

The strategic projects of DESFA in the region of South East Europe

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WITHIN THE JURISDICTION OF THE MINISTRY OF DEVELOPMENT



Source of Development, Supplier of Energy



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Company's Profile



Mission

The mission of DESFA is to formulate a comprehensive, technically superior and cost-effective National Gas System so that it:

- Meets the needs of natural gas users safely, adequately and reliably.
- Upgrades the participation of natural gas in the energy balance of Greece.
- Allows the optimization of the competitive advantages of natural gas in public infrastructure, business activities and everyday life.



Company at a glance

DESFA was established in April 2007 after the completion of the legal separation of the transmission and trading activities of the Public Gas Corporation (DEPA SA), in accordance with Law 3428/2005 for the liberalization of the natural gas market.

DESFA is 100% subsidiary of DEPA.

DESFA, guided by its vision to contribute to social prosperity and public interest:

- Operates, maintains, manages and develops the National Gas Transmission System and its connectors.



- Studies and implements, following the approval of the statutory bodies (RAE and the Ministry of Development), the pricing policy and the process of transmitting natural gas to the system's shippers, who in turn make it available to the consumers.
- Provides access to the National Gas Transmission System for every Shipper wishing to develop commercial activities or direct procurement of natural gas for their own use, ensuring complete transparency, reliability and respect for the rules of competition.
- Through the activity of DESFA natural gas is converted into a valuable tool for the development and progress of our country.



National Natural Gas System



Existing Infrastructure

Consists of:

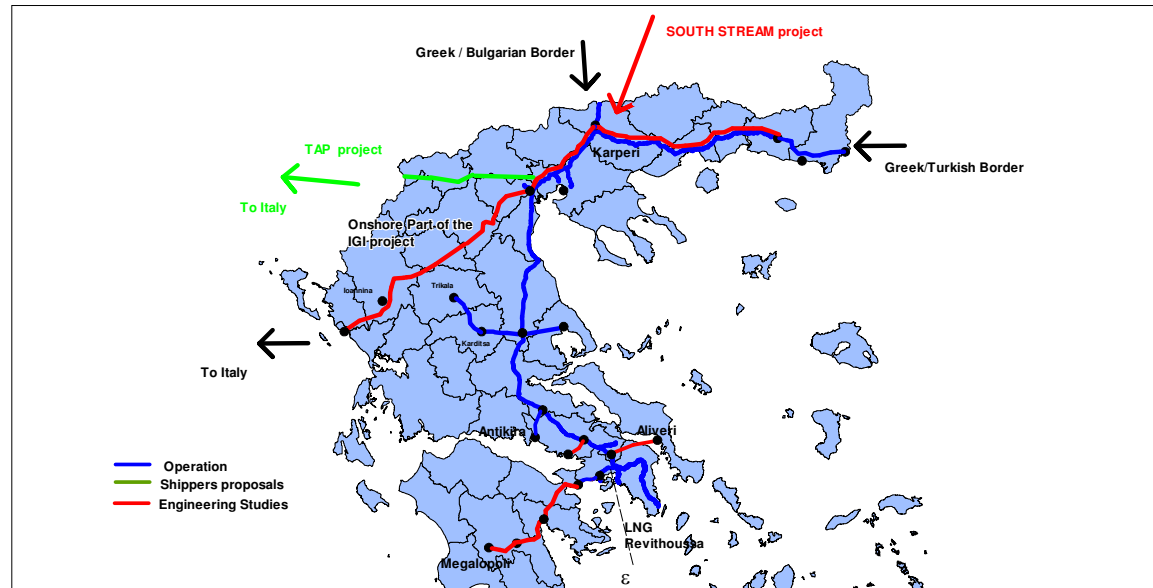
- 512 km high pressure main pipeline
- 689 km high pressure branches
- Three entry points:
 - i. Greek-Bulgarian borders
 - ii. Greek-Turkish borders
 - iii. LNG Regasification Terminal, located on the island of Revithoussa
- Line valves, metering and regulating stations





DESFA's Major Projects

- Interconnection Greece – Italy Project
- TAP Project (Shippers' Proposal)
- Greek Part of South Stream Project
- Interconnection Greece Bulgaria
- LNG Re gasification Terminal in Revithoussa





Interconnector Turkey -Greece – Italy



- The Project will implement the interconnection of SE Europe with the Caspian and Middle East natural gas resources.

The parts of the corridor which concern Greece are the ITG (Interconnection Turkey Greece) pipeline which has been operational since 2007 and the IGI (Interconnection Greece Italy) pipeline.





Interconnection Greece Italy

IGI is a part of the energy corridor Turkey Greece Italy.

IGI has two parts:

- ❑ The Greek onshore part from Komotini to Thesprotia coast. It will be developed from DESFA S.A. under fully regulated TPA.
- ❑ The offshore part from Stavrolimenas to Otranto (POSEIDON pipeline) and will be developed from Edison and DEPA, under the newly established company '**Poseidon Co**'.

•IGI offshore part: Poseidon

- Length: 206 Km
- Diameter: 32"
- Depth: ~ 1400 m

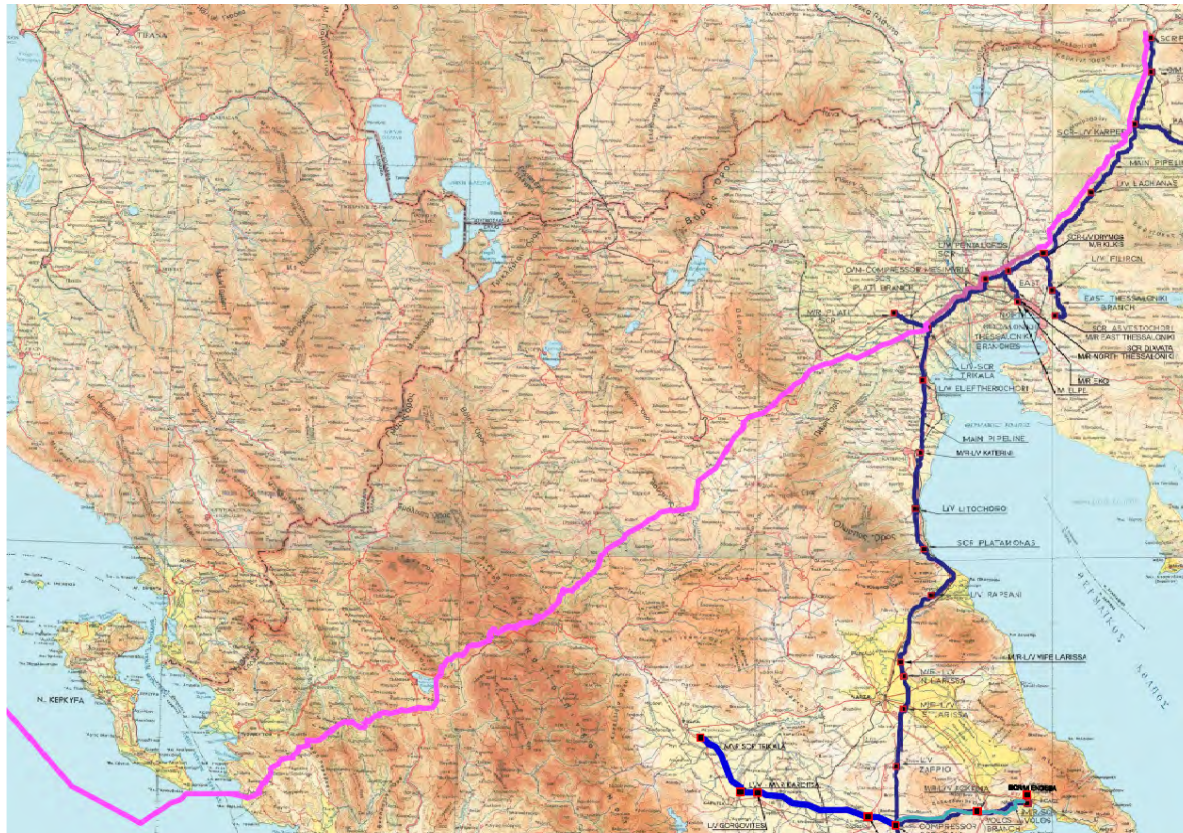


•IGI onshore part:

- Length: 570 Km
- Diameter: 42"



South Stream project



• On 29th of April 2009 in Moscow an Intergovernmental Agreement between Greece and Russia was signed for the implementation of the Greek part of South Stream pipeline

• For the implementation of the project a joint Greek-Russian company will be formed with share holders structure 50% GAZPROM 50% DESFA.

• The company will be established in Greece.

• On 15th of May 2009 at Sochi, a Business Corporation Agreement was signed between GAZPROM and DESFA.



Interconnection Greece Bulgaria



The project refers to the construction of a bi-directional natural gas pipeline from Komotini to Bulgarian city Dimitrovgrad. The pipeline will be connected with the National Natural Gas System. The total length of the pipeline will be app. 110 km, of which 20 km will be in the Greek territory. The project has been proposed for 45 mil. EUR finance through the European Energy Recovery Program.





Revithoussa LNG Terminal



Revithoussa LNG Terminal

- Unloading Capacity: 7.250 m³ LNG / hour
- Storage Capacity: 2 underground tanks of 65.000 m³ LNG useful volume.
- Send-out Capacity:
 - 1000 m³LNG/hour (Sustained Maximum Send out Rate)
 - 1250 m³ LNG/hour (with all spare vaporizers in use)
- Approach and berth of LNG carriers of capacity from 25.000 m³ to 125,000/135,000 m³ (290 m length, 11.5 m draft).
- Small cogeneration plant for the power and thermal needs (hot water) of the Terminal



The Role of the LNG Terminal in the National Gas System

➤ **STRATEGIC ROLE**

The Terminal is the third gas supply source in the System in case of loss of the first and/or second sources (as happened during January 2009 crisis).

➤ **SECURITY OF THE SYSTEM**

It maintains the maximum operating pressure in the System and especially in the south section where the biggest consumers with high required gas supply pressure (power plants) are located.

➤ **PEAK SAVING ROLE**

It covers the overall gas peak demand in a very fast response.



DESFA enhances Security of Supply in Balkans region

- The three existing Entry Points guarantee the uninterrupted gas flow in the Balkan region:
 - They provide the Greek Transmission System with a theoretical import capacity of about 20 bcm/annum, which covers the anticipated domestic demand for natural gas in the long-term.
 - The spare capacity could be exploited to supply gas to SEE through backhaul flows (South/North) and swaps with the transit pipelines in the wider region.
- In July 2007, DESFA completed the revamping (expansion project) of the Liquefied Natural Gas Terminal at Revithoussa. Now, the LNG Terminal has the capacity to accept and handle triple the quantity of LNG than before and supply the National Transmission System with approximately 5 billion cubic meters annually.



Conclusions

- The completion of ITG which is operational since 2007 has contributed in the reinforcement of the strategic position of the country.
- DESFA , by promoting the implementation of major energy infrastructure (ITGI, SOUTH STREAM) establishes the country as an natural gas hub in the SE Europe.
- The LNG terminal is crucial in safeguarding security of supply, both in national and regional level. Managing one of the receiving Liquefied Natural Gas terminals operating today throughout the Mediterranean and Europe, DESFA makes the difference in the Southeastern European security of supply.



Hellenic Gas Transmission System Operator S.A.

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Greece

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