



## **ESIA Italy**

### **Section 1 Introduction**

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## 1 INTRODUCTION

This report presents the updated version of the Environmental and Social Impact Assessment (ESIA) of the Italian section of the Trans Adriatic Pipeline (TAP) Project, reflecting the Scoping Advice of the Italian Ministry of Environment and Ministry of Cultural Heritage, comments received from stakeholders (both Italian Authorities and the general public) and project design changes that have occurred subsequent to the first ESIA submission on 15<sup>th</sup> March 2012. Whilst in principle these amendments could have been addressed through the provision of an integration document, for ease of reference and clarity the decision was taken to provide an entirely revised ESIA document, thus replacing in its entirety the first ESIA submission.

### 1.1 Project Understanding and Overview

The Trans Adriatic Pipeline (TAP) is a natural gas pipeline project which offers a new gas transportation route between the Caspian Region and Southern and Central Europe. The Project will transport gas via Greece and Albania and across the Adriatic Sea to southern Italy and further to Western Europe. The Project is aimed at enhancing security of supply as well as diversification of gas supplies for the European markets. Moreover, the Project has incorporated provisions to accommodate physical reverse flow.

The Project will initially have a capacity of 10 billion cubic metres per year (bcm/year). As more gas becomes available, the Project will have the capacity to expand to 20 bcm/year as required.

#### 1.1.1 Project Background

Europe currently relies on Russia, Africa and the North Sea for gas supplies through several existing pipelines, Russia being its key provider. However, Europe realizes the strategic need to diversify its gas supply and has taken several steps in this direction in the last three years (European Dialogue, 2011).

As part of this strategy, the “Southern Gas Corridor” is playing a major role in Europe’s energy security in ensuring the diversification of gas supplies to Western and South Eastern European markets. As a first step in opening up the Southern Gas Corridor, on 28<sup>th</sup> June 2013 the TAP Project was selected by the Shah Deniz Consortium to transport gas from the Shah Deniz II field in Azerbaijan to Europe.

An Intergovernmental Agreement (IGA) between Albania, Italy and Greece on the construction and operation of the TAP Project was signed in Athens on February 13<sup>th</sup> 2013. At the Italian National Level the TAP Project is included in and supported by the National Energy Strategy (Interministerial Decree, 8<sup>th</sup> March 2013).

#### 1.1.2 Project Location

The pipeline will start in Greece, at the Turkish border, crosses Albania and the Adriatic Sea and comes ashore in southern Italy, allowing gas to flow directly from the Caspian region to European markets.

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Figure 1-1 presents the pipeline's location.

**Figure 1-1 Trans Adriatic Pipeline Project Location**



Source: TAP AG (2013)

The pipeline is approximately 871 km long, (Greece 547 km, Albania 205 km, offshore 111 km, Italy 8.2 km). Its highest elevation point will be 1800 metres in Albania's mountains, while its lowest part offshore will be at 820 metres below sea level.

The shareholders of TAP AG (see Section 1.2) have specifically designed the TAP Project to transport gas available from Shah Deniz II gas field in the Caspian Sea (see Figure 1-2) and to be in alignment with the schedule of this development.

**Figure 1-2 Trans Adriatic Pipeline Project (red line) and Shah Deniz II gas field location**



Source: TAP AG (2013)

Gas from the Shah Deniz II development is foreseen to contribute to the domestic demand for gas in Azerbaijan, Georgia and Turkey, as well as to supply gas to markets in the EU, including Italy.

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Shah Deniz gas will be transported across Azerbaijan and Georgia via the South Caucasus Pipeline Expansion to Turkey, then via the Trans Anatolian Pipeline (TANAP) which will connect with the TAP near the Turkey/Greece border at Kipoi. The overall pipeline route is shown above on *Figure 1-2*. The TAP Project will provide the physical connection between the Turkey/Greece border and the Italian gas national grid operated by Snam Rete Gas (SRG).

## 1.2 Project Proponent

The shareholder structure of TAP AG comprises BP (20%), SOCAR (20%), Statoil (20%), Fluxys (16%), Total (10%), E.ON (9%) and Apxo (5%).

### 1.2.1 BP

BP is one of the leading international oil companies in the world. Through its activities makes available to its customers fuel for means of transports, energy for heat and power generation, motor oils and petrochemicals used for the realization of everyday items such as paint, clothing and packaging.

Main Company interests and activities are covered in two business segments: Upstream exploration and production, and Downstream refining and marketing.

Upstream activities include oil and natural gas exploration; field development and production; hydrocarbon transportation, storage and processing; and the marketing and trading of natural gas including liquefied natural gas (LNG). Downstream activities involve the supply and trading, refining, manufacturing, marketing and transportation of crude oil, petroleum and petrochemicals products.

BP activities in low-carbon energy, primarily focused on biofuels, are managed through its Alternative Energy business. More about BP at [www.bp.com](http://www.bp.com).

### 1.2.2 SOCAR

The State Oil Company of the Azerbaijan Republic (SOCAR) is involved in exploring oil and gas fields, producing, processing, and transporting oil, gas, and gas condensate, marketing petroleum and petrochemical products in domestic and international markets, and supplying natural gas to industry and the public in Azerbaijan. Three production divisions, two oil refineries and one gas processing plant, an oil tanker fleet, a deep water platform fabrication yard, two trusts, one institution, and 22 subdivisions are operating as corporate entities under SOCAR.

Joint ventures (including ventures in Georgia and Turkey), consortia, and operating companies established with SOCAR's participation, are doing business in different parts of the petroleum industry. SOCAR has representative offices in Georgia, Turkey, Romania, Austria, Switzerland, Kazakhstan, Great Britain, Iran, Germany and Ukraine and trading companies in Switzerland, Singapore, Vietnam, Nigeria and other countries. More about SOCAR at [www.socar.az](http://www.socar.az)

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### 1.2.3 STATOIL

Statoil is an international energy company with operations in 34 countries. Building on more than 35 years of experience from oil and gas production on the Norwegian continental shelf, the company is committed to accommodating the world's energy needs in a responsible manner, applying technology and creating innovative business solutions. Statoil is headquartered in Norway with 20,000 employees worldwide..

The company is the world's largest operator of deepwater fields. It is the world's third largest net seller of crude oil and a major gas supplier.

The Norwegian state is the biggest shareholder in Statoil with an ownership of 67 percent. Statoil is listed on Oslo Børs and New York Stock Exchange. For more information about Statoil visit <http://www.statoil.com/>.

### 1.2.4 Fluxys

Fluxys is a Belgium-based natural gas infrastructure group operating on the European market. The company is a major gas transit operator and combines gas transmission, gas storage and terminalling of liquefied natural gas (LNG). Besides its pipeline, storage and LNG terminalling assets in Belgium, Fluxys' partnerships include ownership in the Interconnector and BBL pipelines linking the UK with mainland Europe, the Dunkirk LNG terminal under construction in France, the NEL and TENP pipelines in Germany and the Transitgas pipeline in Switzerland.

Fluxys is convinced that gas and gas infrastructure will remain core components of an affordable energy mix for tomorrow's low-carbon economy. To foster the integration of the European natural gas market, the group develops a cross-border infrastructure backbone linking gas sources to markets, bridging the markets and gas trading places and providing security of supply. The company focuses on safe, efficient and sustainable operations, quality services in line with market expectations and creating long-term value for its shareholders. For more information: [www.fluxys.com](http://www.fluxys.com).

### 1.2.5 Total

Total is a leading energy player on the international stage. Its facilities are located in various regions of the world, as are its shareholders. In 2012, Total reorganized its operations to optimize their growth and development. More about Total at [www.total.com](http://www.total.com).

### 1.2.6 E.ON

E.ON is one of the world's largest investor-owned power and gas companies. At facilities across Europe, Russia, and North America, its more than 72,000 employees generated approx. EUR 132 billion in sales in 2012. In addition, there are businesses in Brazil and Turkey managed jointly with partners.

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E.ON's diversified business consists of renewables, conventional and decentralized power generation, natural gas, energy trading, retail and distribution. It supplies around 26 million customers with energy.

With its broad energy mix E.ON owns almost 68 GW of generation capacity and is one of the world's leading renewables companies.

It has an ambitious objective: to make energy cleaner and better wherever it operates. With its strategy cleaner & better energy, E.ON is turning into a global provider of specialized energy solutions which will benefit employees, customers and investors. More information about E.ON is available at [www.eon.com](http://www.eon.com).

### 1.2.7 AXPO

Axpo delivers energy in Switzerland and in Europe. Axpo is a Swiss energy company with local roots and a European focus. Axpo is 100% owned by the cantons of Northeastern Switzerland and, together with its partners, supplies electricity to around three million people. Axpo is a Swiss energy company with local roots and a European focus. Axpo is 100% owned by the cantons of Northeastern Switzerland. Axpo is active in the production, distribution and sale of electricity, as well as international energy trading. Axpo also offers innovative energy services to customers in Switzerland and Europe.. More information about Axpo is available at [www.axpo.com](http://www.axpo.com).

### 1.3 ESIA Requirements

The D. Lgs 152/06, as modified by D. Lgs 4/08 and D.Lgs. 128/10, lists all the activities subject to a VIA Procedure (*Environmental Impact Assessment Procedure*), both at National and Regional level.

The TAP Project falls under Annex II to the Section 2 of the above-mentioned D.Lgs 152/06:

- point 9) - *Condutture di diametro superiore a 800 mm e di lunghezza superiore a 40 km; per il trasporto di gas, petrolio e prodotti chimici, e; per il trasporto dei flussi di biossido di carbonio (CO<sub>2</sub>) ai fini dello stoccaggio geologico, comprese le relative stazioni di spinta intermedie (pipelines with a diameter greater than 800 mm and length greater than 40 km, for gas, oil chemical products transportation; and for CO<sub>2</sub> transportation for its geological storage, including their intermediate compressor stations)*

and therefore it is included in the activities to be submitted to a National VIA.

The present Environmental Impact Assessment has been developed according to the specific requirements set by the Italian Regulation on VIA (DPCM 27/12/1988 and D.Lgs. 152/2006 as modified by D. Lgs 4/08 and D.Lgs. 128/10).

In addition, the ESIA has been prepared following international best practice as per EBRD (European Bank for Reconstruction and Development) standards, including specific sections on Social Impact Assessment.

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This *Environmental and Social Impact Assessment Study* (ESIA) constitutes, together with the *Non-Technical Summary* and the *Project Basic Design* the documents to activate the VIA procedure.

## **1.4 ESIA Process**

### **1.4.1 Objectives**

ESIA is the systematic process of identifying and assessing the potential effects on the biophysical, socioeconomic, cultural heritage and environment as a consequence of a project or development. As a planning tool, the ESIA aims to ensure that environmental, social and cultural heritage issues throughout the entire project lifecycle are anticipated and considered by the project proponent, in this case TAP AG. It also serves as a framework for establishing project controls to reduce or prevent adverse environmental, socio-economic and cultural heritage impacts and enhance positive impacts.

### **1.4.2 ESIA Scope of Work**

TAP AG recognises that comprehensive planning and management of environmental and socio-economic issues are essential to the execution of any successful project and, therefore, intends to fully integrate environmental and socio-economic considerations into the life cycle of the proposed Project.

As an initial step of the ESIA process, TAP AG has undertaken ESIA scoping procedure (in compliance with Italian legislation and International Best Practice as per EBRD standards) to establish key issues for the project and to define the full scope of the ESIA.

For this purpose TAP AG prepared the Scoping Documentation, including the following information:

- Scope and content of the ESIA to be undertaken;
- Introduction of the regulation and guidelines to be considered in the ESIA process;
- Description of the selected options (current at the time of submission, in May 2011);
- Brief description of the project to be assessed during in the ESIA;
- Preliminary Impact Assessment;
- Terms of Reference for the ESIA;
- Stakeholder engagement process.

TAP AG applied for the Italian Scoping Procedure (voluntary procedure under art. 21 of D.Lgs 152/06 and further amendments) in May 2011.

The scoping documentation was disclosed to the Stakeholders (details are reported in *Section 7*) and published on TAP AG's website.

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Official Scoping Advice was issued by the Italian Ministry of Environment in November 2011 (Advice prot. DVA-2011-0029847 dated 29 November 2011) and by the Italian Ministry of Cultural Heritage in February 2012 (Advice prot. DG/PBAAC/34.19.04/5466/2012 dated 22 February 2012), fully reported in Annex 1 of this ESIA.

TAP AG applied for the Italian EIA Procedure, submitting an ESIA on the 15<sup>th</sup> March 2012. After this submission TAP AG obtained by the Ministry of Environment 3 suspensions of the EIA procedure (the first one until 17<sup>th</sup> September 2012, the second one until 10<sup>th</sup> December 2012 and the third one until 10<sup>th</sup> September 2013) in order to integrate and modify the presented documentation, considering the Scoping Advice of the Italian Ministry of Environment and Ministry of Cultural Heritage, comments received from stakeholders (both Italian Authorities and the general public) and considering the Project design amendments that occurred subsequent to the submission of the original ESIA.

The present document constitutes the updated ESIA, which replaces the ESIA submitted in March 2012.

### 1.4.3 Data Sources

The data sources used for the development of this ESIA Report are listed in *Section 0 “Document Guide”*. There are three main levels of data used in this ESIA Report for characterising the Baseline conditions:

- Desk-based study: (published available information, thematic maps, etc.)
- Analysis of high-resolution orthophotos (source: Puglia Region SIT).
- Field surveys performed to ground-truth information collected in the desk-based study fill in potential gaps and acquire detailed site information and obtain baseline measurements of parameters such as air quality and ambient noise levels.

Project information has been provided by TAP AG (schedules, material balances, natural resources uses, engineering documents, etc.).

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## 1.5 Report Structure

This document is composed of the following Appendices and Annexes:

- Section 0 Document Guide
- Section 1 Introduction;
- Section 2 Project Justification;
- Section 3 Legal Framework;
- Section 4 Project Description;
- Section 5 ESIA Approach and Methodology;
- Section 6 Environmental, Social and Cultural Heritage Baseline;
- Section 7 Stakeholder Engagement;
- Section 8 Assessment of Impacts and Mitigation Measures;
- Section 9 Environmental and Social Management and Monitoring.
- Section 10 Overall Project Assessment

Annexes:

- Annex 1 – Scoping Advice from MoE and MCH;
- Annex 2 - Alternatives Assessment
- Annex 3 – Labour, Health and Safety Legislation in Italy;
- Annex 4 – Main Legislation on Energy and Gas Sector;
- Annex 5 – Soil Management Plan;
- Annex 6 – ESIA Baseline and Impact Assessment Methodology;
- Annex 7 – Baseline Data and Maps
- Annex 8 – Landscape Impact Assessment;
- Annex 9 – Habitats Directive Appropriate Assessment - Screening;
- Annex 10 – Sediment Dispersion;
- Annex 11 – Summary of Impacts and Mitigation Measures;
- Annex 12 – Genest - Noise Assessment Report
- Annex 13 – HRIA Summary and Main Findings

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