

**Public**

## Environmental and Social Data Sheet

### Overview

Project Name:	SNAM INFRASTRUCTURE UPGRADE
Project Number:	2018-0208
Country:	Italy
Project Description:	The Project is part of the Promoters' investment programme for the period 2017-2021, in relation to their gas transmission and storage activities spread across Italy. It consists of 8 distinct project components, including new pipelines - among these the TAP connection to the national grid - and the reconstruction, replacement and modernization of existing gas transmission and storage assets – among these the reconstruction of the gas pipeline between Rimini and Sansepolcro. The Project will contribute to energy security, safety, reliability and gas network operational efficiency.
EIA required:	yes
Project included in Carbon Footprint Exercise <sup>1</sup> :	No
(details are provided in section: "EIB Carbon Footprint Exercise")	

### Environmental and Social Assessment

The investment programme consists of the following components:

- 1) Modernization of the Masera measuring station
- 2) Equipment replacement and modernization of the Minerbio underground gas storage
- 3) Equipment replacement and modernization of the Settala underground gas storage
- 4) Equipment replacement at Brugherio underground gas storage
- 5) Gas pipeline between Boltiere and Bergamo
- 6) Gas pipeline between Pietravairano and Pignataro Maggiore
- 7) Reconstruction of the pipeline between Rimini and Sansepolcro
- 8) The Trans Adriatic Pipeline (TAP) connection to the national grid between Melendugno and Brindisi (the "TAP Component")

### Environmental and Social Assessment

<sup>1</sup> Only projects that meet the scope of the Pilot Exercise, as defined in the EIB draft Carbon Footprint Methodologies, are included, provided estimated emissions exceed the methodology thresholds: above 100,000 tons CO<sub>2</sub>e/year absolute (gross) or 20,000 tons CO<sub>2</sub>e/year relative (net) – both increases and savings.

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Based on the technical characteristics of the **project schemes 1 to 5** and the criteria and thresholds defined in the national legislation, the following project schemes do not fall under the EU EIA Directive 2011/92/EU. All authorisations as related to fire detection and ventilation have been issued. The final building permits are expected to be received by the end of 2018.

The works concern the upgrade and rehabilitation of valves, injector systems, obsolete storage tanks, amongst others. All works will be taking place on existing sites and the environmental impacts are not considered to be significant. The promoter's health and safety and emergency procedures are compliant with national legislation as well as being aligned with international good practice.

The 8km **Boltiere-Bergamo pipeline component** is an associated facility of the HPRS plant, which obtained its Development Consent in August of 2017. The pipeline route was determined in a way to avoid environmentally sensitive areas to the extent possible. The pipeline route is mostly agricultural and sub-urban landscape. Impacts will be mainly temporary in nature and relate to construction works. The impacts will be managed by appropriate measures taken by the construction company in order to avoid unacceptable nuisance to other parties and the public. There are no Natura 2000 areas in the vicinity.

The **gas pipeline between Pietravairano and Pignataro Maggiore (Campania) component** was screened out by the competent authority for an EIA as well as for the need for an appropriate assessment required by Article 6(3) of the Habitats Directive. The pipeline route will go through mostly agricultural and grazing land. The decision was issued by the Competent Authority on 16 October 2017 and the Development Consent was issued in July 2018 following the fulfilment of the three conditions related to fauna, hydrogeology and soil erosion established in the screening decision. Negotiations on the land easement and compensation are almost completed.

Surface water quality may be affected by sedimentation due to river crossing activities and the release of sewage and wastewater. Construction activities will be carried out depending on climate condition and in sensitive areas, such construction will not take place during the avifauna breeding season. The promoter has stated that they would only use open cut for all river crossings but will have in place the required mitigation measure to minimise the impacts on water quality through the development of hydro-testing plans where required. These plans will include (i) methods and sites of collection of water and disposal of wastewater used for testing and pipeline cleaning, (ii) chemical characterisation of the water before its discharge and water quality monitoring and, (iii) methods for any waste disposal.

**Reconstruction of the pipeline between Rimini and Sansepolcro** and decommissioning of the old pipeline: The whole pipeline is 74.590 m length: the first part is 650 mm diameter wide (length of 38.320 m) and the second is 750 mm diameter wide (length of 36.270 m). Italian law requires the top of the pipe to be buried at a minimum of 1 m below the ground, and it is planned at 1,5 m depth. The region of Tuscany has provided a positive opinion on the EIA in June 2018 with a number of conditions. The EIA approval for the Rimini section by the Emilia Romagna Region is still outstanding due to concerns and complaints raised by the "Coldiretti" (Agriculture Collective) specifically with regards to insufficient information on the land easement and compensation process for loss of livelihood. The promoter has been engaging with the complainants and an agreement, between Coldiretti and the promoter was discussed in October 2018. As a result the promoter is expecting the agreement to be signed by the end of 2018,

The pipeline crosses 5 Natura 2000 areas in Emilia Romagna and 1 in Tuscany. The Appropriate Assessment has been carried out in Tuscany in line with Article 6(3) of the

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Habitats Directive. Conditions have been included in the EIA authorisation of that portion of the pipeline. The EIA study covers also the decommissioning of the old pipeline.

The promoter will be using open cut methods for all river crossings. The decision was based both on engineering constraints and ecological values of the area. Water crossing method statements, which include ecological considerations and measures will be developed during detailed design/engineering.

Hydro-testing management and monitoring plans, which include the requirement from the region of Tuscany for surface water quality monitoring, will be developed by the promoter prior to construction. These plans will include, as required, (i) methods and sites of collection of water and disposal of wastewater used for the testing and the pipeline cleaning, (ii) chemical characterisation of the water before its discharge and water quality monitoring and (iii) methods for any waste disposal”.

Following the EIB review of the EIA study, the following areas which need alignment with EIB E&S Standards were identified.

The EIA study concluded that even after mitigation measures have been applied, including restoration measures, the residual impact on soil, landscape and vegetation remains medium and with respect to fauna and ecosystems it remains high. Medium and high residual impacts have been indicated for habitats listed under Annex I of the Habitat Directive, including priority habitats, and habitats of importance for species listed under Annexes II and IV of the Habitat Directive or listed in the Bird Directive.

Detailed in-design bio-restoration plans will be developed for each of those affected habitats tailored to the real conditions of habitats *ante-operam* and clearly demonstrate that medium and high residual impacts can be reduced to low/negligible level. Bio-restoration plans will include remedial and/or compensation measures, in case the No Net Loss of biodiversity cannot be demonstrated or any of the expected targets should not be achieved during monitoring. The promoter will provide to the Bank the detailed bio-restoration and monitoring plans prior to construction.

**Trans Adriatic Pipeline Connection to the Grid:** The TAP Connection scheme involves the construction of a 1400-mm (56-in.) pipeline that will link the TAP project in Melendugno (Lecce), Italy to the natural gas national grid in Brindisi. The length of the pipeline will be approximately 55 km. The project lies entirely in the Puglia region of Italy, passing through the provinces of Lecce and Brindisi. The route will run from southeast to northwest, approximately parallel to the Adriatic coast and at a distance between 3 and 10 km from it.

The project also includes the construction of metering facilities and a pig trap area in the municipality of Melendugno, at the interconnection point with the TAP pipeline. Connection with the national grid will occur at the existing facilities in Masseria Matagiola (Brindisi), where capacity will be increased. The project received its Development Consent in May 2018 however with a negative opinion from the Regional Government of Puglia and the Ministry of Cultural Heritage and Activities and Tourism.

The pipeline has been designed to meet the requirements of the Italian Energy Regulatory Authority with a burial depth of 1m below ground level and increased to 1.5m at infrastructure crossing points. The project has defined a specific working strip width of 24/32 m. A number of routing options were reviewed during the EIA process to identify a route that was (i) as short as practical, (ii) avoided major settlements and (iii) where possible, followed existing infrastructure, thereby avoiding new impacts. Care was also taken to minimise impacts on

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sensitive ecological areas, although the route does impact on 8614 olive trees, Annex I and Annex IV species of the Habitats Directive as well as rivers and other water bodies.

During the construction of the pipeline, most of the environmental impacts (clearing of right-of-way, noise, dust, increased waste and soil disposal) will be temporary and can be mitigated with standard environmental management procedures for construction, complemented by specific construction methods for river crossings (trenchless).

The EIA study of 2015 was revised by the promoter taking into account most concerns raised by the Ministry of Environment and following the public consultation process in 2017. However, a number of areas needing further work in the assessment remain: (i) no cumulative impact assessment was carried out and specifically not at the connection point in Brindisi – this has been a point of contention with the Region of Puglia (ii) given the issues and the sensitivities around the TAP Project, the quality of the stakeholder engagement has been put into question by the Region in particular; (iv) the socio-economic impacts of the project have not been adequately addressed; (iii) baseline surveys on fauna and flora were limited to desktop surveys, as a result the bio-restoration and monitoring plans summarised in the EIA will need to be refined. Field surveys, as part of the PMA (Environmental Monitoring Plan) and required to characterise the *ante-operam*, should be used also to develop and tailor the detailed in-design bio-restoration plans.

The Project will result in direct impact on landowners and users along the right-of-way. In total over 700 land plots in 9 municipalities and in 2 provinces will be directly affected by construction, with most of the impacts related to (i) temporary land acquisition associated with temporary restrictions of land use rights for owners and users and the possible loss of olive and fruit trees and income; (ii) limited permanent land acquisition for Above Ground Installations (AGIS); (iii) permanent land use restrictions in the pipeline corridor (e.g. building of structures) potentially associated with decreased property values; and (iv) temporary removal of olive trees and trees with high landscape value for the purpose of route clearance during the construction.

In order to mitigate these impacts, the promoter has developed a land easement framework that identifies impacted persons, eligibility criteria and compensation entitlements for different types of impacts, as well as principles of engagement with affected landowners, The Land easement process was developed in line with the Italian legal framework and specifically DPR 327/2001 and LR 3/2005. The promoter will provide a summary of its land easement and acquisition process detailing the eligibility criteria, compensation entitlements, engagement with affected landowners and land acquisition/easement schedule.

No appropriate Assessment under Article 6(3) was required. However the national EIA has identified species under conservation/protection status outside protected area some of which also have as their natural habitat the “muretto a secco” (i.e. the dry stone walls). The baseline studies in the EIA on fauna were all based on a desktop analysis. Field surveys, carried out as part of the PMA *ante-operam* (Environmental Monitoring Plan), should be used to adequately re-assess and quantify impacts on fauna present on the ground and to establish the tailored mitigation and restoration measures. The promoter will develop respective bio-restoration and monitoring plans for all affected habitats/species. Where the expected targets established in the monitoring plans will not be achieved, remedial and/or compensation measures will be required to be developed. The Promoter will provide to the Bank the detailed bio-restoration and monitoring plans prior to construction.

The pipeline is crossing 7 areas of archaeological interest considered to be culturally sensitive areas. Furthermore, 194 “muretto a secco” (stone dry walls) will be impacted and will need to be reconstructed. A cultural heritage protocol will be put in place to minimise any impacts and

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a chance find procedure, in line with respective national requirements, will be applied by the promoter and the contractor.

The promoter has an established grievance process as part of its corporate governance structure which deals with any grievances arising as a result of the construction, operations of the pipeline and land easement and livelihood restoration process. This grievance process has procedures in place to address and respond in a timely manner to all grievances submitted by the affected third parties and individuals. The promoter will require the respective EPC contractors to have a worker grievance mechanism in place.

Finally, the project will liaise closely with the TAP Project to ensure consistency in the application of project E&S standards as well as in the engagement with any opposition to the project and having in place processes in line with international best practice and the Voluntary Principles on Human Rights and Security.

#### **EIB Carbon Footprint Exercise:**

Absolute emissions from new pipelines are zero since there is virtually no leakage and no compressor stations are included in the programme. The connection to TAP will use TAP's pressure and emissions from its fuel gas have been accounted for in the TAP CF calculation. Replacement of obsolete equipment will not produce any absolute emissions either.

The baseline to the programme is the current state of the system, which has negligibly higher emissions due to the age of the equipment to be replaced. A conservative assumption is taken here that relative emissions are zero.

## **Conclusions and Recommendations**

With the following conditions in place the investment programme is acceptable in environmental and social terms;

No funds shall be allocated to any of the components until all environmental authorisations and development consents have been issued by the relevant competent authorities; the Promoters will submit an electronic copy of the Environmental Impact Assessments including the non-technical summaries ("NTS") where relevant which will be made accessible through the public project register on the Bank's website.

**For pipeline component 7** confirm that the issues raised by the "Coldiretti" have been resolved to the satisfaction of the affected communities and the agreement has been signed.

**For pipeline components 7 and 8** the promoter shall submit to the Bank the respective bio-restoration and monitoring plans. Should the expected targets established in the monitoring plans not be achieved, remedial and/or compensation measures will be required to be developed to the satisfaction of the EIB.

#### **For pipeline component 8 the promoter shall**

Liaise closely with the TAP project to ensure that the same environmental and social standards and requirements are applied in both projects and in particular concerning the engagement with any opposition to the project and having in place processes in line with international best practice and the Voluntary Principles on Human Rights and Security.

Prior to construction, develop and submit to the Bank an Ecological Management Plan which will include the pre-construction/pre-clearance surveys to be carried out in accordance with project commitments, Management Plan for fauna, invasive species, restoration plans for different habitats and agroecosystems (including watercourse/canal) as requested in the Development Consent;



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The promoter will provide to the Bank, a summary of its land easement and acquisition process detailing the eligibility criteria, compensation entitlements, engagement with affected landowners and land acquisition/easement schedule”.

EIB reserves the right to retain an independent environmental and social consultant to supplement the Bank’s monitoring during construction and initial operations of the TAP pipeline connection to the national grid.