

# *Caring Together for Nature and Society*

2018

ANNUAL ENVIRONMENTAL

AND SOCIAL REPORT



1915ÇANAKKALE  
BRIDGE AND MOTORWAY PROJECT  
*2018*  
ANNUAL ENVIRONMENTAL  
AND SOCIAL REPORT

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# About the Report

Through the disclosure of this report, we are pleased to present our environmental and social management approach, performance and future targets to the views of our stakeholders. Our target is to share 1915Çanakkale Bridge and Motorway Project's environmental and social performance on annual basis and inform our stakeholders in an accurate, comprehensive, understandable and transparent manner.

We prepared this report for the period between 01.01.2018 – 31.12.2018, regarding environmental and social aspects, indicators and activities in relation to expectations of stakeholders. In circumstances which the data are available for a different time period, indication is provided in the relevant section.

Committed to enhancing our environmental and social performance every year within the context of continuous improvement and to share the results with our stakeholders by means of our report. In this regard, we disclosed the PDF version of our report to our stakeholders at: [1915canakkale.com](http://1915canakkale.com).

We deeply value the feedback of our stakeholders which is of great importance in terms of improving our environmental and social performance and reporting it. Please contact us via e-mail [info@1915canakkale.com](mailto:info@1915canakkale.com) for suggestions, complaints and any kind of feedback.

# CEO's Message



Our Esteemed Stakeholders,

As we successfully carry out the works for the construction and operation of 1915Çanakkale Bridge and Motorway, we are fully aware that one of our primary commitments as Çanakkale Otoyol ve Köprüsü İnşaat Yatırım ve İşletme A.Ş. (the "ÇOK A.Ş.") to the community is to ensure that each operation is conducted in a manner consistent with our environmental and social responsibilities. In this respect, we assign priority to the environmental and social requirements throughout the implementation of 1915Çanakkale Bridge and Motorway Project.

The beginning of our journey was marked with the approval of the Environmental Impact Assessment (EIA) Report prepared in compliance with the national legislation. As an environmentally and socially conscious corporation, environmental and social impacts of the Project and associated mitigation measures were further evaluated through the Environmental and Social Impact Assessment ("ESIA") study in line with international standards.

We know that participation of our stakeholders in the ESIA study is a key to success. Accordingly, during our public consultation period in January 2018, we tried to reach all our stakeholders and held several meetings with them since we aim to manage and accommodate their expectations to the maximum possible extent. We have established our environmental and social management system based on the findings of this study and laid the foundations of our Project's environmental and social culture. The backbone of our strategy is to prevent any contingent negative environmental and social impacts and become a good neighbour

to the local community. In order to fulfil these objectives, our future initiatives will focus on the continuous improvement of our environmental and social performance through the implementation of the best possible practices.

With the publication of our first annual environmental and social performance report, we aim to share, in a transparent and accurate manner, how we exactly approach and manage the Project's environmental and social impacts. In this report, we explain our environmental and social management system established in 2018 and provide detailed information on the specific practices we have carried out to attain the highest level of environmental and social standards for the Project. We believe in the importance of explaining these practices to 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 communication channels continually open and 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

# About the Company



Çanakkale Motorway Bridge Construction Investment Management Inc. (ÇOK A.Ş.) was established in 2017 for the specific purpose of actualizing the Malkara-Çanakkale Motorway Project (including the 1915Çanakkale Bridge). Yapı Merkezi and Limak from Turkey, Daelim and SK E&C from South Korea are the four partners of ÇOK A.Ş. Yapı Merkezi (since 1965) and Limak (since 1976) have been among Turkey's foremost construction companies with a remarkable portfolio of many national and international large-scale construction projects. Likewise, Daelim (since 1939) and SK E&C (since 1977) have been among South Korea's foremost construction companies undertaking large-scale construction projects there. These four companies are currently collaborating on the 1915Çanakkale Bridge and Motorway Project which is going to be one of Turkey's world-renowned masterpieces of engineering when completed.

The Project consists of the 1915Çanakkale Bridge and the motorway sections which require different expertise. Therefore, two separate organization sub-structures are planned under DLSY JV, the EPC (Engineering, Procurement, Construction) Contractor formed of the same four above-mentioned firms of ÇOK A.Ş. for the effective management of the Project.

**About DAELIM****DAELIM**

Daelim Group is one of Korea's largest enterprise groups having been founded in 1939 with 13 affiliates covering construction, power generation, trading, logistics, manufacturing and leisure. Daelim Industrial Co. Ltd. is one of the main affiliates of Daelim Group and a global EPC contractor and petrochemicals company. Daelim has an asset portfolio of USD 18 bn with large scale projects being implemented in 35 countries worldwide. Daelim was ranked 67<sup>th</sup> in the Top International Contractors ENR Ranking in 2018.

Daelim is a bridge expert with a successful track record, having implemented five suspension bridges and 11 cable-stayed bridges. Daelim's suspension bridges include the Yi Sun-sin Bridge in Yeosu/Gwangyang in October 2012 being the largest suspension bridge in South Korea and fifth longest suspension bridge globally.

**About LIMAK**

Limak, which was established in 1976 as a construction company, has become one of the leading Turkish conglomerates operating in the construction, energy, infrastructure, cement and tourism sectors both in Turkey and abroad. Limak's commercial activities include construction, electricity power generation and distribution, cement production, airport & seaport operations and it was ranked 68<sup>th</sup> in the top International Contractors according to ENR Ranking in 2018, reflecting the quality and scale of its EPC contracts (including contracts for mega projects such as Istanbul Grand Airport with over 4.3 B USD contract value). Limak İnşaat is the principle operating entity of the Limak Group.

Limak is a proven track record in the region and has demonstrated efficient contract management, strong negotiation with governing authorities, best practice construction quality with early completion and realizing value from investee companies by implementing enhanced management techniques, increased efficiencies and quick turnarounds. Limak is successfully completing Istanbul Sabiha Gökçen Airport PPP, which will be one of the largest airports in the world. In addition to this, Limak is the sole contractor for the Kuwait International Airport Project.

**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 57<sup>th</sup> 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 Bosphorus Bridge) project (as EPC contractor).

**About YAPI MERKEZİ**

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 PPPs. 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 82<sup>nd</sup> in the top International Contractors ENR Ranking in 2018.

Over the years Yapı Merkezi has demonstrated an ability and capacity to build mega construction projects earlier than scheduled, in 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 Subsea Tunnel (along with SK E&C). It has strong relationships with many international finance institutions.

## About the Project



**1915Çanakkale Bridge and Malkara – Çanakkale Motorway is a reliable, modern transportation infrastructure that adds economic and social value to Turkey thanks to its accessibility, high freight and passenger capacity; through the reduced travel times, increased road safety and integration of the national motorway network.**

1915Çanakkale Bridge Project is now counted among the world's few select projects with its diverse financing structure.

Having received loans from 25 banks and financial institutions in 10 different countries, 1915Çanakkale Project won to date, 11 global finance awards from some of the world's most esteemed organizations.

Selected by **Project Finance International PFI** as the **"Turkish Deal of the Year"** in London on the 6th of February 2019, 1915Çanakkale Project won the **"Project and Infrastructure Finance Deal of the Year Award"** at the **IFN Awards** organized by the Islamic Finance News (IFN) on the 10th of March in Dubai.

Again in London, in the award ceremony organized by **IJGlobal** on the 21st of March, the project was announced to be the winner of the **"Europe Road Deal of the Year Award"** and also won the **"Project Finance Deal of The Year"** and the **"Infrastructure Finance Deal of the Year"** awards at Turkey's so-called finance Oscars, the **"2019 Turkey Bonds & Loans Awards"**.



Selected as the **"Best EMEA ECA - Backed Deal of the Year"** at the Proximo Finance Awards realized in Lisbon on the 31st of May, 1915Çanakkale project finally received five awards at the EMEA Project Finance Awards held in June in London, including the **"Best**

**Project Finance Deal"** and the **"Best Public Private Sector Partnership Project Deal"** of Central and Eastern Europe; the **"Best Project Finance Deal"**, the **"Best Road Deal"** and the **"Best Syndicated Loan of the Year"** of the EMA region.



**88 km**

TOTAL PROJECT LENGTH

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 Vision 2023 Master Plan, the statement of Turkey's push for national development.

**4608 m**

BRIDGE LENGTH

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-İzmir Motorway.

**2023 m**

CENTRAL SPAN OF THE BRIDGE

A new alternative to the Bosphorus passage.

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

**4**

NUMBER OF VIADUCTS

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.

**12**

NUMBER OF JUNCTIONS

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-İzmir Motorway near the city of Balıkesir will shorten the distance from tourism centers such as İzmir, Aydın and Antalya to the European countries, thus booming the tourism industry.

**4**

NUMBER OF SERVICE AREAS

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.

**318 m**

BRIDGE TOWER HEIGHT

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.

**7**

NUMBER OF TOLL PLAZA

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

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

# Environmental and Social Performance Management



**Change Management (CM)** sets out how the environmental and social implications of the design and construction methodology development will be assessed. The assessment of these aspects will aim to ensure that adequate mitigation is adopted to minimise and avoid effects where any deviations to the scheme described in the ESIA are proposed.

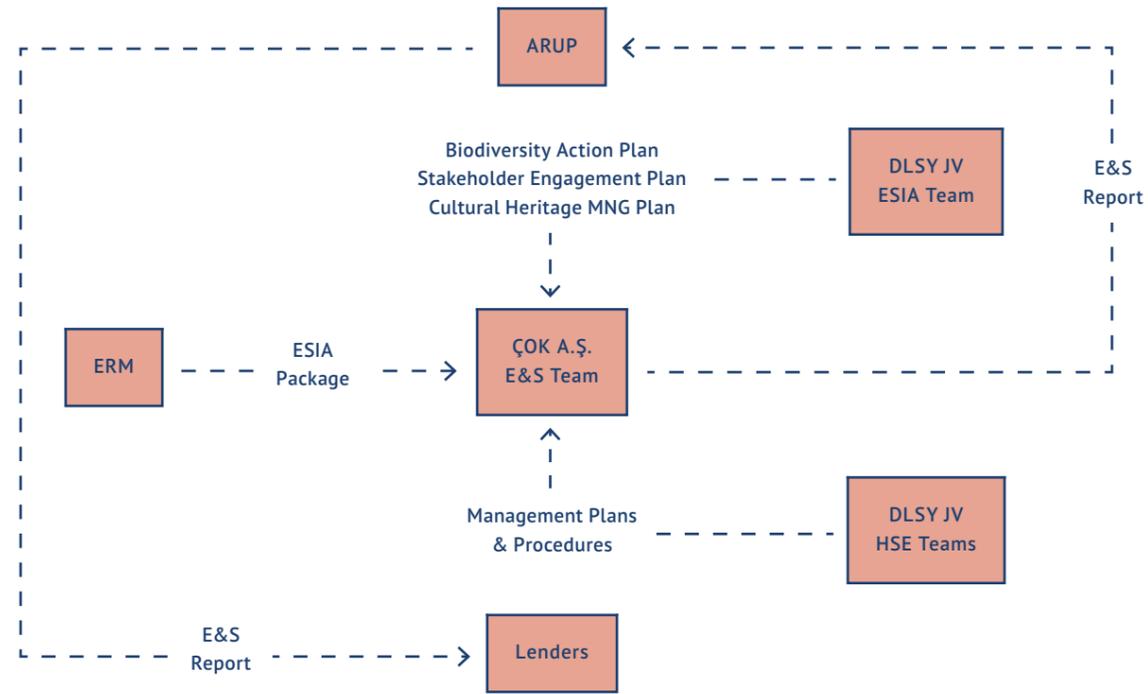
Environmental and social awareness is one of our core values in the 1915Çanakkale Bridge and Motorway Project. As a result of our sensitive approach towards the environmental and social risks and impacts, 1915Çanakkale Bridge and Motorway Project was further evaluated following the approval of the local 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. Then, a public consultation process was carried out in 31 locations (villages and districts in Gelibolu, Lapseki and Malkara) for 30 days with the attendance of approximate total of 1000 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.

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. We are committed to take all the actions indicated in this plan in a timely and effective manner and to improve the overall environmental and social awareness of the Project. This is why we prepared a Health, Safety, Security, Social

and Environmental Policy including the main practices, requirements and commitments to be followed by all employees of 1915Çanakkale Bridge and Motorway Project.

Our E&S Team’s approach on Environmental and Social Management can be summarized with the Lead-Help-Check principle:

- Lead HSE teams on-site to comply with Lenders’ international standards by developing an effective Environmental and Social Management System and manage specific activities and programs in relation to Project’s environmental and social requirements such as Community Level Assistance Program, archaeology, biodiversity, stakeholder engagement together with the on-site ESIA team (ecologist, archaeologist, 2 community liaison officers)
- Help HSE teams on-site with their E&S operations by providing appropriate tools, sources and guidance
- Check HSE teams on-site in relation to implementation of the Project’s environmental and social requirements



During this reporting period, our environmental and social performance was monitored by ARUP via bi-monthly site visits, E&S Reports and regular communication activities. Our Project continues to be in compliance with the Environmental and Social Requirements in all material aspects.



# *Environmental Performance Management*

*For our Common Future*

## ***Nature First***

**318**

*environmental*

*trainings,*

**3043**

*man-hours in*

**2018**

**Water Management**

Çanakkale Strait, lakes, streams, irrigation systems, municipal water pipelines and groundwater resources in the Project area were evaluated in accordance with the IFC Performance Standard 3 regarding baseline and impact assessment purposes during the ESIA period. It is estimated that many impacts from the construction of the 1915Çanakkale Bridge are temporary or considered short or medium-term impacts. However, specific mitigation measures were suggested in relation to increased vessel presence, non-routine events during construction and specific construction activities with higher risks in order to keep our impact insignificant.

Motorway construction’s impact on lakes, streams, irrigation systems, municipal water pipelines and groundwater resources in the Project area were also evaluated in terms of baseline and impact assessment purposes during the ESIA period. The entire Project route is situated within the Marmara Watershed, which is the 9th largest watershed in Turkey with a precipitation area of 24,100 km<sup>2</sup> that comprises 3.1 % of the total precipitation area of all 25 watersheds. The pollution sources in the Marmara Watershed include industrial, domestic and agricultural, as well as from shipping activities. Project Area in particular, suffers pollution from untreated municipal sewage, industrial and mining wastewaters and low flow rate due to extensive irrigation/over-irrigation. It is estimated that the impact of the construction of the Motorway will be adverse for the freshwater environment due to the blockage and diversion of streams, river and irrigation channel crossings. However, residual effects of the Motorway (after mitigation is applied), are expected to be minor to negligible for the freshwater environment. The results of the

assessment indicate that no water body is likely to suffer permanent major adverse impacts if all mitigation measures will be applied.

*For further information on 1915Çanakkale Bridge and Motorway Project’s freshwater and marine water- related impacts, please see our environmental and social impact assessment report disclosed in the project website [1915canakkale.com](http://1915canakkale.com)*

Mitigation measures implemented on-site include but not limited to:

- Drainage from excavations will be collected and settled to remove suspended materials prior to discharge in accordance with required permits.
- Sensitive areas of rivers and drains (such as streambeds) 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.
- All drainage structures (culverts, sediment basins, catch drains etc.) will be designed to prevent uncontrolled wastewater discharge to surface watercourses or agricultural land.
- Treated wastewater will be reused where possible (in firefighting, in water trucks for dust mitigation and concrete applications etc.).
- Construction equipment will be cleaned far from the surface water resources.
- Wastewater will be discharged in compliance with the national and international requirements of the Project.

- Fuelling activities will not take place within excavation-sites. Where heavy equipment cannot be moved to appropriate fuelling points, impervious surface (such as drip-trays) will be used to prevent accidental releases to groundwater aquifers.
- The use of groundwater resources will be subject to DSI approval.

Our Project’s main water consumption areas are summarized as follows:

- Toilets, catering and washing
- Tool cleaning on-site
- Concrete applications
- Water trucks and tire washing

In order to monitor our performance on efficient water use accurately, construction activity will be taken into consideration and water consumption and wastewater discharge data will be divided by man-hours worked during the reporting period. Municipal water consumption and wastewater discharge during the March 2018 – February 2019 period is provided in the Table below:

MONITORING INDICATOR	BRIDGE	MOTORWAY
	m <sup>3</sup> /Man-hour	m <sup>3</sup> /Man-hour
Municipal Water Consumption	0,059	0,015
Groundwater Consumption*	N/A	N/A
Wastewater Discharge	0,083	0,014

\*This data will be reported in the next Environmental and Social Performance Report.

We target 5% reduction in water consumption for the next reporting period. In this regard, targets for the next reporting period are determined based on the water consumption data of this reporting period and the 5% reduction goal. Since this is our first report, target achievement and performance evaluation will be reported in the next Environmental and Social Performance Report.

**Our Plans for 2019**

- In 2019, Drainage Design Study will be conducted for mitigating the environmental impacts which may occur during operation phase in relation to water.
- Quarterly water quality monitoring activities.

**Energy Monitoring and GHG Emissions**

**Energy Monitoring**

Mitigation measures implemented on-site include but not limited to:

- Drivers will keep bills and transmit them to DLSY JV in case of fuel purchase from outside of construction-site.
- Equipment fuel consumption will be tracked.
- The engines of vehicles and equipment will be switched off if not operated.
- Energy consumption will be tracked by bills.
- Photo cells will be used wherever appropriate as much as possible.
- When applicable, energy saving equipment will be preferred.

1915Çanakkale Bridge and Motorway Project's resource and energy consumption data will be monitored and internally reported

throughout the construction period on a quarterly basis, starting from the beginning of 2019. In order to monitor our performance accurately, construction activity will be taken into consideration and resource and energy consumption data will be divided by man-hours during the reporting period. Diesel, natural gas and electricity consumption during the March 2018 – February 2019 period is provided in the Table below:

Resource conservation and efficiency target of 2019 is determined as 5 %. In this regard, 2019 targets are determined based on the resource consumption data of 2018 and the additional 5 % reduction rate. Target achievement and performance evaluation of 2019 will be reported in the next Environmental and Social Performance Report.

MONITORING INDICATOR	BRIDGE	MOTORWAY
	CONSUMPTION / MAN-HOUR	CONSUMPTION / MAN-HOUR
Diesel	0,090	0,202
Natural Gas	0,068	0,257
Electricity	0,685	0,458

**GHG Emissions Assessment Studies**

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. GHG emissions were calculated for 5.5 years of construction period. During this process, data from previous studies, public sources and

Project plans are used where available. 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. Key GHG emissions sources related to construction phase are determined as follows:

- **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.

Table provided below includes the calculation results.

SCOPE	EMISSION SOURCES	ESIA PERIOD (tCO <sub>2</sub> e)
		BRIDGE & MOTORWAY
Scope 1	Diesel	50,000
	Diesel (Hauling)	100,000
	Production of Asphalt and Concrete	300,000
	Natural Gas	-
<b>Subtotal</b>		<b>450,000</b>
Scope 2	Electricity	5,000
<b>Subtotal</b>		<b>5,000</b>
Scope 2	Cement	-
	Steel	130,000
	Aggregate and Admixture	-
<b>Subtotal</b>		<b>130,000</b>
<b>Total (Scope 1, 2, 3)</b>		<b>585,000</b>
<b>Total (Scope 1, 2)</b>		<b>455,000</b>
<b>Total (Scope 1, 2) – Annual Average</b>		<b>80,000</b>

As the annual average of Scope 1 and Scope 2 emissions do not exceed 100,000 tCO<sub>2</sub>e threshold of Equator Principles, no alternative analysis is required.

In 2019, after completion of the first year of construction, another study will be conducted to update the GHG assessment for the construction phase, replacing the original assumptions made in ESIA with data collected on-site during the first year of the construction or updating assumptions with new design information.

**Waste Management**

Impacts of 1915Çanakkale Bridge and Motorway Project on resources and waste were determined during the Environmental and Social Impact Assessment (ESIA) period in accordance with the IFC Performance Standard 3. Key aspects such as extraction of raw materials and resources in the Project area, disposal of bulk materials, transport of materials and wastes, disposal of construction waste and routine waste of the operations were assessed. Although site-specific impact assessment was not feasible at the time of the ESIA study, magnitude of potential impacts was estimated as negligible or small when effective implementation of mitigation measures in relation to waste management are applied.

- **WASTE AVOIDANCE** Minimising the amount of material that needs to be generated and managed in the first place.
- **RE-USE ON-SITE** Where possible, the re-use of excavated materials within the Project site is to be maximised. 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 minimises the Project footprint.
- **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. This includes finding sites that are approved by the relevant planning consent authorities (e.g. local council) to accept the specific wastes.
- **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 will be disposed to authorized (licensed by the designated government authority) locations and facilities only.
- Waste generation will be reduced whenever practicable.
- Materials will be purchased in bulk or in reusable/returnable containers to minimize packaging waste or empty waste containers.
- Leaks and spills will be minimized.
- Non-hazardous or less hazardous material alternatives will be preferred where available.
- Materials will be reused whenever practicable.
- Good housekeeping practices will be implemented.
- Wastes will be stored properly.
- All wastes (wood, steel, plastics, and paper) will be segregated. Hazardous, non-hazardous and recyclable materials will not be mixed for disposal or treatment.
- In cases where there is a risk of leakage of materials, including contaminated rainwater run-off, waste containers will be placed in secondary containment.

Waste types to be generated during the construction phase are determined as follows:

- Domestic Waste
- Excavation & Demolition Waste
- Packaging Waste
- Waste Oil
- Waste Batteries
- Hazardous Waste
- Medical Waste

In order to monitor our waste management performance accurately, construction activity will be taken into consideration and waste generation data will be divided by man-hours worked during the reporting period. Waste generation during the March 2018 – February 2019 period is provided in the Table below:

MONITORING INDICATOR	BRIDGE		MOTORWAY	
	kg	kg/ man-hour	kg	kg/ man-hour
Packaging Waste	80,212	0,017	14,176	0,019
Domestic Waste	1,035,580	0,230	416,640	0,550
Metal Waste	1,331,390	0,296	7,640	0,010
Medical Waste	90	-	22	-

*For further information on 1915Çanakkale Bridge and Motorway Project's waste generation-related impacts, please see our Environmental and Social Impact Assessment Report disclosed in the project website [1915canakkale.com](http://1915canakkale.com)*

### 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. In addition to noise impact regarding the construction period, operation phase was evaluated as well. A noise model was constructed with 52 receptors to predict the noise in relation to operation phase.

Following the studies conducted during the ESIA, in December 2018 additional noise baseline survey studies were carried out. Nine additional baseline measurements were conducted by AECOM ensure a representative data set. Obtained data are being used by the HSE departments regarding regular noise monitoring activities. Noise management process of the Project is compliant with the National Legislation and IFC Standards.

In 2019, Supplemental Noise Assessment studies will be conducted in relation to operation phase of the Project.

### Biodiversity Conservation

Biodiversity impacts of the 1915Çanakkale Bridge and Motorway 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. Definitions of the groups are explained below:

- **TERRESTRIAL ECOLOGY** The area of influence is defined as the 1000 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.

Protecting biodiversity is of great importance in 1915Çanakkale Bridge and Motorway Project and we are committed to minimize our biodiversity impacts by the implementation of best practices (avoid, mitigate, manage, monitor) developed in line with mitigation hierarchy. We are pleased to share the biodiversity conservation practices implemented during this reporting period and we will continue to mitigate our biodiversity impacts by carrying out the activities indicated in BAP.





**2 hours 11 minutes**  
**total downtime to protect**  
**marine mammals**



#### Marine Mammal Observation

Between March and November 2018, pile driving works took place in two zones in Çanakkale Strait. Since the main negative impact of this activity on marine mammals was determined as disturbance through underwater noise, Passive Acoustic Monitoring and Marine Mammal Observation works were conducted during the pile driving operations. Following practices in line with international standards and best industry practices were implemented during the mitigation works:

- An Exclusion Zone of 500 m horizontal radius from centre of the acoustic source was established.
- In cases which mammals were seen within the 500 m Exclusion Zone, operations were halted until the mammal left the Exclusion Zone.
- Soft start method was implemented to periodically increase the impact of hammer intensity over the course of a single pile installation.
- 30 minutes pre-watch/listen practice was implemented prior to initiation of pile driving operations.

#### Key Facts

- 43 sightings and 9 acoustic detections
- 7 sightings within the 500 m Exclusion Zone
- 2 hours 11 minutes total downtime caused by marine mammals
- Approximately 200 marine mammals (Tursiops truncatus and unidentified delphinid species)

We took the Best Practice approach by employing trained and educated observers to conduct marine mammals' visual and acoustic monitoring, based on accepted JNCC (Joint Nature Conservation Committee) and ACCOBAMS (The Agreement on the Conservation of Cetaceans in the Black Sea, Mediterranean Sea and contiguous Atlantic area) mitigation protocols. Construction activities were completed in full compliance with BAP requirements.



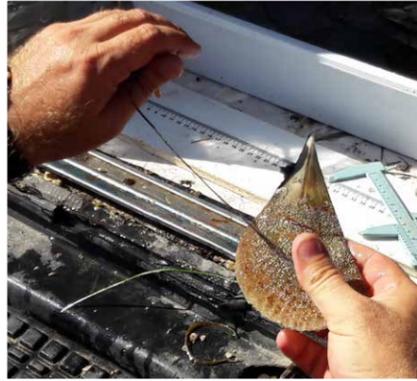
**Change Management** Pile driving operations were carried out with different timing and different equipment than the descriptions provided in the ESIA Report. Since the impacts deriving from night time piling and pile driving hammer with different noise sensitivity were not included in ESIA, in addition to daytime visual observation activities conducted by the Marine Mammal Observers, night-time acoustic monitoring activities were conducted via Passive Acoustic Monitoring equipment to mitigate the additional impacts.

**Transplantation of *Pinna Nobilis***

*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. In order to mitigate our impact on this species living in Çanakkale Strait, Transplantation study was carried out together with Çanakkale Onsekiz Mart University Underwater Research and Application Centre between July and August 2018. Following practices were implemented during the mitigation works:

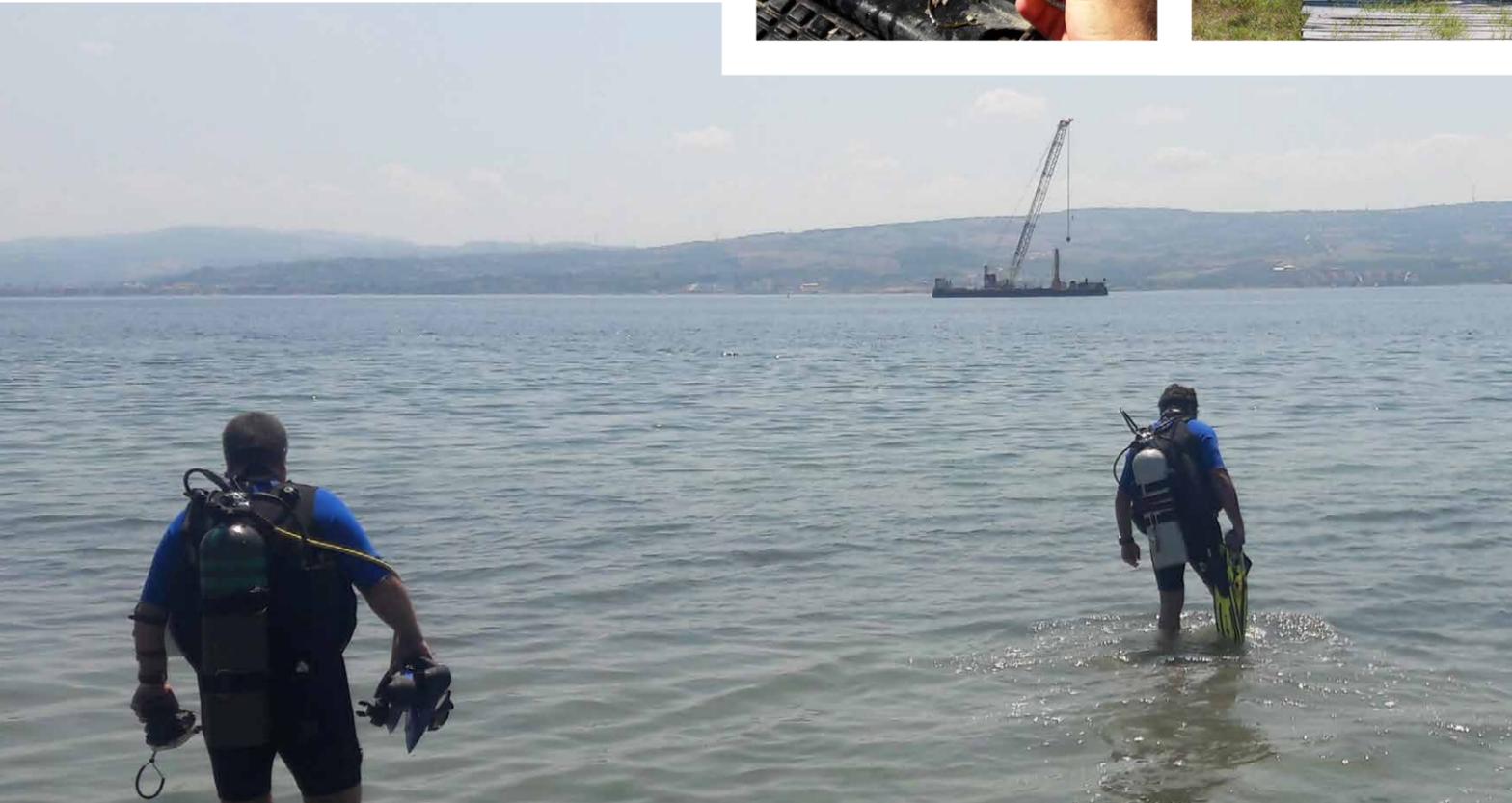
- Preliminary study was conducted in three different locations (in relation to dredging and reclamation activities) to determine the distribution areas of *Pinna nobilis* individuals.
- Sediment and water samples were taken from the dredging, reclamation and potential transplantation areas.

- Water and sediment samples were evaluated, and suitable transplantation areas were determined.
- *Pinna nobilis* individuals were collected and measured prior to re-planting.
- Collected individuals were transferred to safe areas and planted alive to their new habitats.
- 1 month after the transplantation, monitoring activities were carried out and it was observed that *Pinna nobilis* individuals were alive and adapted to their new habitat.



We collaborated with experts and academicians from a local institution, Çanakkale Onsekiz Mart University Underwater Research and Application Centre to mitigate our impacts on *Pinna nobilis* species and successfully implemented the requirements of BAP. In 2019, we will have another monitoring session to make observations on the transplanted individuals.

**1054**  
***Pinna nobilis***  
**individuals were**  
**transplanted.**





**Bird Surveys**

Biodiversity baseline studies were carried out during the ESIA period. Impacts of 1915Çanakkale Bridge and Motorway Project on bird species were determined except for the impacts on Yelkouan Shearwater (*Puffinus yelkouan*), 2 goose species (*Anser erythropus* and *Branta ruficollis*) and Collared Pratincole (*Glareola pratincola*) due to seasonal constraints. Sensitivity levels of species (within the scope of ESIA) were classified between low to medium and further studies were recommended for the bird species indicated above.



In February - March 2018, we carried out an additional bird survey study regarding goose species and Yelkouan Shearwater in order to determine our Project's impact. Observations related to two goose species were made in Saros Bay IBA, which is their roosting and foraging habitat. Their presence in our Project's footprint area (and 500 meters to 2 km buffer zone) that overlaps with the Saros Bay IBA was investigated. None of these two species were observed during the field surveys. Observations related to Yelkouan Shearwater were made in Çanakkale Strait, which is their migration area. Our Project's risk on these species was regarding the elevated structures which are directly related with their flight altitude. It was seen from the study that altitude bands differ between 2 to 20 meters depending on the weather conditions but both bands do not offer any risk related to the height of the Bridge.

In June - July 2018, we carried another additional bird survey study regarding Collared Pratincole in order to determine our Project's impact. Observations related to Collared Pratincole were made in Saros Bay IBA, which is their breeding area. It was seen from the study that the distance between the closest breeding area and the motorway was more than 3,5 km which is why no negative impact is expected in relation to our Project.

**Key Facts**

- Yelkouan Shearwater and goose species are Vulnerable according to IUCN
- Collared Pratincole is Least Concern according to IUCN
- Over 3500 Yelkouan Shearwater individuals observed
- Over 100 Collared Pratincole individuals observed



**Over 3500**  
**Yelkouan Shearwater**  
**individuals observed.**

**Our Plans for 2019**

- Seeds of restricted range distribution flora (*Rorippa thracica*, *Ferulago confuse*, *Thymus atticus*) to be collected
- Afforestation studies to be initiated
- Monitoring dives regarding *Pinna nobilis* transplantation to be made

# *Social Performance Management*

*For our Common Welfare*

***Society First***



**Stakeholder Engagement**

Healthy and efficient communication with stakeholders is essential for 1915Çanakkale Bridge and Motorway Project. We have a wide range of stakeholder groups which we engage through various channels. 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.

For a formal period of 30-days, the Public Consultation process for the 1915Çanakkale Bridge and Motorway Project has targeted individuals and institutions that felt impacted by the Project at all levels. In summary, the process comprised extensive field activities along the route where the disclosed draft Environmental and Social Impact Assessment (ESIA) and associated documents were shared with stakeholders and were subject to public comment for 30 days. During this process, invitation letters were sent to 68 NGOs and approximately 1000 individuals attended the events. Feedback and comments received via this process are evaluated and taken into

consideration during the finalization of the Environmental and Social Impact Assessment studies which include Stakeholder Engagement Plan (SEP).

Our Stakeholder Engagement Plan:

- Gives insight into the Project documents and the way to acquire them to the directly effected population, other interested stakeholders and the community,
- Describes the Public Consultation Process which enabled Project Affected Persons and other stakeholders (NGOs, etc.) to provide comments and express concerns,
- Explains how these comments were addressed within the finalization of the ESIA Report,
- Provides detailed information on our grievance mechanism.

As our SEP is a living document, we will update and make it available for public as the Project progresses through the various stages of development. Presented below, you can find our engagement platforms and frequencies:



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

STAKEHOLDERS	PLATFORM OF DIALOGUE	FREQUENCY OF DIALOGUE
Project Employees (ÇOK A.Ş., DLSY JV)	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
	H&S, Security, Environmental and Social 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.)
Media (TV, newspaper, etc.)		Continuous
Social media		Continuous
Website		Continuous
Call Center		Continuous
Ethics Hotline		Continuous
Local People (including PAPs)	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
	Ethics Hotline	Continuous
	Community grievance mechanism	Continuous

STAKEHOLDERS	PLATFORM OF DIALOGUE	FREQUENCY OF DIALOGUE	
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	
	Ethics 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	
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		

We publicly disclosed the Public Consultation Report and Stakeholder Engagement Plan on our Project website, please visit for further information.  
[1915canakkale.com](http://1915canakkale.com)

STAKEHOLDERS	PLATFORM OF DIALOGUE	FREQUENCY OF DIALOGUE
Business Partners (Consultants, subcontractors, suppliers, service providers, etc.)	Meetings	Case-basis
	E-mail	Case-basis
	Employment Policy Document	Continuous
	Code of Conduct	Continuous
	H&S, Security, Environmental and Social Policy	Continuous
	Inspections / audits	Daily / Monthly
	Trainings	Continuous
	Work health and safety meetings	Monthly
	Worker grievance mechanism	Continuous
	Worker satisfaction surveys	Quarterly
	Ethics Hotline	Continuous
	Media (TV, newspaper, etc.)	Continuous
	Social media	Continuous
Website	Continuous	
Academics	Technical Visits	Case-basis
	Media (TV, newspaper, etc.)	Continuous
	Social media	Continuous
	Website	Continuous
	Call Center	Continuous
	Ethics Hotline	Continuous

It is important for us to form good and healthy relations with the local people. Therefore, a grievance mechanism in line with International Good Practice is being implemented in our Project. By the effective use of this mechanism, PAPs and other interested stakeholders can submit their complaints, questions or comments in relation to the Project. Following options are made available for PAPs and other stakeholders for submitting grievances:

- Grievance forms for villages
- Project hotline
- Direct mail contact to ÇOK A.Ş. office.
- Submittal in person through Community Liaison Officers (CLOs)

Further information on grievances and engagement methods with locals are provided in Community Engagement Activities section of this report.

### 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 SURKAL, we will implement this program in 32 settlements identified as being located within the 500 m corridor (both sides of the centreline).

Four programs designed for CLAP and their main purposes are provided 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 ensure the attendance of vulnerable groups to CLAP Programmes
- To provide input support especially for Project affected farmers, women and fishermen obtaining alternative livelihood opportunities
- To deliver on job trainings and demonstrative applications for income generating activities
- To provide trainings and support to rural enterprises, NGO's 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 deliver trainings to communities and local institutions on efficient use of natural resources
- To disseminate the use of alternative energy sources
- To design and implement an environmental awareness campaign

#### PROGRAM 4 Community health, safety and wellbeing

- To raise awareness on waste and sanitation in target settlements
- To give support to vulnerable groups, the elderly, women and youth for improvement of health conditions
- To promote activities for overall wellbeing

In addition to the programs given above, we will undertake quick impact projects which are the applications that are not foreseen but important for the community and for common use of the settlements.

Implementation of the Community Level Assistance Program will start in May 2019.

### Community Needs Assessment

In 2018, in order to feed the Community Level Assistance Program (CLAP), detailed Community Needs Assessment studies were conducted. CLAP's primary focus is to meet the requirements for international project financing by complementing the compensation that has been or will be paid by KGM in accordance with Turkish legislation for lost land and assets and enabling households to continue or replace reduced livelihoods or adopt new ways of gaining a livelihood. The purpose of the CNA research is to collect data to design the implementation plan required to achieve CLAP targets. 2 CNA studies have been conducted during the reporting period. First study was conducted in relation to the seasonal workers and summerhouse owners in September 2018. Meetings were held with summerhouse owners, mukhtars, NGOs and seasonal workers.

Following actions were suggested in relation to summerhouse owners:

- Environmental, hygiene, etc. trainings can be conducted, training support can be provided.
- Environmental protection activities can be conducted, especially in the beaches near the summerhouse villages.
- Cleaning and environmental protection events can be carried out for locals and daily visitors coming from cities/towns nearby.
- Especially in the beaches near the summerhouse villages, restrooms, shower areas and changing rooms can be provided for visitors.
- To set an example, water treatment plant can be constructed in a summerhouse village (with support of the summerhouse village).

- Summerhouse villages can be supported in terms of landscaping.

Following actions were suggested in relation to seasonal workers:

- Literacy courses can be conducted.
- Their existing skills on music can be further developed by trainings/courses.
- Vocational trainings can be provided with the purpose of creating job opportunities with further qualification.
- Such vocational trainings can be a step for Roman people to be employed by subcontractors of motorway construction.
- Conditions of camp sites can be improved. By collaborating with town authorities, issues such as site allocation, utility services, shower, toilet and etc. can be ameliorated.
- Potable water and domestic water can be provided to camp sites.
- Living conditions can be improved by portable/permanent showers, toilets etc.

In October 2018, another CNA study was conducted in Sütllüce, Cevizli, Bayırköy, Gazisüleyman Paşa and Suluca. Key findings of the study include but not limited to:

- There are a total number of 3437 women living in 5 target settlements. Women living in the villages are working intensively on orcharding, vegetable growing and animal husbandry activities.
- The primary livelihood of the settlements in the Project study area is farming. There are lots of challenges in relation to farming but most of the villagers are willing to continue to farming and open to innovative farming techniques.

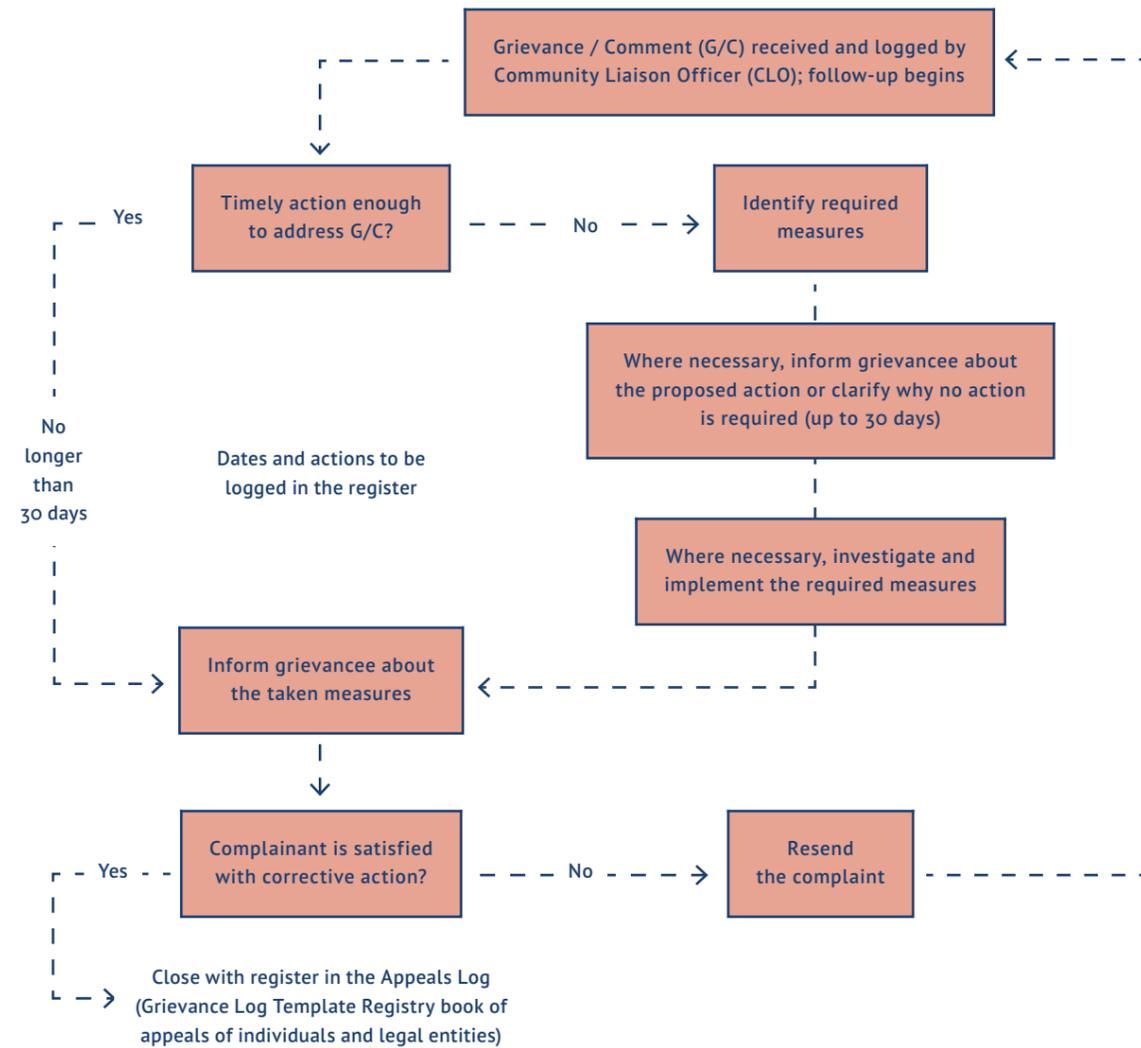
- Animal husbandry is the secondary livelihood in 5 settlements visited, the percentage of households engaged in this activity is significantly lower than those engaged in farming. Men and women usually have equal roles with regard to animal husbandry.
- Beekeeping is carried out only for family nutrition in the settlements. However, as the region is proper for migratory beekeeping there are beekeepers coming to settlements in the flowering season of sunflowers.
- It has been observed that there is a weakness in organization and communal business in the target settlements. And the established Agricultural Development Cooperatives each settlement had that closed down due to lack of management.

It has been seen that there are various applicable activities in order to increase the production and source of income thus the quality of life in the target settlements. Together with the sufficient findings the CNA studies and the previous researches during ESIA period, several project ideas have been identified which will be included in the CLAP implementation plan on target settlements. Hence, the efficiency of Community Level Assistance Program will be increased.

**Community Engagement Activities**

We value our relationship with local people, and we see them as our neighbours. In order to maintain healthy and working relations with local people, we manage complaints, comments, requests and any other feedback through our grievance mechanism as explained in our Stakeholder Engagement Plan.

We address grievances in a fair and transparent manner with taking confidentiality aspect into consideration. Processes determined for managing grievances are provided in figure below:



**During this reporting period 220 consultation meetings and 14 women meetings were conducted with local people.**





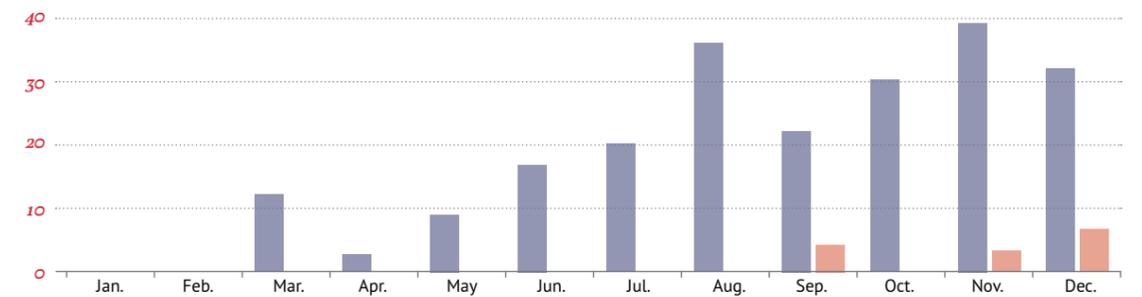
Through the effective implementation of this mechanism, we ensure that meaningful consultation of the stakeholders is achieved. In 2018, percentage of addressed grievances during the reporting period is 99 %. 61 of these received grievances were from males and 8 grievances were from females.

In order to make sure that we capture all the grievances, our CLOs visit villages throughout the project route on a daily basis and carry out various meetings such as consultation and women gatherings. During this reporting period 220 consultation meetings and 14 women meetings were conducted with local people.



### Meetings with Local People

■ Consultation Meetings ■ Women Meetings



### Number of Grievances

■ Grievances-Male ■ Grievances-Female



## ***Economic Impacts***

### **Socio-Economic Impacts**

In order to demonstrate how the 1915Çanakkale Bridge and Motorway Project will improve both regional and national economy as well as the living standard of people through increasing GVA (Gross Value Added) of the Region, creating new revenue streams, providing savings from travel time and cost, boosting employment and generating tax revenue, a socio-economic impact analysis study was conducted in 2017 by Deloitte. In this study, following impacts of the Project were determined:

- **THE DIRECT IMPACT** The increase in economic activities that are directly affected by the Project through increase in expenditure or efficiency gains.
- **THE INDIRECT IMPACT** The impact arising from the demand for goods and services along the supply chain.
- **THE INDUCED IMPACT** The impact arising as the employees of the directly affected industries and its suppliers spend a share of their income on the consumption of goods and services in the wider economy.

It is found from the study that, 1915Çanakkale Bridge and Motorway Project, including direct, indirect and induced impacts is expected to generate €14.5 billion total economic activity, contribute €11.2 billion to GVA, create 285k employment and generate additional €2.5 billion tax revenues from the first construction expenditure in 2017 to the end of concession period in 2034.

### **Local Content Study**

We manage our local employment and local procurement practices in line with IFC Performance Standard 1 and IFC's guideline on local procurement through our Local Content Procedure, Subcontractor Management Procedure, Supply Chain Management Plan and Employment Policy Document. In 2018, a Demand and Supply Analysis (DSA) was carried out to assess the status of local content in procurement and employment and to optimize the process for 1915Çanakkale Bridge and Motorway Project. Local term was defined within the Project context and local content management process, current performance and future needs were assessed. During this process, Project documents were reviewed, meetings were conducted with related departments, key subcontractors and local people.

By the end of 2018, our Project had 2.660 workers including both blue-collar and white-collar employees and 607 of these employees were employed from local settlements which results with a Project local employment rate of 23%. Although this is considered as a recommendable rate for a large scaled infrastructure project, based on the potential in the Project area, local employment target of the Project regarding the construction phase is determined as 50 %.

As the data analysis conducted during the Demand & Supply Analysis study shows, overall (as all the interviewees did not provide data and it was not possible to extract all data) local procurement rate is estimated around 13 – 15 %. This is considered as acceptable since the materials and equipment are highly technical and specific due to Project's nature. However, considering the room for improvement, new Project target regarding local procurement is determined as 30 %.

As a result of the DSA study, recommendations on following improvement areas were determined in order to achieve the local employment and procurement targets:

- Document revision
- Internal & external optimization
- Monitoring & evaluation
- Organizational support

In 2019, findings of the DSA will be integrated to the management plans and procedures. We will communicate the results of this study to relevant persons and organize capacity development trainings including this subject. We will continue to monitor our local employment and procurement rates while aiming to achieve our new Project targets.

# Archaeology and Cultural Heritage



1915Çanakkale Bridge and Motorway 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 during this study and further studies were recommended. 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 including the specific practices recommended in relation to site activities was prepared for guidance purposes.

In order to ensure effective implementation of the measures indicated in The Management Plan, a site archaeologist was appointed in 2018.

All construction activities along the Project route have been carried out in coordination with Tekirdağ and Çanakkale Archaeology Museums.



# Navigational Risk Assessment



The 1915 Çanakkale Bridge across the Çanakkale Strait shall carry a new motorway connecting the European and Asian part of Turkey. The bridge will be located at the north-eastern end of the Strait where it interconnects Gelibolu Province and Lapseki Province. Since the 1915 Çanakkale Bridge construction will increase the marine-related activities in Çanakkale Strait, a three-phase Navigational Risk Assessment (NRA) study was undertaken by COWI in 2018. In this study, environmental and social risks deriving from ship collision were qualitatively and quantitatively assessed. Phases and scopes of the NRA study are provided below:

- **PHASE 1** Initial construction phases namely inclusion piling work, gravel bedding and wet dock construction.
- **PHASE 2** Construction phases not covered in Phase 1. Namely revetment and berth construction, tower foundation (including towing and immersion), tower erection, cable erection and steel deck erection.
- **PHASE 3** Operation phase.

Following factors were taken into consideration during the assessment:

- Commercial vessel traffic,
- Navigation patterns,
- Fishing activities,
- Navigational buoys,
- Turkish Strait Vessel Traffic System,
- Accident statistics – Current risk level,
- Oil spill and emergency oil spill response.

During qualitative risk assessment, hazard evaluation is carried out based upon the practical experience in similar scenarios, semi-quantitative estimates, discussion with the experts as well as engineering judgement. Then, hazards were evaluated via modelling study. A number of recommendations were made based on the identified hazards, the qualitative and quantitative discussion of the risk and assumed implemented mitigation measures.



Recommendations regarding the initial construction and construction phases were carefully evaluated and implemented. Findings of the NRA study were shared with the Port Authority, ferry operators and fishermen via meetings. In addition, our Community Liaison Officers (CLOs) inform Lapseki, Çardak and Gelibolu Fishery Cooperatives on a regular basis regarding the upcoming marine construction activities.

As for the operation phase, design-related recommendations are being evaluated and integrated into the Project design and managerial issues are being included in the Operation Management System.





# Occupational Health And Safety

We are committed to make Occupational Health and Safety, a priority of the 1915Çanakkale Bridge and Motorway Project. Our approach is to ensure the effective implementation of the OHS practices throughout the Project. We are working continuously to improve our performance via on-site supervision, trainings and management tools such as policies, procedures and plans.

In 2018, together with the HSE departments on-site we:

- Planned and established objectives, strategies and activities
- Monitored performance
- Improved processes to eliminate non-conformities, accidents, environmental incidents

- Ensured that main contractors develop an HSE Management System in accordance with OHSAS 18001:2007 and ISO 14001:2015 for our Project to have a more effective, encompassing and concise system
- Ensured 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
- Emphasized 'Safety First' philosophy in our Project at all stages

Our H&S performance in 2018 is provided via following table which includes (but not limited to) the indicators used for monitoring purposes:

	MOTORWAY	BRIDGE
Man-hours	695,790	3,342,869
Number of Fatalities	0	0
Number of Accident	5	93
Disabling Injuries	0	2
Number of Lost Time Incident	2	22
Lost Time Injury Frequency Rate	2.87	6.76
Accident Frequency Rate	7.2	25.1
Number of Lost Workdays	8	196

**14269**

OCCUPATIONAL HEALTH AND SAFETY TRAININGS

**60430**

MAN-HOURS IN 2018



#### **ÇOK A.Ş.**

#### **Çanakkale Otoyol ve Köprüsü İnşaat Yatırım ve İşletme A.Ş.**

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October 2019

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**DAELIM**

