



Luxembourg, 22/12/2023

Environmental and Social Completion Sheet (ESCS)¹

Overview

Project Name: *TANAP Trans-Anatolian Natural Gas Pipeline*
 Project Number: *2015-0676*
 Country: *Turkey*
 Project Description: Construction of a gas pipeline through Turkey for transportation of natural gas from Shah Deniz production field in Azerbaijan to European and Turkish markets.

Summary of Environmental and Social Assessment at Completion

EIB notes the following Environmental and Social performance and key outcomes at Project Completion.

TANAP is the largest segment of the 3,5000 km Southern Gas Corridor. Linear infrastructure of this scale involves diverse and complex environmental and social (E&S) challenges. TANAP was structured to meet the EIB E&S Standards (2013) and international good practice as well as of the E&S standards of the relevant lenders. A comprehensive ESIA package was disclosed on both TANAP's website the Bank's external website.

At the request of the EIB and the Lenders, third-party E&S monitoring was put in place by TANAP. Three sets of independent E&S consultants monitored the Project against the ESAP during 2014-2019 with regular reporting on E&S issues. The Independent E&S Consultant continues to monitor the implementation of specific provisions, commitments and the overall Project objectives of the Project Biodiversity Action Plan, the Biodiversity Offset Strategy, the Stakeholder Engagement Plan, the Resettlement Action Plans, the Livelihood Restoration plans and other related Project documents. The reports are published on TANAP's website.

Environmental and Social Management System (ESMS): Given that the length of the pipeline route and the fact that it crosses diverse geological terrain, ecosystems and socioeconomic regions impacting over 28,0000 parcels of land across 67 districts and then crossing under the Marmara Sea, TANAP was required to put in place a comprehensive ESMS to effectively manage the evolving E&S challenges. TANAP organised its environmental, social, health and safety units into one directorate, with one director reporting directly to TANAP's general manager. This direct reporting mechanism played a critical role in expediting internal communication and decision-making. Key also to the effectiveness of the ESMS was the experienced and expertise of the teams hired to implement the plans under the ESMS. TANAP also instituted a management of change procedure, which enabled continuous improvement and adaptative management during construction.

The operational ESMS has now been completed and as part of that the environmental plans and procedures for the Operations phase have been developed and are being implemented by TANAP. Revisions to some of these plans are on-going including to the Waste Management Procedures (to include additional resource efficiency KPIs), Pollution Prevention Procedures (to include revised list of air emission sources) and Ecological management Plan for Operations (to include critical habitat).

¹ The template is for ILs and FLs



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TANAP's social management and monitoring plans are in place for the Operations phase. These include: the Social Action Plan for Operations; the Social Monitoring Plan for Operations; Stakeholder Engagement Plan (and associated annexes); and Grievance Management Procedure. The Operations Phase Land Access Management Procedure (Land Entry, Land Exit and Compensation) is the key procedure now in place for land access. The RAP End-Term Impact Evaluation has been completed and implementation of corrective actions are ongoing.

Geo-hazards: There are on-going geo-hazard risks and impacts across the Project that will need to be monitored and managed on a continuous basis, especially where the pipeline passes through more challenging mountainous and karst landscapes. The Lenders have been assured that the TANAP Lead Integrity Engineer for Geohazards has an excellent appreciation of the full range of geo-hazard risks across the Project, having been involved in the initial ground investigations, and route design and construction processes. Furthermore, the scope and frequency of geo-hazard monitoring being undertaken are considered to be appropriate and adequate for the levels of geo-hazard risks identified. To date, this has ensured that any immediate risks to the integrity of the pipeline have been detected and effectively addressed.

Carbon Footprint and GHG emissions: Greenhouse gas emissions are being calculated and reported in line with Project commitments. From the Promoter's actual figures for 2021, when the pipeline was running close to target capacity, the absolute greenhouse gases emissions attributed to the operation of the Project amounted to 566 ktCO₂-eq/yr (compared to 758 kt CO₂-eq/yr estimated by the Bank at appraisal)². Scope 1 and 2 emissions are monitored regularly by the Promoter. Scope 1 emissions include stationary diesel combustion (from pipeline above-ground infrastructure and lodging), mobile combustion (low emission vehicles) and vented emissions (from metering station, compressor station and pipeline). Scope 2 emissions include electricity consumption from all elements of the project, including offices and control centres.

Biodiversity: By Project completion, all reinstatement activities in the four lots had been fully completed, including bio-restoration and reforestation activities. Bio-restoration monitoring continues to be conducted by TANAP's consultants and contractor teams. The Biodiversity Action Plan (BAP) requirements for critical habitat areas and Species of Conservation Concern (SCC) monitoring post construction are ongoing and being implemented as described within the BAP. TANAP has continued its monitoring of high-risk areas along the OHL to identify risks to bird species from the OHL operation. Due to bird carcasses being found during 2023, it has been recommended that bird flight deflectors are fitted to the OHL and that monitoring continues for a further two years.

The Site-specific Biodiversity Offset Management Plans implemented by TANAP. The Forest Offset Management Plan is progressing very well, and the General Directorate of Forestry is pleased with the outcome too. The Steppe Offset Management Plan is also being implemented, with a strong emphasis on social liaison, which has enabled a high "buy-in" to the project, increasing its likelihood of success, as grazing regimes are changed.

Labour and Working Conditions: TANAP engaged third-party monitors to ensure that construction contractors provided all workers with fair and safe working conditions. When non-compliances were detected, TANAP promptly designed and implemented remedial action plans to resolve these. TANAP also closely monitored occupational health and safety indicators and provided incentives to improve safety practices.

Involuntary Resettlement and Livelihood Restoration: Since the project involved about 7,000 hectares (ha) of land, including 4,576 ha of private land acquisition affecting more than

² Using a global warming potential (GWP) for CH₄ of 21, as per the Bank's GHG methodology at the time of appraisal. When applying a GWP of 28, the absolute emissions rise to 771 kt CO₂-eq/yr



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115,000 landowners, resettlement action plans (RAPs) were implemented, in compliance with Lenders' requirements. By Project completion, implementation of two RAPs, expropriation processes and livelihood restoration plans were substantially complete and independently audited and verified. The TANAP external monitoring reports are available on TANAP's website. Registration of private land parcels stood at 99.55 percent as of December 6, 2021. A post-resettlement impact evaluation conducted by TANAP to assess the outcome of compensation and livelihood assistance received by the affected people confirmed the satisfactory implementation of the agreed actions in the RAP, particularly regarding the key commitments related to mandatory compensation payment under Turkish law. The RAP End Term Impact Evaluation (RETIE) has been finalised and disclosed. While all not all corrective actions have been completed in line with the RETIE schedule, the SI team is working through all steps and completion of these remains the priority, and, for close out of construction phase legacy reinstatement issues. TANAP is progressing on these actions in a systematic and thorough manner considering the limitations faced with engagement opportunities and the large areas covered by the SI representatives. The IESC continues to monitor the implementation.

TANAP also established a Social and Environmental Investment Program (SEIP) to help accelerate socio-economic development and protect natural resources along the pipeline route and around the construction sites. This broadened the scope of TANAP's interventions from risk and impact mitigation measures aimed at directly affected households to interventions contributing to the economic and social development of local communities more broadly. The SEIP benefited over 40,000 people, prioritizing vulnerable groups including children, women, physically challenged persons and farmers to improve their socio-economic well-being.

Stakeholder Engagement: The relevant TANAP stakeholder engagement systems are in place and functioning adequately. Information disclosure continues to focus on key milestones e.g., land use restrictions, operational safety, etc. as continues during the operations phase of the Project. Having said that, TANAP does face challenges in terms of the timing of stakeholder engagement as villagers do not want to be disturbed during the agricultural months. In addition, many of the households generally leave the villages following harvests and few stakeholders remain.

Grievance Management: A Grievance Redress Mechanism (GRM) was put in place by TANAP in compliance with the Lenders' requirements. The project total complaints since commencement is now 5,604. Of these, 5,556 have been closed and 48 complaints are yet to be closed. Of these, 41 are overdue, predominantly relating to reinstatement (30 cases, or 73%). Most of these are about stones and levelling issues. One topic of grievances that required specific investigation related to slope breakers. After geotechnical investigation in each slope breaker grievance case, the case is either closed with compensation (for temporary cases, relating to the duration the slope breaker has been in place), or where slope breakers are permanently needed, permanent land acquisition is instigated.

Cultural Heritage: TANAP hired archaeologists to avoid routing the pipeline through known cultural and archaeological sites, which helped construction contractors reduce the chances of finds and delays during construction.

Despite this, during construction, archaeologists discovered over 1,000 artifacts, including a find of materials dating from 4720 B.C. to 4553 B.C. at the Alaybeyi site. After a chance discovery, all work would stop until archaeologists and Turkish museum authorities arrived at the site to inspect, salvage, and preserve the artifacts.

This work, following international good practices, is helping preserve the country's rich cultural history for future generations—one museum even opened a new exhibition hall dedicated to displaying the wealth of findings found through TANAP.



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Summary opinion of Environmental and Social aspects at completion:

TANAP is the largest segment of the 3,5000 km Southern Gas Corridor. Linear infrastructure of this scale involves diverse and complex environmental and social challenges. However due to TANAP's management commitment to actively engage with these risks at all phases during construction and operation, as well as to hiring the required expertise in environmental and social risks management resulted in positive environmental outcomes as well as benefits to local communities. In fact during construction and operations TANAP has discovered sixteen new species of flora and fauna, including dance flies, crane flies, butterflies and several types of plants.

Although the Biodiversity Offset Strategy appears to be well implemented and on a trajectory for a positive outcome, it is still important that TANAP undertake monitoring activities to minimise residual impacts.

Monitoring on the implementation of the corrective actions related to compensation and reinstatement issues under the RAP and the livelihood restoration plans need to continue.

EIB is of the opinion based on reports from the promoter, site visits by the EIB team and/or inputs provided by Independent Environmental and Social Consultants, during Construction and Operations that the Project has been implemented in line with EIB Environmental and Social Standards and Lenders' requirements, applicable at the time of appraisal.