



Technical Assistance to Connectivity in the Western Balkans EuropeAid/13785/IH/SER/MULTI

Cost Benefit Analysis, Feasibility Study update, Environmental and Social Impact Assessment, Basic (detailed) Design and Tender Dossier for the Gas Interconnector North Macedonia - Greece

The subject project is still ongoing. The description that follows is for information purposes only and subject to the project's completion.

NORTH MACEDONIA

Partners:

- MER JSC Skopje
- Ministry of Economy
- DESFA, Greece (for the CBA)
- European Investment Bank (EIB)

Budget of Technical Assistance:

- €1 172 685

EU contribution¹:

- As above (100%)

Technical Assistance provided by:

- CONNECTA (Technical Assistance to Connectivity in the Western Balkans)

This Technical Assistance is part of the European Union's "Connectivity Agenda" in the Western Balkans and concerns closing a gap in the gas transport networks in the region. The implementation of the gas interconnector between North Macedonia and Greece will interconnect the existing and planned gas transmission system of the two countries and will represent a new supply route for North Macedonia.

The main promoters, beneficiaries and counterparts are the Macedonian Energy Resources Skopje (hereafter "MER JSC") and the Hellenic Gas Transmission System Operator (DESFA) S.A. (hereafter "DESFA").

At present, the natural gas market in North Macedonia is underdeveloped and territorially limited to the area around Skopje. The 98 km long existing transmission pipeline from Bulgaria is reasonably new, having been built in the mid-nineties and it's been operational since 1997. The pipeline is part of the system that transports Russian natural gas to the markets of Southeast Europe and Turkey through Ukraine, Moldova, Romania and Bulgaria.

The new gas interconnector is a constituent of the Strategic Plan and Program of the Energy Sector of North Macedonia. The project is listed on the Public Investment Program of North Macedonia 2017-2019 as a priority project. In addition, the project was identified as a Project of Mutual Interest (PMI) by the Energy Community with code GAS-04B and was included in the Ten-Year Network Development Plan (TYNDP).

The project envisages the construction of a 126 km long gas pipeline, where 70 km is on the North Macedonian side while 56 km is on the Greek side. Each part of the interconnector (in Greece and in North Macedonia) will be built and operated by the respective national gas Transmission System

Operator (TSO) as a stand-alone project supported by an Interstate Agreement.



Gas Interconnector North Macedonia - Greece

Results achieved by the TA

CBA

- The cost-benefit analysis (CBA) included all necessary sections in both North Macedonia and Greece, with the aim of verifying the socio-economic feasibility of the gas interconnector.

Feasibility Study update

To complement the feasibility study (FS) for the gas interconnector (completed in February 2019 by JSC MER and DESFA) following was included in the updated FS:

- Option analysis;
- Demand analysis;
- Hydraulic analysis;
- Financial analysis; and
- Risk analysis.

Environmental and Social Impact Assessment

- An Environmental and Social Impact Assessment (ESIA) was developed in compliance with EU and national laws and requirements, and EIB/EBRD's requirements. The ESIA included:
 - Environmental Screening;
 - Environmental Scoping;

Energy

¹ EU contribution concerns only TA services for project development.

Key recommendations - further actions:

- Application for a Location Permit;
- International competitive tender for Works and Supervision;
- Construction works; and
- Supervision activities.



- Environmental and Social Impact Assessment;
- Non-technical Summary;
- Stakeholder Engagement Plan;
- Environmental and Social Management and Monitoring Plan
- Environmental and Social Action Plan;
- Resettlement Policy Framework; and
- The EIA review process.

Basic (detailed) Design

- The Basic Design (BD) of the gas pipeline was prepared in accordance with the national and international norms, regulations and laws relevant to this type of structures. The BD included:
 - Geodetic and Geotechnical surveys;
 - Basic (detailed) Design; and
 - Design Review by independent certified auditor.



Procurement and Tendering

The project included assistance to the beneficiary in developing:

- A Procurement Strategy with all agreed procurement procedures in accordance with EIB’s Guide to Procurement;
- Tender dossier for Works Contract in accordance with Procedures and Practical Guide (PRAG) rules and the International Federation of Consulting Engineers (FIDIC) Conditions of Contract for Construction 1st Edition (1999 Red Book);
- Tender dossier for the Supervision Contract in accordance with the PRAG rules; and

- A Priced Bill of Quantities (Consultants estimates) of equipment, material and works.

Key conclusions:

- The performance indicators from the financial and economic analysis of the implementation of the gas interconnector MKD – GR revealed that the project is economically sound.
- The Environmental and Social Impact Assessment revealed that the main adverse environmental and social impacts of the project activities are the residual ones, which affect only the local environment on a low to moderate scale. These impacts are of minor importance compared to the positive effects of the project at local, district, national, and regional scale.
- The Basic (detailed) Design provided detailed knowledge of the pipeline routing as well as necessary pipeline facilities such as Pressure, Metering and Regulation Stations, Block Valve Stations, Pig Trap Stations etc.

Benefits expected due to Technical Assistance:

- Completed project cycle up to tender documentation leading to construction.

Impacts anticipated:

- Improvement of Security of Supply;
- Improvement of diversity; and
- Improvement of gas market development.