Trans Adriatic Pipeline

ESIA Albania
Section 1 – Introduction

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1 INTRODUCTION

This report presents the Environmental and Social Impact Assessment (ESIA) of the Albanian section of the Trans Adriatic Pipeline (TAP).

1.1 Project Understanding and Overview

The TAP is a proposed natural gas pipeline which offers a new gas transportation route between the Caspian Region and Southern and Central Europe. The TAP will transport gas via Greece and Albania, across the Adriatic Sea to southern Italy and further to Western Europe. It aims to enhance security of supply as well as to diversify gas supplies for European markets.

The TAP will initially have a capacity of 10 billion cubic metres per year (bcm/yr). As more gas becomes available, the TAP will have the capacity to supply an additional 10 bcm/yr of new gas, expanding to 20 bcm/yr as required.

1.1.1 Project Background

Europe currently relies on Russia, Africa and the North Sea for gas supplies through several existing pipelines, with Russia being its key provider. However, Europe realises the strategic need to diversify its gas supply and has taken several steps in this direction in the last three years (European Dialogue, 2011). During this period a number of energy companies and governments are attempting to bring to reality the southern gas corridor concept, instigated by the European Commission, by developing concrete projects, the TAP being one of these.

1.1.2 Project Location

The pipeline will start in Greece, close to the Turkish border, cross Albania and the Adriatic Sea and come ashore in southern Italy, allowing gas to flow directly from the Caspian region to European markets. *Figure 1.1-1* presents the location of the TAP.

Figure 1.1-1 Trans Adriatic Pipeline Location

Source: TAP AG (2011)

The TAP's route will be approximately 800 kilometres (km) in length (Greece 478 km, Albania 209 km, offshore 105 km, Italy 4.9 km). Entering from Greece in the Korca region, the Albanian section of the route stretches a total of 209 km to the coast, northwest of Fier. The offshore section will be 105 km in length, crossing the Adriatic Sea to enter southern Italy. TheTAP's highest elevation point will be 1,800 meters (m) in Albania's mountains, while its lowest part offshore will be at a depth of 820 m.

A gas pipeline from the Caspian Sea already exists in part: The South Caucasus Pipeline, completed in 2007, goes from Baku (Azerbaijan) to Erzurum (Turkey). This gas then flows through the Turkish infrastructure all the way to Istanbul. The internal network on the western side of the Adriatic Sea and north of the Balkans is, broadly speaking, also built. The TAP will provide the physical connection between the eastern part, which ends at the Turkey / Greece border, and the end market of Europe.

1.1.3 Description of the Infrastructure and Relevant Services

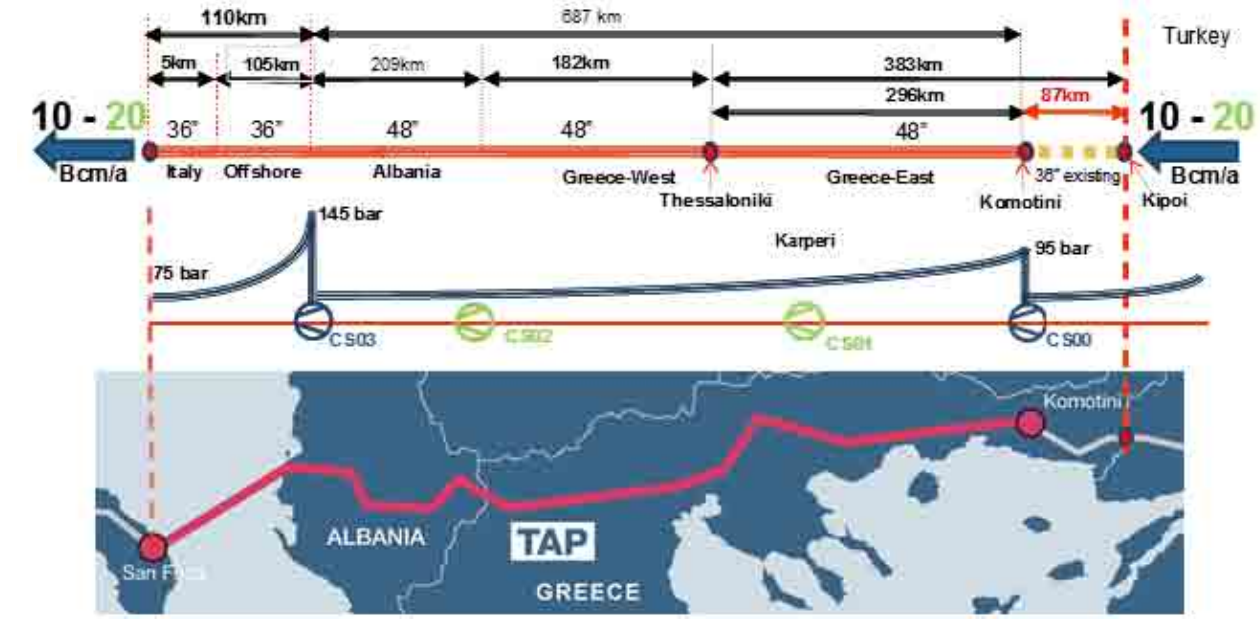
The onshore pipeline is designed with a diameter of 48 inches onshore (Komotini to the Adriatic coastline near Fier), and reduces to a diameter of 36 inches for the offshore section, which crosses the Adriatic Sea, makes landfall at San Foca (province of Lecce) (*Figure 1.1-2*).

The offshore pipeline crossing the Adriatic Sea is the shortest distance between Albania and Italy, with favourable subsea conditions relative to depth and steepness of the seabed, thus providing a highly cost efficient solution.

According to the development of the gas markets in the South East European region, the TAP is designed to enable the implementation of additional off-take points along the route if sufficient demand is available and the implementation is economically reasonable and technically viable.

Construction of the pipeline will be performed by one or more contractors in each of the three host countries in compliance with national and international HSE standards and national procurement requirements. Local contractors will also be invited to participate in the construction phase.

Figure 1.1-2 Trans Adriatic Pipeline Features



Note 1: CS01 and CS02 only needed for the 20 bcm/yr case.
Note 2: Albania onshore pipeline length is 211 km with elevation
Source: TAP AG (2012) – Legend: Bcm/a = billion cubic metres/year or bcm/yr; CS = Compressor Station

1.2 Project Proponent

The shareholder structure of the TAP is comprised of Swiss Axpo (42.5%), Norwegian Statoil (42.5%) and German E.ON Ruhrgas (15%).

1.2.1 Axpo

Axpo is a Swiss energy company owned by the cantons of northeastern Switzerland[1]. The company is active in the production, distribution and sale of electricity, as well as in the international energy trade. Axpo also offers innovative energy related services for clients in Switzerland and Europe.

[1] Axpo recently integrated EGL AG (a European energy trading company) into its new operational and legal structure - effective from 1 October 2012.

Axpo's operations focus on two business areas:

Axpo Trading and Sales which comprises all EGL and Axpo AG (an Axpo Group company) and whose scope includes all trading activities and managing the EGL natural gas business; and

Axpo Assets which is the business area in charge of maintaining and developing the energy production capabilities and infrastructure in Switzerland and elsewhere in Europe.

1.2.2 Statoil

Statoil is an international energy company with operations in 36 countries. Building on more than 35 years of experience with oil and gas production on the Norwegian continental shelf, Statoil 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 and listed on the New York and Oslo stock exchanges.

Statoil is a long-term, reliable natural gas supplier which enjoys a strong position in some of the world's most attractive markets. The group is the second largest gas supplier in Europe and the sixth biggest in the world. Statoil sells gas to customers in Germany, France, Belgium, Italy, the Netherlands, the UK, the Czech Republic, Austria, Spain, Denmark, Ireland, Norway, Azerbaijan, Georgia, Turkey and the USA.

Statoil's operations are divided into the following categories: Exploration and Production; New Energy; Natural Gas; Procurement; Pipelines; Production Facilities; Trading and Products.

Statoil currently produces 1.9 billion barrels of oil equivalent (boe) per day, is the world leader in carbon capture and storage and the largest operator in waters deeper than 100 m.

1.2.3 E.ON Ruhrgas

Within the E.ON Group, the Global Gas Unit is responsible for gas procurement and gas production, as well as for project and product development in the fields of storage, gas transmission, LNG and technical support for plants. The lead company of Global Gas is E.ON Ruhrgas AG.

The business activities of E.ON Ruhrgas are divided into seven strategic business units. Portfolio Management ensures that individual departments cooperate effectively. The Gas Technology & Energy Systems Competence Centre pools the technical expertise required for supporting all the company's activities along the value stream.

E.ON Ruhrgas Exploration & Production is the unit responsible for gas and oil exploration and production activities (the upstream sector). LTC is the unit responsible for long-term gas supply contracts.

In the LNG unit, the objective is to secure long-term growth opportunities in the global gas business. National and international storage business is coordinated by E.ON Gas Storage unit.

Gas transmission capacities on the German natural gas pipeline system are marketed by the newly established group company unit Open Grid Europe.

Infrastructure Shareholdings, the strategic business unit, manages existing international pipeline systems and shareholdings and actively supports new pipeline projects and joint ventures.

The leading position of the E.ON Group in the European gas sales market is reinforced by the Sales Business Unit. Sales pools activities for power and gas and offers products tailored to customers' needs as well as advice from a single source.

1.3 The Consultancy

TAP AG has created a multi-disciplinary team to provide an integral approach to project design and its integration of environmental and socioeconomic aspects.

This ESIA has been prepared by a network of international and local consultants and specialists. Local consultants have been selected individually from personnel working in Albanian universities, including professionals certified by relevant authorities for preparation of Environmental Impact Assessments in Albania. A list of the key consultants and specialists is provided in the document guide.

International and local consultants cover all the different areas of expertise needed to develop an ESIA of international standards, such as water resources, geology, landscape, forests, ecology, noise, air quality, archaeology/cultural heritage, sociology, economy, law, etc. TAP AG has also organised a team of local and international socioeconomic, financial and legal experts, which has been in charge of organising all stakeholder engagement activities related to the ESIA.

1.4 ESIA Requirements

Albanian Laws on Environmental Impact Assessment (Law No. 8990 and Law No. 10440) aim to protect the environment through prevention, minimisation and compensation of damages from proposed projects which may cause direct or indirect significant adverse impacts on the environment due to their size, nature or location, before they are approved. Given the nature, extent and location of the TAP in Albania, its authorization is subject to the environmental permitting procedure according to Albanian Law.

In its commitment to the environment and the community, TAP AG has adopted the EBRD Performance Requirements (PR) and standards as the main international standards for compliance during the execution of Project activities.

The ESIA is formally presented to the authorities together with other documents in the dossier for environmental permit application. The ESIA report needs to be prepared by certified experts selected by the applicant for the environmental permit. ESIA reports must be signed and stamped by the drafters, and data regarding the licence of the environmental experts certified by the Ministry of Environment, Forest and Water Administration must be given. The contents of the ESIA are included in Instruction No. 3, dated 19.11.2009 "On the methodology of ESIA evaluation". The detailed Table of Contents of an ESIA is presented in Appendix II (Instruction No. 3, dated 19.11.2009 "On the methodology of EIA evaluation").

This document presents the Environmental and Social Impact Assessment (ESIA) of the Albanian section of the TAP (also referred to hereinafter as 'the Project') and will be submitted to relevant authorities as part of the dossier for environmental permit application.

The Project proponents and the consultancies developing the ESIA have been working closely with Albanian authorities and the different communities while developing all the activities for arriving at this final ESIA Report. TAP AG has considered the requests from Albanian authorities and from the communities in the Project's final design. *Section 7* shows the Stakeholder Engagement performed in the ESIA process.

1.5 ESIA Process

1.5.1 Objectives

ESIA is the systematic process of identifying and assessing the potential effects on the biophysical, socioeconomic, and cultural environment as a consequence of a project or development. As a planning tool, the ESIA aims to ensure that environmental, socioeconomic and cultural 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 or socioeconomic impacts.

1.5.2 ESIA Scope of Work

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

As an initial step in the ESIA process, TAP AG has undertaken an 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.

Therefore, TAP AG prepared the Scoping Documentation and presented it to the authorities, including the following information:

- Scope and content of the ESIA to be undertaken;

- Introduction of the regulations and guidelines to be considered in the ESIA process;
- Description of the selected options (current at the time of submission in March 2012);
- Brief description of the Project to be assessed during in the ESIA;
- Terms of Reference for the ESIA; and
- Stakeholder engagement process.

1.5.3 Data Sources

The data sources used in developing this ESIA Report are listed at the beginning of the ESIA Report after the Table of Contents. 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 satellite images (VHR Orthomosaics provided by Astrium); and
- Field surveys performed to ground truth information collected during the desk-based study and to fill in potential gaps.

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

1.6 Report Structure

This document comprises of the following *Sections* and supporting *Annexes*:

Main Sections:

- *Section 0 - Non-Technical Summary*
- *Section 1 - Introduction*
- *Section 2 - Project Justification*
- *Section 3 - Legal Framework*
- *Section 4 - Project Description*
- *Section 5 - Baseline and Impact Assessment Methodology*
- *Section 6 - Environmental, Socioeconomic and Cultural Heritage Baseline*
- *Section 7 - Stakeholder Engagement*
- *Section 8 - Assessment of Impacts and Mitigation Measures*
- *Section 9 - Environmental and Social Management and Monitoring*

Main Annexes:

- *Annex 1 – Comparison Matrix for Route Alternatives*
- *Annex 2 – Albania National Legislation Framework*
- *Annex 3 – Project Description Figures and Maps*
- *Annex 4 – Baseline Maps and Photographic Report*
- *Annex 5 – Baseline and Impact Assessment Criteria*
- *Annex 6 – Baseline Data*
- *Annex 7 – Stakeholder Engagement Data*
- *Annex 8 – Impact Assessment Data*
- *Annex 9 – Sediment Dispersion Model from Nearshore Flotation Channel Installation and Pipeline Trenching*
- *Annex 10 - HRIA Summary and Main Findings*
- *Annex 11 – Habitat Directive Assessment Report*

Some of the main annexes are further sub-divided therefore one single listed annex might contain several sub-annexes.

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