

Connecting Europe Facility - ENERGY

Feasibility Study for the Interconnection Turkey-Bulgaria (ITB)

7.4.2-0061-BG-S-M-14

Part of Project of Common Interest no 7.4.2

EXECUTIVE SUMMARY

The Action is part of the PCI 7.4.2 "Interconnector between Turkey and Bulgaria". It consisted of one activity – conduction of an overall study of the feasibility of the PCI "Interconnection Turkey-Bulgaria".

The objective of the action was the preparation of a Feasibility Study (FS), including all technical, economic, environmental, market and social aspects of the PCI "Interconnection Turkey-Bulgaria" for the section on the Bulgarian territory.

The Action was fully and properly implemented by the Contractor "Chimcomplect Engineering" AD, following a tender procedure under the Public Procurement Act in compliance with the criteria – "the lowest price". It includes all the required information and provides the necessary findings. No deviations from the planned course of Action did occur. The delivered documentation consists of 10 volumes.

The following were clarified:

1. The optimal gas pipeline route taking into account the following: the technical possibility and convenience for its construction, environmental protection and its construction costs. Three route options have been compared and Option II is indicated as a preferable option for route – length 75,815 km, starting point the border between Bulgaria and Turkey, end point the region of the village of Lozenets.
2. The actual capacity of the Bulgarian and the Turkish transmission system to ensure the design capacity of the connection - 3 bcm/y (load factor 0.9), option of reverse flow is available.
3. The overall concept for configuration of the gas pipeline system including the pipe's diameter and material. Recommendations for next stage of design. Terms of Reference for FEED were prepared.
4. The costs for construction of the interconnection.
5. Financial and economic feasibility: Financial Model examination– Financing Sources options' assessment: Net Present Value (NPV) & Internal Rate of Return (IRR); Cost benefit analysis (CBA) – in line with the Methodology prepared by ENTSOG on the assessment of projects of common interest and more particularly the part thereof Project specific PS-CBA step. The analysis includes financial analysis describing the project's financial aspects; Economic analysis describing the social and economic impact of the PCI's realization.
6. The regulatory framework which is applied on the Bulgarian and on the Turkish territory in the gas pipeline design and construction.
7. The ecological effect of the selected route and the facilities connected to it. A request assessing the need of EIA performance has been prepared in accordance with the environmental legislation. As a result the MEW Decision MOCB №4-ПР/2016 evaluated the necessity of EIA, concluding to perform an EIA.
8. Market needs identification - identification and assessment of the market needs and prospects for the development of the regional infrastructure (i.e. any major pan-European projects), review and examination of the existing gas supply situation and demand & supply projections and scenarios and potential supply sources and recommendations for appropriate market mechanism to offer and allocation of the capacity of the interconnection.
9. PCI development schedule. Four options between 900 and 1140 working days are proposed for the realization of the project.

The FS duly assesses the technical, financial and market aspects, as well as the potential of this PCI to the level of detail that allows Bulgartransgaz EAD to evaluate and select the optimal option for the PCI realisation. Preliminary data such as length, diameter, capacity, pressure, above ground equipment, financial results, as well as a project time schedule have been precised.

This executive summary has been produced by the beneficiary(ies) of the Action co-financed under CEF. It aims to sum-up the main results achieved during the Action implementation period. The European Commission/Agency do not guarantee the authenticity, accuracy nor completeness of the information given therein, nor do they accept responsibility for any use made thereof. In any circumstances, this executive summary should not bind the European Commission/Agency nor the beneficiary(ies).