to working conditions. According to the results of our 2019 Employee Satisfaction Survey, the rate of our employees who answered “Yes” to the relevant processes is shared via the table below.

	February 2019	August 2019	November 2019
Grievance Mechanism	88%	76%	81%
Payment and Working Hours	89%	89%	90%
Camp Sites and Catering	89%	65%	74%
Occupational Health and Safety Conditions	98%	90%	97%

Economic Impacts

Local Content Study

With the Project Employment Policy, we work with the aim of creating value for society by guaranteeing the rights of our employees. We aim to create a fair and egalitarian work environment where our employees can receive regular training, increase their skills and competencies, respect human rights, and support equality of opportunity without discrimination. In the Project, where an impartial and transparent approach is adopted throughout all human resources processes starting from recruitment, equal opportunities are offered to all employees regardless of age, gender, belief, ethnicity or any other personal characteristic, and practices that evoke discrimination or discrimination are not allowed.

Maritime Traffic Risk Assessment and Marine Pollution Prevention

Most of the work within the scope of the 1915Çanakale Project takes place at the sea. The comprehensive measures taken to carry out these studies in the intense maritime traffic of the Çanakkale Strait were determined as a result of a three-stage Maritime Traffic Risk Assessment Study in 2018. In this study, environmental and social risks that may arise from ship accidents are evaluated qualitatively and quantitatively. During the evaluation, commercial vessel traffic, navigation routes, fishing activities, navigation buoys, Turkish Straits Ship Traffic Management System, marine accident statistics and current level of risk, fuel leakage and fuel leakage emergency response issues were taken into consideration. In 2018 and 2019, the findings of the Maritime Traffic Risk Assessment were shared with the Port Authority, ferry operators and fishermen. In addition, our public relations experts have regularly informed the Lapseki, Çardak and Gelibolu Fishermen’s Cooperatives about the construction activities to be carried out at the sea. Regular communication activities with fishermen continue. Design proposals for the operation period are evaluated and included in the Project design, and administrative issues are included in the Operation and Maintenance Management Systems.

The Çanakkale Strait, which has heavy ship traffic, is kept under uninterrupted observation with digital systems by the Ship Traffic Services affiliated with the General Directorate of Çanakkale Coastal Safety. Information on the progress of the Project is exchanged through routine quarterly meetings with the Port Authority. We are working with a specialist company in order to make an emergency intervention against environmental pollution that will occur in a possible accident. In addition, a boat belonging to the Project and four personnel with the capacity to turn an area of 300 meters are on duty 24 hours a day to make the first response until the teams of the General Directorate of Coastal Safety arrive at the scene in case of any pollution.

Occupational Health and Safety

Occupational Health and Safety is one of our focal points both in terms of protecting the health of our employees and for the success of the activities carried out. Our Occupational Health and Safety approach is a vision that is important to apply in all fields of activity. On Occupational Health and Safety, we are constantly working to increase our performance by using management tools such as rules, procedures and plans as well as on-site audits and trainings. Some of the actions taken in 2019 under the responsibility of the Project Occupational Health and Safety Unit are given below:

- Planning the actions to be taken, HSE goals and work strategy.
- Monitoring the HSE performance.
- Developing processes to comply with the HSE rules and striving to minimize the likelihood of accidents.
- Ensuring that main contractors develop an HSE Management System in accordance with OHSAS 18001:2007.
- Ensuring that all persons involved in the Project are aware of the H&S requirements in line with IFC Standards and they are properly experienced, trained, inducted, and qualified for their duties prior to work.
- Emphasizing 'Safety First' philosophy in our Project at all stages.

2019 Occupational Health and Safety Performance Indicator:

	2018		2019	
Name of Indicator	**Bridge**	**Motorway**	**Bridge**	**Motorway**
Number of Fatalities	0	0	0	1
Number of Disabling Accidents	-	-	1	0
Number of Lost Time Incident	22	2	27	24
Lost time Incident Frequency Rate	6.76	2.87	2.74	4.07
Accident Frequency Rate	25.1	7.2	8.6	6.27
Number of Lost Workdays	196	8	165	180
Number of Rewards	-	-	251	31
Number of Penalties	-	-	429	129
Total Training Duration (employee-hour)	**60,430**		**56,790**	**38,684**

Various activities are carried out by our Occupational Health and Safety experts to prevent accidents and fatalities by improving occupational health and safety performance throughout the project. In this context, the capacity of the motorway section's Occupational Health and Safety Department has been significantly increased. Improvement actions addressing the accident that caused a fatality in 2019 have been rapidly implemented. In order to reduce the risks by avoiding the reverse manoeuvres that was the cause of the accident, the " Reverse Manoeuvre Avoidance Policy " was created in the Project and shared with all DLSY JV and subcontractors in both the Bridge and the Highway groups. The content of our OHS Trainings has been developed in this direction, and the awareness of our employees have been raised.

A gap analysis has been conducted in 2019 by assessing the responses of Project staff and field observations towards the seven main articles (Article 4 – 10) of the ISO 45001:2018 Occupational Health and Safety document. The recommendations identified as a result of the gap analysis are significant in establishing an Occupational Health and Safety Management System in the operations phase that is entirely compliant with ISO 45001:2018. It is seen that the Project strives to properly apply the Occupational Health and Safety Management System and the workers have satisfactory knowledge about the requirements of the system.

Archaeology and Cultural Heritage

The Project's impacts in relation to archaeology and cultural heritage were initially assessed during the ESIA period in compliance with the IFC Performance Standard 8. Sensitive areas were identified by this study. Following the ESIA period, archaeogeophysical studies were initiated and surveys of sensitive areas in European side were completed in 2018. Outcomes of these studies have been considered during the detailed design and a Cultural Heritage Management Plan was prepared. In order to ensure effective implementation of the measures indicated in The Management Plan, a site archaeologist was appointed in 2018. The studies have been carried out in collaboration and coordination with local museum directorates in the designated potential archaeological areas on the Project route that have been scanned by the archaeologists through walking each kilometre. All construction activities along the Project route have been carried out in coordination with Tekirdağ and Çanakkale Archaeology Museums. In addition, detailed trainings are provided to all employees and subcontractors responsible for excavation works on identifying archaeological structures that may be encountered as a result of underground excavations and taking the subsequent actions.

In 2019, the archeogeophysical evaluation studies of 15 registered and unregistered areas in the European and Asian sides of the Project were completed. Our cultural heritage has been secured by establishing regular communication with the Archaeology Museums in case of a new archaeologic findings.

As a result of the excavations carried out in the registered area named Gelibolu Field – 5, a bowl in a grave from the Late Roman period (5th -6th centuries) and 43 graves that have 3 grave goods and considered to belong to Late Byzantine era. Anthropological studies have also provided unique information in terms of learning the age of death, gender proportion, dietary habits, and pathological diseases of the remains in the graves.

Furthermore, architectural structures belonging to the 16th - 17th centuries Ottoman Period were found in the area, which had not been used as a cemetery in the following periods.

All archaeological works were carried out under the supervision of Archaeological Museums, and the construction works continued under the expertise of local archaeological museums without harming the archaeological findings found in the registered area of approximately 1,000 m2. Within the scope of our Project activities, we will continue to support bringing the archaeological richness of our country to day light with the awareness of responsible approach towards our archaeological culture and heritage.

ÇOK A.Ş.
Çanakkale Otoyolu ve Köprüsü Inşaat Yatırım ve Işletme A.Ş.

Head Office
Mustafa Kemal Mahallesi 2118 Caddesi No 4A/155 Çankaya 06530 Ankara, TR
T +90 312 222 1915
F +90 312 215 1915

Branch Office
Büyükdere Caddesi Yapı Kredi Plaza B Blok, Kat 12, Daire 30 Levent 34330 Istanbul, TR
T +90 212 270 4766
F +90 212 278 2309

1915canakkale.com

January 2021

Report Consultancy
KPMG Turkey Sustainability Team
www.kpmg.com.tr

1915 ÇANAKKALE

1915canakkale.com

KGM

TEKFEN MÜHENDİSLİK

engineering

DAELIM

Limak

SK E&C

yapı merkezi