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Connecting Europe Facility



BULGARTRANGAZ

INFORMATION BROCHURE

PROJECT OF COMMON INTEREST (PCI)

6.8.2 REHABILITATION, MODERNIZATION AND EXPANSION OF THE EXISTING GAS TRANSMISSION SYSTEM



PROJECT PROMOTER:



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GENERAL PROJECT INFORMATION

PCI 6.8.2 is a complex, multi-component and phased project for modernization, rehabilitation and expansion of the existing gas transmission infrastructure on the territory of Bulgaria, owned and operated by the combined gas operator Bulgartransgaz EAD.

It is implemented in 3 stages and includes the following types of activities:

- Modernization and rehabilitation of compressor stations;
- Repair and replacement of gas pipeline sections following inspections;
- Expansion and modernization of the existing network;
- Inspections to determine and characterize the gas pipelines' condition;
- Implementation of systems for optimization of the management process of the network technical condition.

PCI 6.8.2. IS

PROJECT OF COMMON INTEREST (PCI) in line with Regulation EU 347/2013.

PRIORITY PROJECT of the Central and South Eastern Europe Gas Connectivity Initiative - CESEC.

Part of **TEN-YEAR NETWORK DEVELOPMENT PLAN OF BULGARTRANGAZ EAD**

Part of the **COMMUNITY TEN-YEAR NETWORK DEVELOPMENT PLAN of ENTSOG, (TYNDP 2020)**

Part of **GAS REGIONAL INVESTMENT PLAN (GRIP) for Central and Eastern Europe region (CEE GRIP 2019)**

Sites, envisaged to be built within Phase 2 of PCI 6.8.2 by Decision No, 312 of 10 May 2018 of the Council of Ministers of the Republic of Bulgaria, have been declared to be national sites and sites of national importance.

PROJECT OBJECTIVES

THE MAIN PROJECT OBJECTIVE is the existing gas infrastructure on the territory of Bulgaria, which has been in operation for forty years now and has been constructed to transport natural gas in direction from North to South, to be adapted to the new market requirements and new realities in the context of the plans for infrastructure development in the region.



IN ADDITION, THE PROJECT IS EXPECTED

- TO ensure secure and reliable natural gas transmission, enhance gas transmission system’s efficiency, reliability and flexibility and the required capacities and pressures.
- TO ensure technical capabilities for transmission of additional natural gas quantities through the territory of the country entering from existing and new entry/exit points and possibilities to diversify the transmission directions depending on the market interest.
- TO contribute to increase of market integration, establish a competitive gas market, stimulate trade development, ensure greater systems’ flexibility, optimize risk management.

PROJECT PHASES

PHASE 1

<p>Includes the initial actions undertaken in the period 2013-2015, which Bulgartransgaz EAD implemented with company’s own funds and funds from the National Investment Plan (for CS Petrich and CS Ihtiman).</p>	<ul style="list-style-type: none"> ○ Stage 1 of modernization of four compressor stations (CS Lozenets, CS Ihtiman, CS Petrich, CS Strandzha) by integrating six low emission gas turbine compressor units (GTCUs); ○ Construction of a new gas pipeline CS Lozenets – PF Nedyalsko (~20 km) as part of the activities envisaged for gas transmission network expansion; ○ In-line inspections; ○ Implementation of systems to optimize the management process of the network technical condition.
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PHASE 2

<p>Includes activities undertaken in 2016 which are a natural and logical continuation of the overall project realization following implementation of PHASE 1.</p> <p><i>The activities under PHASE 2 of PCI 6.8.2 are realized with the financial support of the EU via the Connecting Europe Facility (CEF) Programme</i></p>	<ul style="list-style-type: none"> ○ Stage 2 of modernization of compressor stations by integrating four GTCUs in three compressor stations (CS Lozenets, CS Ihtiman, CS Petrich); ○ Rehabilitation and replacement of sections of the Northern semi-ring of the gas transmission network of 81 km total length. ○ Carrying out inspections.
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PHASE 3



Includes the construction of conditional infrastructure required following adoption of a Final Investment Decision (FID) on implementation of IBS project Stage 2 – capacity increase of the interconnection from 1.8 to 2.4 bcm/y.

This phase includes the infrastructure which implementation and parameters are conditional, as they are related to future decisions on the project Interconnection Bulgaria-Serbia (IBS).

The infrastructure to be built includes:

- new gas pipeline Gorni Bogrov - Novi Iskar of 19 km length, DN 700;
- new Compressor station Bogrov - 20 MW.

ACTIVITIES MAP



Rehabilitation and modernization of compressor stations (Stage 1 and Stage 2)



Expansion of the existing network (part of Phase 1 and Phase 3)



Rehabilitation and replacement of sections of the gas transmission network – 81 km (part of Phase 2)



ALTERNATIVE ROUTES CONSIDERED (PHASE 2):

In order to estimate the optimal options for modernization (regarding compressor stations) and to define a route for rehabilitation and replacement (regarding gas transmission system sections), technical and economic pre-investment activities are carried out, part of which are:

- Proposal of options for modernization of three compressor stations by integrating four low emission compressor units:
 - CS Lozenets – 2 units;
 - CS Petrich – 1 unit;
 - CS Ihtiman – 1 unit.
- Proposals for route of the new gas pipeline sections and the sites thereto (mainly within the easement of the existing sections of the rehabilitated gas pipeline), a total of 81 km, as follows:
 - PF Beglezh – VA Dermantsi – VA Batultsi – VA Kalugerovo - 58 km;
 - PF Valchi Dol – VA Preselka - 23km.

The proposals (options) for modernization and rehabilitation were considered by Bulgartransgaz EAD Expert Technical and Economic Committee (ETEC) which approved the optimal option according to which the project activities will be implemented.

PRELIMINARY PROJECT TIME SCHEDULE:

		Year of activities' completion
PHASE 1*:	Stage 1 of compressor stations modernization	2016
	Construction of a gas pipeline CS Lozenets - PF Nedyalsko	2018
	Implementation of software for optimization of the management process of network's technical condition	2017
PHASE 2:	Stage 2 of compressor stations modernization	2021
	Rehabilitation and replacement of a gas pipeline section – 58 km PF Beglezh – VA Dermantsi – VA Batultsi – VA Kalugerovo	2022
	Rehabilitation and replacement of a gas pipeline section – 23km PF Valchi Dol – VA Preselka	2022
	Carrying out inspections	2016
PHASE 3 **:	New gas pipeline Gorni Bogrov – Novi Iskar, 19 km, DN 700 and CS, 20MW	Conditional

* Phase 1 - completed activities

** Conditional infrastructure – following adoption of a Final Investment Decision (FID) on implementation of Stage 2 of project Interconnection Bulgaria-Serbia



EXPECTED PROJECT IMPACT:

PCI 6.8.2 Rehabilitation, modernization and expansion of the existing gas transmission system includes activities related to modernization of compressor stations and rehabilitation, modernization and extension of the gas pipeline network of gas transmission system.

Preparatory (pre-investment) studies were carried out for each of these activities which represent an initial stage of the overall implementation of the respective activity. As a result of the study, route option (in cases of activities related to gas pipeline network) and option for modernization (in cases of activities related to modernization of compressor stations) were determined, as well as the parameters (technical, economic, legal, etc.) for subsequent design and construction.

As part of the preparatory activities, a Detailed Spatial Plan - Parcelling Plan (DSP-PP) was approved for the respective investment site, archaeological studies were carried out, as well as an environmental and social impact assessment, and environmental solutions for implementation of individual investment proposals were defined. Based on the information prepared for the respective investment proposal, the competent authority (the Ministry of Environment and Water) has issued the respective decisions, including the need of Environmental Impact Assessment (EIA) and a Conformity Assessment (CA).

POSSIBLE ASPECTS OF ENVIRONMENTAL IMPACT

During execution of construction, all necessary measures have been taken to protect environment, as well as to prevent damage and negative impact on people and property due to environmental components pollution as a result of formation of emissions, including:

AMBIENT AIR: Impacts, measures, requirements and conservation solutions

During the stage of construction, excavation works are carried out in the designated areas for the specified activities.

The area where the above activities are being carried out is a diffuse source mainly of dust and, to a very small extent, of emissions of harmful substances in the exhaust gases from internal combustion engines (ICE) of the diesel fuel machinery used - carbon and nitrogen oxides, volatile organic compounds, fine particulates and negligible amounts of cadmium and persistent organic pollutants.

The intensity of dust release depends to a large extent on weather conditions during construction works and the season during which construction works are carried out, climate and weather factors (wind, humidity, temperature, and atmospheric stability), the properties of soil particles and many other conditions. One of the measures to reduce dust is by using the so-called sprinkler system to maintain sufficient moisture during dry summer and autumn months in order to reduce the levels of dust emissions (controlled emissions). In order to prevent the risk of pollution, it is necessary to observe a precise schedule of construction works consistent with weather conditions, i.e. to allow the natural self-cleaning ability of atmosphere. In case of windlessness and very polluted air, construction works should be suspended for a certain period so that pollution can dissipate.

The use of sprinkler system to maintain sufficient moisture during dry summer and autumn months ensures emissions control by reducing dust levels by up to 80%.



SURFACE WATER AND GROUNDWATER: Impacts, measures, requirements and conservation solutions

Waste water quantity is determined upon selection of an option during the design stage. In order to avoid contamination of surface water and groundwater in the site area, technological discipline is observed while carrying out construction activities.

In order to minimize these impacts, care is taken for proper storage and subsequent treatment of waste generated on site, as well as use of construction and transport machinery and equipment in good technical condition, in order to prevent water pollution from petroleum products.

LANDSCAPE: Impacts, measures, requirements and conservation solutions

The undertaken mitigation measures to prevent damage to the landscape in the area shall be limited primarily to timely clearing of construction site immediately after completion of construction works in the area of the site, as well as compliance with the solutions laid down in the technical design.

SOILS: Impacts, measures, requirements and conservation solutions

Protection of soils in the area during execution of the individual activities is directly related to observance of the technological discipline, including proper storage of the raw materials used for construction and operation. At the construction site, they should be stored in closed containers, on an insulated surface, without direct access to soil and/or water. A suitable absorbent is provided close to containers for prevention in case of spillage. The proper storage of waste generated during construction and operation is strictly monitored.

FLORA and FAUNA and PROTECTION AREAS of Natura 2000 Ecological Network: Impacts, measures, requirements and conservation solutions

The choice of route options shall not affect the subject and objectives of protection in protected areas of Natura 2000 National Ecological Network in order to avoid negative impact on the flora, fauna and Natura 2000 areas during construction and operation. Where necessary, mitigation measures have been and are being applied to minimize and/or limit expected impacts, part of which is to preserve the natural state of habitats and species, to restore, where necessary, the area and natural state of priority natural habitats and species, as well as their populations.

Cross-border nature of impacts

Implementation of PCI 6.8.2 Rehabilitation, modernization and expansion of the existing gas transmission system will not have any cross-border environmental impact.

FUNDING OF PROJECT ACTIVITIES:

PCI 6.8.2 Rehabilitation, modernization and expansion of the existing gas transmission system – PHASE 2 is implemented with Bulgartransgaz EAD own funds and the financial support of the EU through the [Connecting Europe Facility \(CEF\) Programme](#).



Action 6.20.2-0055-BG-S-M-15 (implemented)	Co-funding amount: up to EUR 850 000
Action 6.8.2-0026-BG-S-M-16 (implemented)	Co-funding amount: up to EUR 182 000
Action 6.8.2-0034-BG-W-M-18 (in progress)	Co-funding amount: up to EUR 27 184 518
TOTAL CO-FUNDING PROVIDED SO FAR UNDER CEF: up to EUR 28,217 million	

* Implementation of Phase 1 activities of the project has commenced before the project was granted the status of a project of "common interest" and at the end of June 2018, with the commissioning of Lozenets-Nedyalsko gas pipeline section, all activities under this phase have been completed. *Stage 1 of compressor stations' modernization was included in the National Investment Plan (NIP) and, in this respect, in the end of 2016 Bulgartransgaz EAD received national funding for CS Petrich and CS Ihtiman.*

Phase 3 of the project concerns conditional infrastructure and is bound by decisions which are to be taken regarding the IBS Project (Interconnection Bulgaria-Serbia).

In this respect, Phase 2 is a key phase of project realization as a PCI and the above mentioned Grant agreements are related to implementation of the actions under Phase 2.

PROJECT PUBLIC CONSULTATIONS:

Public consultations on the project are conducted during project implementation through:

- Open Feedback Standard Form on Bulgartransgaz EAD website;
- Regularly updated information on the progress of the PCI implementation is available at the [project website](#);
- Discussions and consultations with the public concerned in accordance with the effective Bulgarian legal provisions in the field of design and environmental protection, such as the Spatial Development Act, Environmental Protection Act and other legislation relevant to the particular stage of the project;
- Public consultations on the drafts of the Ten-Year Network Development Plans of the company, part of which is the detailed information about the development status of the implemented projects of common interest.

CONTACT FORM:

Comments, questions and recommendations about the PCIs can be sent to the company's official e-mail address: info@bulgartransgaz.bg, by filling in [a Standard Form](#) (end of page) for comments and questions regarding PCIs implemented by Bulgartransgaz EAD.



EC INFORMATION PLATFORM:

More information on the PCIs is available on the official website of the European Commission:

<https://ec.europa.eu/energy/en/topics/infrastructure/projects-common-interest>.

MANUAL OF PROCEDURES:

Manual of procedures for the process of issuing permits applicable to projects of common interest in the Republic of Bulgaria is published in line with Art. 9 of Regulation 347/2013 by the Ministry of Energy as the competent national authority.

<https://www.me.government.bg/bg/themes/narachnik-za-procedurite-v-procesa-na-izdavane-na-razresheniya-za-proekti-ot-obsht-interes-v-republika-ba-1849-463.html>