**PA/08757/17 [EA 00043/16]:**
CONSTRUCTION OF MELITA TRANSGAS PIPELINE EU PROJECT OF COMMON INTEREST. THE PROPOSAL INCLUDES A TERMINAL STATION AT DELIMARA POWER STATION TO BE CONSTRUCTED PARTIALLY ON RECLAIMED LAND WITH REVETMENT, A MICRO-TUNNEL ROUTE THROUGH DELIMARA PENINSULA, AND THE LAYING OF AN OFFSHORE PIPELINE UP TO THE MEDIAN LINE BETWEEN DELIMARA, MALTA AND GELA, SICILY

LOCATION: SITE AT, DELIMARA POWER STATION AND OFFSHORE ROUTE WITHIN THE MALTA TERRITORIAL WATERS, DELIMARA, MARSAXLOKK, MALTA

# 1. INTRODUCTION

## *1.1 General background*

The proposal for the above-captioned development required the submission of an Environmental Impact Assessment (EIA) in accordance with the then Environmental Impact Assessment Regulations, 2007 (S.L. 549.46), specifically Schedule IA, Category II, Section 2.6.2.1 (*Oil and gas pipeline installations and pipelines for the transport of $CO_2$ streams for the purpose of geological storage (projects not included in Category I of this Section*)) and Section 4.2.2.3 (*Construction of a building with footprint of more than 500$m^2$)*. Following amendments to the same Regulations in 2017, the submission of an EIA was still required and confirmed to fall under Schedule I Category II, Section 4.3.2.1 (*Oil or gas pipeline installations not falling within Category I)*.

The EIA was coordinated by Ing. Mario Schembri on behalf of AIS Environment Ltd.

## *1.2 Description of the site and proposed development*

PA/08757/17 is an application for the offshore approach (i.e. laying of a 22" offshore gas pipeline between Delimara, Malta and Gela, Sicily) (Figure 1), the shore approach (i.e. an onshore micro tunnel route through the Delimara peninsula) and onshore approach (i.e. land reclamation, access road to the terminal station and a terminal station at the Delimara Power Station (DPS)) (Figure 2).

The site is located within Natura 2000 sites (Figure 3) *Żona fil-Baħar fil-Grigal* (MT 0000107) designated as an Special Protected Area (SPA) via GN No. 1311 of 2016; *Żona fil-Baħar fil-Lvant* (MT 0000108) designated as an SPA via GN No. 1311 of 2016; and *Żona fil-Baħar fil-Lbiċ* (MT 0000111) designated as an SPA via GN No. 1311 of 2016, in accordance with the Flora, Fauna and Natural Habitats Protection Regulations (S.L.549.44). In this regard, an Appropriate Assessment (AA) study was requested by ERA in accordance with the Flora, Fauna and Natural Habitats Protection Regulations (S.L. 549.44) to assess whether the proposed development will have a significant effect on the site and its surroundings.

Given that the project is set in a transboundary context, the EIA and AA focused on the Maltese part of the project i.e. the shore and onshore approach, together with the offshore approach until the median line between Malta and Sicily.

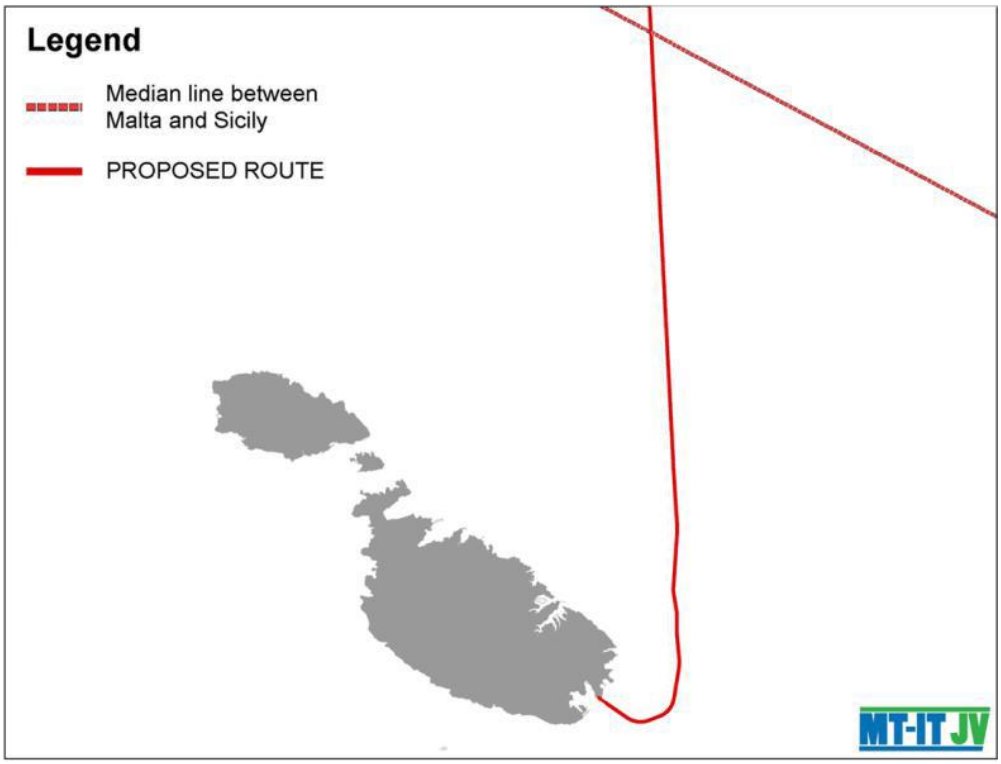


*Figure 1: Location of offshore route (Source: EIA Report [May 2021])*


*Figure 2: Location of onshore route and Delimara Terminal Plant (Source: EIA Report [February 2021])*

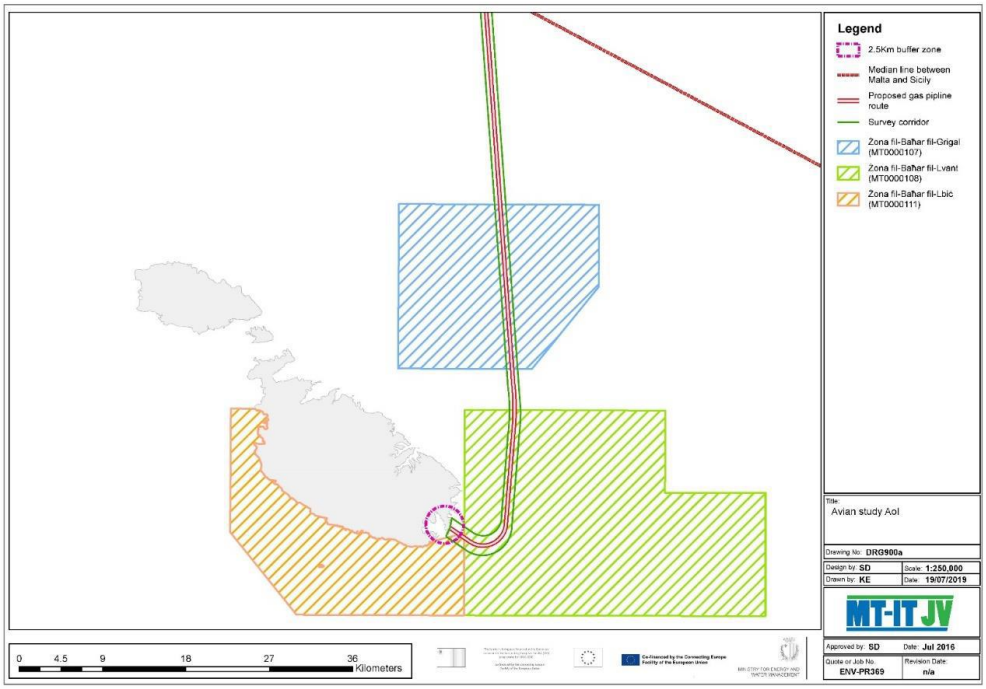


*Figure 3: Natura 2000 sites along the pathway of the gas pipeline (Source: EIA Report [February 2021])*

# 2. EIA CONSULTATIONS

## *2.1 EIA Scoping*

During the scoping stage, the Project Description Statement (PDS) was circulated to the following consultees and made available for a 30-day public consultation period between 29th January 2018 and 28th February 2018:

- Planning Authority;
- Malta Resources Authority (MRA);
- Regulator for Energy and Water Services (REWS);
- Ministry for the Environment, Sustainable Development and Climate Change - Department of Fisheries and Aquaculture;
- Ministry for the Environment, Sustainable Development and Climate Change – Agricultural Directorate;
- Malta Tourism Authority (MTA);
- Occupational Health and Safety Authority;
- Civil Protection Department;
- Transport Malta;
- Superintendence of Cultural Heritage;
- Department of Health Regulation – Environmental Health Directorate;
- Local council of Marsaxlokk; and
- Environmental NGOs: Biological Conservation Research Foundation (BICREF), Birdlife Malta, Din l-Art Ħelwa, Kummissjoni Ambjent, Flimkien għal Ambjent Aħjar, Fondazzjoni Wirt Artna, Friends of the Earth Malta, Front Ħarsien ODZ, GAIA Foundation, Light Pollution Awareness Group, Malta Bat Conservation Group, Malta Water Association, Moviment Graffiti, Nature Trust Malta, Greenhouse Malta, Noise Abatement Society of Malta, Ramblers Association of Malta, Żminijietna, Youth for the Environment, and Malta Organic and Agriculture Movement (MOAM).

The PDS was also circulated for internal review within ERA.

Within the stipulated consultation period, comments were received from the Malta Resources Authority (Email dated 31st January 2018), Ministry for the Environment, Sustainable Development and Climate Change – Agricultural Directorate (Email dated 1st February 2018), Ministry for Health – Department for Health Regulation (Email dated 2nd February 2018). Feedback was also received from BirdLife Malta (Email dated 1st March 2018), Occupational Health & Safety Authority (Email dated 20th March 2018), and Continental Shelf Department (Email dated 3rd April 2018). Feedback received is summarised in Section 7.1 to this document.

The final Terms of Reference were issued on 19th April 2018.

### *2.2 EIA Review*

The EIA Report was submitted to ERA on 28th February 2020 and was published for a 30-day consultation period on 15th March 2020 with the public and the same consultees consulted during the scoping stage (see Para 2.1 above), in accordance with the EIA Regulations (S.L. 549.46). The EIA Report was also circulated for internal review within ERA.

Within the stipulated consultation period, comments were received from the Regulator for Energy and Water Services (REWS) (Email dated 24th March 2020); Occupational Health & Safety Authority (Email dated 26th March 2020), Superintendence of Cultural Heritage (Email dated 9th April 2020); Department of Health Regulation – Environmental Health Directorate (Email dated 15th April 2020) and members of the public.

Comments made by ERA and its consultees during the EIA review stage were forwarded to the EIA Coordinator and the applicant on the 12th May 2020. These comments were addressed by the EIA Coordinator and responses are included in Section 7.2 ('Comments during consultation period on EIA Review') of this document.

The final EIA Report was submitted to ERA on 22nd February 2021.

## 3. Espoo Convention consultations

On 8th January 2018, Malta (as Party of Origin) notified Italy (as the Affected Party) in accordance with Article 3 of the Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention).

On 7th April 2020, the Environmental Impact Assessment report together with other reports prepared for the Malta part of the project were submitted for 60-day consultation to the Italian counterparts in accordance with Articles 4 and 5 of the Espoo Convention. Feedback from the Italian counterparts was received on 31st August 2020, and Malta communicated a letter of acknowledgement together with responses to the comments made was communicated on 15th December 2020.

Following the conclusion of the EIA review stage and the drafting of the Authority's report, Malta will be communicating the final decision of the EIA procedure in Malta in accordance with Article 6 of the Convention.

Procedures in terms of the same Espoo Convention are also relevant vis-à-vis the EIA being conducted in Italy on the remainder of the project that lies within Italian territory and Italian territorial waters, with Italy as party of origin and Malta as affected party.

# 4. ASSESSMENT OF ALTERNATIVES

## *4.1 Alternative sites*

The Delimara site was considered favourably given that the area already accommodates energy related infrastructure. Sites located further away would require the construction of additional infrastructure to transport the gas to the power station, reducing the efficiency of the system and increasing operational risk as well as overall environmental impact. In light of this, no other sites for the Terminal Plant were considered at design stage.

## *4.2 Alternative technologies*

During the construction phase, for the pipeline to pass from the seabed, across the Delimara peninsula to the terminal facility (i.e. the shore – onshore approach), different drilling methods i.e. trenchless and open trenching, were initially considered. Trenchless methods were preferred to avoid disturbing ecologically sensitive areas. Two alternative trenchless drilling methods were considered in the EIA; namely Horizontal Directional Drilling (HDD) and Microtunnelling (MT). The latter was considered the most appropriate.

The entire offshore pipeline and the pipeline inside the TBM tunnel (i.e. onshore approach) will be encased with a concrete layer. For the offshore pipeline to be protected against anchor droppings and trawling activities, several protection types were considered.

Given the high levels of marine traffic, at certain points (KP 154 and KP 157) along the pipeline route, installation of a 2-metre rock protection layer was considered the best option to protect the pipeline against human activities, such as anchor droppings. Furthermore, three trawling areas (i.e. trawling area C (C1) (KP 155.2-155.5); trawling area C (C2) (KP 149.0-151.6); trawling area E (KP 140.1 – 142.8); and trawling area F (KP 127.8 - KP131.2)) require further protection via post trenching (i.e. a plough machine will excavate and displace the sediment underneath the pipeline, in order to lower it) (Figures 4 – 6).

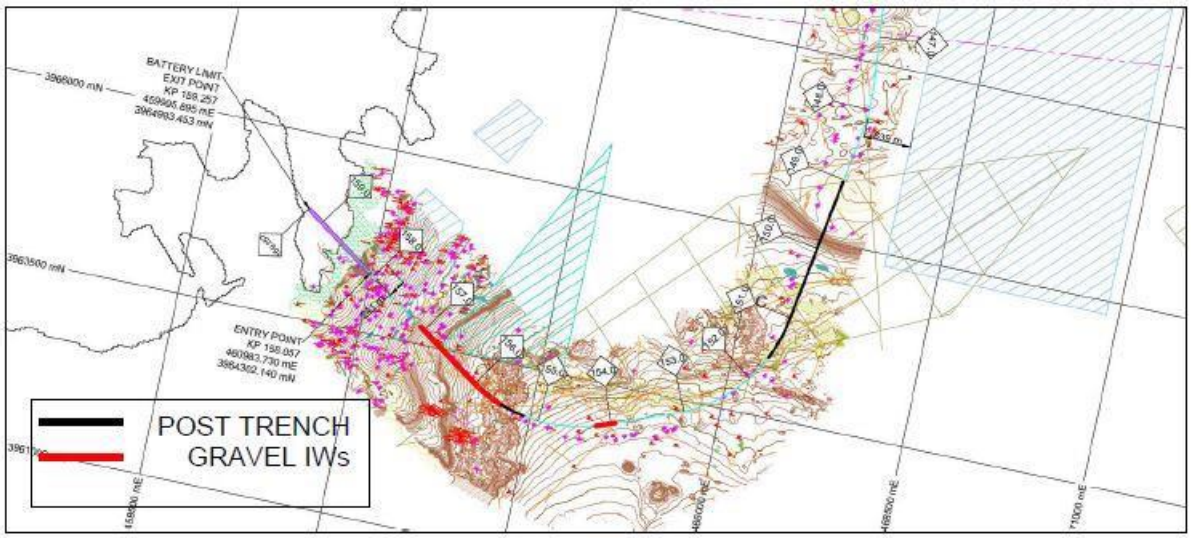


*Figure 4: Proposed post trench in Trawling Area C (Source: EIA Report [May 2021])*

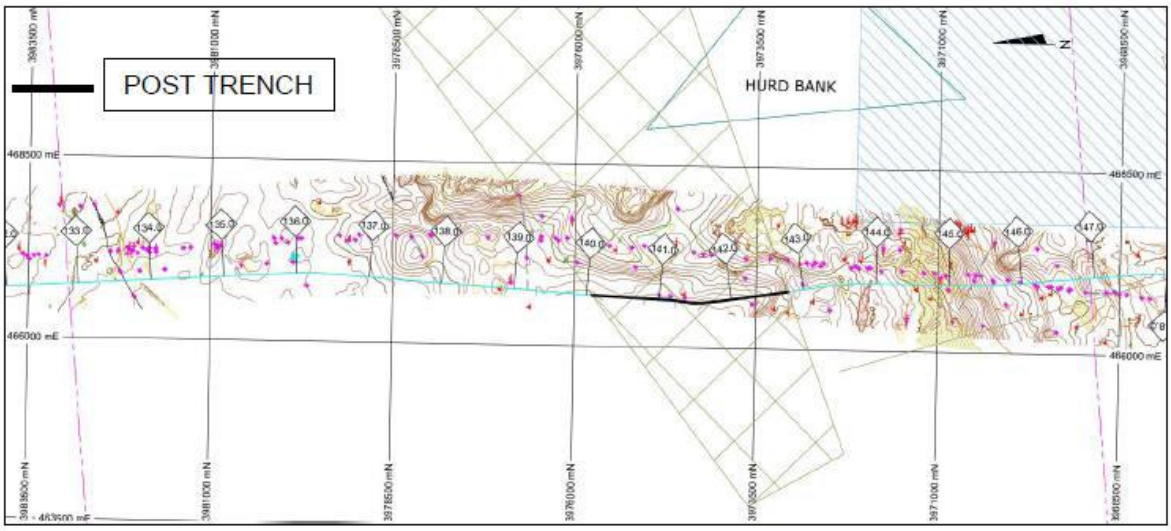


*Figure 5: Proposed post trench in Trawling Area E (Source: EIA Report [May 2021])*

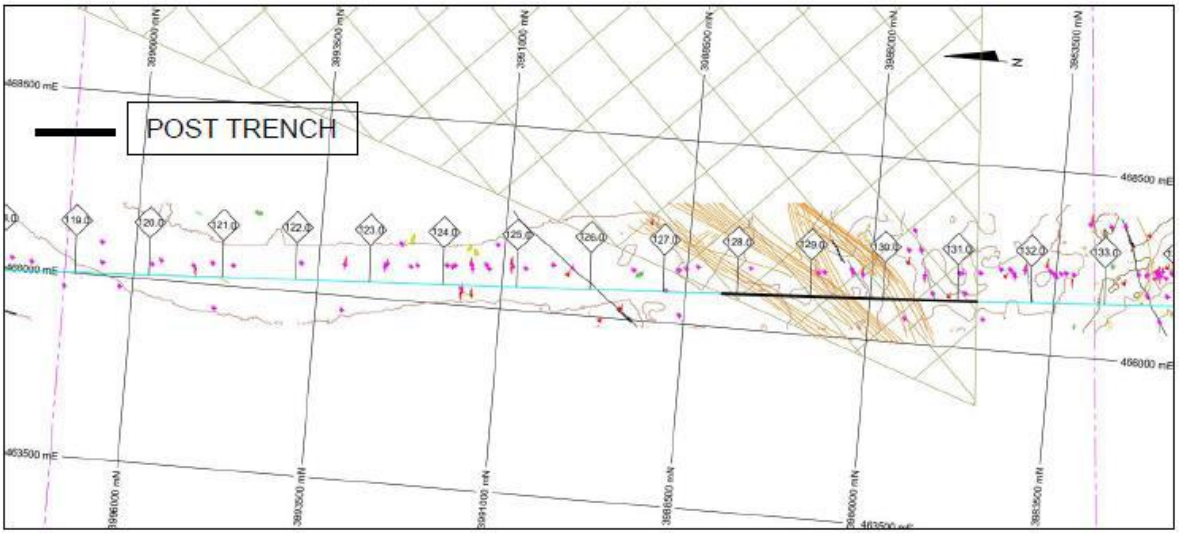


*Figure 6: Proposed post trench in Trawling Area F (Source: EIA Report [May 2021])*

## *4.3 Alternative layouts*

The following alternatives were considered for the Delimara Terminal Plant, namely (i) using the existing regasification plant NVCC; (ii) locating the HV/LV transformers outside the plant; and (iii) locating the workshop outside the plant, however these were discarded due to various reasons (refer to EIA Report Chapter 3.3.1 for further information).

Three zones (A, B and C – Figure 7) were considered for the onshore pipeline, which were based on a number of criteria (refer to EIA Report Chapter 3.3.2 for further information). Following a feasibility study of the possible alternatives, the preferred orientation of the pipeline route was considered to be Zone B.

For the offshore pipeline, a 1.2km corridor was intensively surveyed to determine the final route of the offshore route (refer to EIA Report Chapter 3.3.3 for further information).


*Figure 7: Alternative zones for the shore approach (Source: EIA Report [May 2021])*

## 5. EIA FINDINGS

The summary of the characteristics of the site, assessment of impacts, mitigation measures and residual impacts identified in the EIA Report are as follows:

### *5.1 Land/sea cover and land/sea uses*

A literature review and a site visit were conducted to identify and confirm land/sea cover and uses within the Area of Influence (AoI). For the onshore part of the project the AoI encompasses the access road, land reclamation area, terminal station, terrestrial pipeline route and landfall site within a 100m buffer zone around the aforementioned features. For the offshore part, until the median line, the AoI covers a 2km corridor (1km on each side of the route) for the first 1nm, and 1.2km corridor (600m on each side of the route) for the remainder of the route. Impacts identified are as follows:

- The permanent take-up of sea and shoreline for the terminal plant due to land reclamation is considered to have a *moderate* residual impact;
- The permanent take up of coastline due to the construction of the terminal plant is considered to have a *minor* residual impact; and
- The permanent damage to the natural cliffs is considered to have a *major* impact.

No mitigation measures have been proposed by the EIA consultants to mitigate the impacts identified above, however further negotiations were undertaken by ERA and the applicant to mitigate as much as possible the extent of the interventions on the cliff face.

## *5.2 Landscape character and visual amenity*

A desk study and a field survey were carried to determine the landscape baseline survey. Six (6) viewpoints were identified to represent short, medium and long-distance views:

- Viewpoint 1: carpark overlooking Delimara power station
- Viewpoint 2: Il-Ponta tat-Tawwalija, Delimara
- Viewpoint 3: Il-Ponta tal-Gidien, Delimara
- Viewpoint 4: Il-Ponta tal-Ħofra, Delimara (Xrobb l-Għaġin)
- Viewpoint 5: Dawret il-Qalb Imqaddsa, Birżebbuġa
- Viewpoint 6: Triq it-Tramuntana, Marsaxlokk

During construction of the terminal facility a *minor to major adverse* residual impact is expected from viewpoints 2, 3 and 4 due to the presence of construction machinery/ vessels and turbidity and pollution of sea water. The residual impact significance varies depending on the extent and resulting impact in case of any accidents. *No impacts* are envisaged from viewpoints 1, 5 and 6, during construction.

During operation, a *minor adverse* residual impact in expected from viewpoints 2, 3 and 4. A *moderate adverse* residual impact is predicted from viewpoint 1 (Figures 8 and 9) and a minor beneficial impacts are envisaged from viewpoints 5 and 6.

*Figure 8: Viewpoint 1 - from Carpark overlooking Delimara Power Station (Source: EIA Report [May 2021])*

*Figure 9: Viewpoint 1 - Photomontage of Scheme as seen from Carpark overlooking Delimara Power Station (Source: EIA Report [May 2021])*

## *5.3 Geology, geomorphology, hydrogeology and soils*

The AoI for the onshore part of these studies included the entire Delimara peninsula. For the offshore approach, a 2km corridor on either side of the offshore route was identified for the first 1nm, and 1.2km wide corridor for the remainder of the route. The baseline information was collected from available published information, as well as field surveys (refer to EIA Report Chapter 5.4 for further information).

The following are some of the potential impacts have been assessed to have a *major* overall impact significance during the construction phase:

- Damage to natural cliff to accommodate new access road;
- Destabilisation of terrain along the same cliff due to re-profiling/undercutting;
- Risk of underground collapse of bedrock during microtunneling works across Delimara peninsula; and
- Deterioration of seafloor integrity during trenching and dredging works.

The above impacts, amongst others assessed in the EIA Report mostly have a *minor adverse* residual impact following the implementation of mitigation measures, such as (i) assessing weathering rates in the tunnel; (ii) working and disposal in calm weather; and (iii) leaving a gap between the new road and cliff face to act as a buffer. With regards to the deterioration of sea floor integrity due to trenching and dredging works, a *major adverse* residual impact still perseveres following the implementation of mitigation measures.

The residual impacts during operation and decommissioning are considered to be *minor adverse* to *not significant*, following the implementation of mitigation measures, such as (i) storage and re-use of excavated material; (ii) work only in calm weather for shallow sections to minimise risk of accidents.

## *5.4 Marine water bodies*

### *5.4.1 Nearshore waters*

The AoI for the nearshore water bodies is identical to that used for the geology, geomorphology, hydrogeology and soils study, i.e the entire Delimara peninsula. The baseline information was collected from available information, as well as field surveys. Potential impacts identified during construction, operational and decommissioning phases of the project are considered to be as follows:

- The following impact on nearshore waters during construction have been identified to have a *minor to not significant residual impact*:
    - Deterioration of coastal water and sediment quality from mud fluid spreading during microtunneling

- Deterioration of coastal water quality:
  - during pipeline laying;
  - during modifications to seabed for pipeline stabilisation and protection;
  - due to trenching and dredging;
  - disposal of material at sea during land reclamation;
  - runoff from stock piling of inter material;
  - due to excavation, construction and transport of material onshore; and
  - during flooding , cleaning and gauging.
- deterioration of coastal and open water quality during hydrotesting of pipeline;

During operation, a *minor residual* impact is envisaged on the nearshore water quality from (i) excavation, construction and transport of materials on land during pipeline repairs, and (ii) excavation for pipeline repairs offshore.

A *minor r*esidual impacts is envisaged from damage by earthquake on nearshore and open water quality during all phases.

All potential impacts listed above have been assessed to have a *minor to not significant residual impact,* following the implementation of mitigation measures, such as (i) minimise, as much as possible any overspill from the proposed trenching pits; (ii) using alternative post-trenching methodologies; and (iii) use of dust mitigation techniques.

### *5.4.2 Offshore waters*

The AoI for the offshore water bodies considered a 2km corridor on either side of the offshore route for the first 1nm, and 1.2km wide corridor for the remainder of the route.

Works during construction, operational and decommissioning phases of the project are envisaged to have a *minor to not significant* residual impacts due to deterioration of offshore water quality due to (i) dispersion of re-suspended fine sediment particles; (ii) leaching and re-suspension of hazardous chemicals; (iii) flooding, cleaning and gauging of pipeline; and (iv) hydrotesting of the pipeline.

Potential impacts assessed above are considered to have a *minor adverse or not significant residual impact,* following the implementation of mitigation measures, such as (i) use of a submersible pump; (ii) works in shallow water during calms seas; and (iii) excavation works during dry season.

## *5.5 Ecology*

The AoI for this study encompassed the terminal station, land reclamation area, terrestrial pipeline route and landfall site within a 100m buffer zone around the aforementioned features. A broad-brush terrestrial ecological survey was also undertaken in the footprint of the proposed terminal plant and access road. The AoI for this marine study included the area around the offshore pipeline.

### *5.5.1 Marine ecology*

- Impacts on marine ecology during construction:
    - *No impact* is envisaged on the benthic assemblages in relation to seabed reclamation for the terminal facility. On the other hand, a *major adverse* residual impact is envisaged on the benthic assemblages during the excavation of the transition pit and pre-trenching (including associated dredging) works.
    - During pipeline laying, impacts on benthic assemblages are considered to be of a *moderate adverse* residual impact within the identified corridor, while a *minor adverse* residual impact is envisaged during post-trenching and backfilling works.
    - A *minor* residual impacts, following mitigation measure is envisaged on benthic assemblages due to heightened anchoring activity.
    - A *minor adverse* residual impact is likely envisaged on marine organisms and habitats due to atmospheric fall-out/deposition of fine particulates.
    - A *negligible residual* impact is envisaged on marine organism and habitats due to heightened marine contamination risk.
    - A *minor adverse* residual impact is envisaged on marine organisms and habitats due to the: (i) re-mobilisation of nutrients and pollutants sequestered within the benthic sediments; and (ii) re-suspension of fine benthic sediment fractions.
    - A *major adverse* residual impact is envisaged on benthic assemblages during pipe-laying within the identified corridor due to the installation of pipeline support structure and cable crossing structures.
    - *Negligible residual* impacts is envisaged during post-laying works (due to the release of drilling fluids into the marine environment) and during hydrotesting (from release of corrosion inhibitor-contaminated water on benthic assemblages and marine organisms and habitats.
    - A *minor adverse* residual impact is envisaged on marine organisms and habitats due to anthropogenic generation of submarine noise and artificial light.

- Impacts on marine ecology during operation:
    - A negligible residual impact is envisaged on marine organisms and habitats due to increase in marine traffic in the area.
    - A *moderate adverse* residual impact is envisaged on the benthic assemblages due to pipeline maintenance and repair works.
    - A *minor adverse* residual impact is envisaged on marine organisms and habitats due to anthropogenic generation of submarine noise and artificial light during maintenance and works.
    - A *moderate beneficial and adverse* residual impact is envisaged from the colonisation of epibiota on the laid pipeline.

The EIA report lists the following mitigation measures in relation to ecology:

- Minimising spillage (during construction of transition pit, pre-trenching; and post-lay works) by using appropriate bunding, spill kits and booms;
- Optimising pipeline route during design phase;
- Minimise use of anchor stabilisation devices;
- Use of geotextile silt curtain in shallow areas and other abatement technologies (such as suction dredger) in deeper waters;
- Recovery, as much as possible, the release of corrosion inhibitor-contaminated water;
- Minimise size of pipeline support structures and cable crossing structures; and
- Deployment of air bubble screens for stretches of high noise generation (such as trenching).

### *5.5.2 Terrestrial ecology*

- Impacts on terrestrial ecology during construction:
    - A *major adverse* residual impact is envisaged from the removal of existing protected shrub species from the cliff face during cliff works.
    - On the other hand, a negligible impact is envisaged from the removal of vegetation communities (of low conservation importance) from the mounds and during trenchless drilling works.
- No impacts are envisaged on terrestrial ecology during the operational phase.

No mitigation measures have been proposed by the EIA consultants to mitigate the impacts identified above, however further negotiations were undertaken by ERA and the applicant to mitigate as much as possible the extent of the interventions on the cliff face.

## *5.6 Avifauna*

The AoI for the avian component of the ecology study encompassed a 2.5km buffer zone around the entry point of the gas pipeline at Delimara. A desktop study was also carried out for the three Natura 2000 SPA sites mentioned in Section 1.2 above.

- During construction, *minor adverse* residual impacts are envisaged on avifauna due to siltation of the water column during drilling and construction works; and noise from machine and engines.
- During tunnelling works (construction phase), a *minor adverse* residual impact is envisaged on *Calandrella brachydactyla* (Greater short-toed lark- avian).
- A *minor adverse* residual impact is envisaged on migratory species due to illumination from working vessels, during the construction phase. *Moderate* residual impacts are envisaged on avifauna due to illumination during the construction phase from working vessels; and from the terminal facility during operation.

The EIA Report lists (i) limiting light levels; (ii) intelligent lighting solutions; (iii) monitoring injured species; (iv) limiting illumination during the night; and (v) avoiding over illumination of vessels, as mitigation measures in relation to avifauna.

## *5.7 Architectural, archaeological, historical & cultural heritage and related material assets*

The AoI for this study included the area around the onshore pipeline and around the offshore pipeline. A desktop study was carried out together with a field-walkover-survey (for the onshore area). Underwater surveying was undertaken for the offshore corridor. (Further information can be found in Chapter 5.10. of the EIA Report).

Impacts such as damage to the ORP Kujawiak wreck are considered to be *not significant* during both construction and operational phases. Il-Fortizza ta' Delimara was considered to be located outside the AoI.

The EIA report proposes monitoring during construction works and obtaining necessary permission and guidance from the Superintendence of Cultural Heritage (SCH), as mitigation measures.

## *5.8 Noise, vibration & exterior lighting*

For the terrestrial baseline study, four (4) noise monitoring locations were identified. Terrestrial noise surveys were conducted over a 24-hour period in November and December

2017 and in December 2018, respectively. Underwater noise surveys were also carried out in three (3) locations. Impacts identified are as follows:

- Noise and vibrations during the clearance of cliff base and rock cutting, construction of access road and land reclamation are *not considered to have a significant* residual impact;
- Impacts related to noise disturbance on fish in the SE aquaculture zone during the offshore installation of the pipeline is *not considered to have a significant* residual impact;
- *No significant* residual impacts related to noise and vibrations are expected during operation of the terminal plant;
- Impacts related to onshore noise on both Noise Sensitive Receptors and avifauna are considered to be *not significant* during both the construction and operational phase.
- Impacts related to underwater noise on marine organisms (i.e. marine mammals, fishes and sea turtles) are considered to be *not significant or minimal* and for a short time during the construction phase.

The EIA Report proposed the following mitigation measures:

- Adoption of good practice during site works;
- Limiting the hours of operation in vicinity of South-East aquaculture zone; and
- Inform near noise sensitive receptors of activities;

## *5.9 Infrastructure, utilities and public access*

The AoI for this study included the area around the onshore pipeline and around the offshore pipeline. A desktop study was carried out together with a field-walkover-survey (for the onshore area). Impacts identified are as follows:

- Impacts from the newly proposed access road as per sections 5.2 and 5.3 above;
- Impacts related to damage to the Power Station due to rock fall during clearance of cliff base and rock cutting are considered to have *a moderate to minor* residual impact.
- *Minor* residual impacts are expected during the temporary take-up of the exclusion zone and direct physical damage to the jetty during the land reclamation works.
- During the offshore installation of the pipeline, reduction in access due to exclusion zones around lay barge is *not considered to have a significant* residual impact.
- During operation of the terminal plant, a *minor* residual impact is envisaged from the take-up of the coastline on the residents of Marsaxlokk and tourists.
- *Minor to major beneficial impacts* are expected from the potential removal of the FSU, in relation to boundary revisions of the exclusion zone and visual amenity respectively. However it should be noted that the removal of the FSU is not specifically guaranteed by the proposal.

The EIA Report proposed the following mitigation measures:

- Monitoring of rock stability during rock cutting and buffer area between cliff face and new road fence;
- Two-way communications with operators; and
- Monitoring during construction.

## *5.10 Transboundary effect*

A cross-border impact assessment was carried out given that the project will connect Malta and Sicily by means of a subsea pipe. *Negligible* to *minor* adverse impacts are envisaged due to:

- Interference with international fishing fleets. During construction through the temporary loss or restricted access to established fishing grounds, and forbid anchoring or other activities along the pipeline route once the pipeline is laid;
- Air emissions generated from vessels;
- Underwater noise generated from vessels;
- Waste production from vessels;
- Movement of suspended sediment;
- Water discharge due to offshore pipeline hydrotesting; and
- Unplanned events (such as accidental release of fuel into the sea from construction vessels).

Most of the effects considered are of a temporary nature, short duration, reversible, and confined to work areas and mitigated through mitigation measures (such as adherence to current regulations and oil spill prevention and response plans and pollution emergency plans).

Beneficial transboundary impacts have been assessed in relation to the operations of the pipeline and such are mainly related to energy. The project will end the isolation of Malta from EU gas network, reduce Malta's $CO_2$ emissions and eliminate any global impact related to the operation of the existing LNG shipment for electricity generation in Malta) (see Chapter 6.17.2. of the EIA Report or further information).

## *5.11 Environmental Risk*

An environmental risk assessment was carried out for three phases: (i) construction, (ii) operation, and (iii) decommissioning.

A high environmental risk is envisaged due to the loss of protected benthic habitats and endemic vegetation species due to land reclamation and trenching, and trampling and cliff works, respectively.

A moderate environmental risk is envisaged due to:

- Contamination of the mean sea leave aquifer and marine environment through spillage of oil or fuel;
- Generation of dust and rock/soil instability during excavation works and construction on the surrounding areas and uses;
- Spillage and dust emission from vehicular transportation of waste material on the surrounding areas and uses;
- Loss of protected benthic habitats/species through equipment failure, dropped anchors/object;
- Direct physical damage on ecological features due to pipeline laying;
- Instability of infrastructure and flooding or water damage due to natural earthquakes and heavy rainfall respectively; and
- Damage to surrounding environment form explosion/jet fire at the terminal plant.

A low environmental risk is envisaged from the contamination of geological layers through the spillage of oils or fuels during excavation construction and decommissioning phases. A low environmental risk is envisaged from the natural corrosion of the pipeline infrastructure during operation.

## 6. Appropriate Assessment (AA) findings

Preliminary screening did not satisfactorily eliminate significant, negative impacts that impinge on the integrity of the Special Protection Areas (SPA) and the full implications of the proposal on the integrity of the habitats and species of the protected site were deemed unclear. In this regard, an Appropriate Assessment (AA) study was requested by ERA in accordance with the Flora, Fauna and Natural Habitats Protection Regulations (S.L. 549.44) to investigate whether the proposed development will have a significant effect on the site and its surroundings. The first draft AA report was submitted by the consultant on the 28th February 2020, and the final version was submitted on 22nd February 2021. Following further clarifications requested by the Authority, the final report was submitted on 7th July 2021.

The AA identified and assessed the potential adverse effects of the proposed project on Special Protection Areas (SPAs) listed in Section 1.2 above. It also assessed potential adverse effects from the proposed projected on protected marine species and habitats covered by the same Regulations (S.L.549.44), however these are beyond the scope of the AA and are duly assessed in the EIA Report.

### *6.1 Marine ecology*

The marine study took into consideration ten protected species and three protected habitats (refer to Table 5 of the AA for the full list).

During construction, the following species are to be significantly affected:

- *Cystoseira* cfr. *Brachycarpa (algae); Posidonia oceanica and Cymodocea nodosa* (seagrass) due to excavation works of the pre-trenched transition zone;
- *Lithothamnion minervae* and *Lithothamnion corallioides (marine coralline algae)* during land reclamation works;
- *Palinurus elephas (benthic invertebrate)* due to underwater noise during seabed interventions; and
- *Eunicella cavolinii, Antipathes dichotoma (marine corals) and Axinella polypoides (marine sponge)* during installation of pipeline supporting structures and cable crossing features.

During operation, impacts on marine protected species listed above are not expected to be significant.

During construction, *P. oceanica* and *C. nodosa* meadows are expected to be significantly affected during the excavation of the pre-trenched transition zone and post-trenching at trawling areas, and from servicing vessels. Reefs (biogenic reefs) are expected to be significantly affected during the installation of pipeline supporting structures and cable crossing features.

Impacts on marine protected habitats (*P. oceanica* and *C. nodosa* meadows) during operation are expected to be not significant.

To mitigate against the loss and damage of *P. oceanica* meadows, transplantation of the seagrasses is being proposed to be carried out prior to trenching, through deployment of a number of iron artificial reefs at depths of 40-45m, inoculated with seagrass cuttings, pursuant to reproducing.

### *6.2 Avifauna*

During construction, impacts related to noise, illumination and siltation of water column are considered to be not significant. The consultant's AA report identified impacts related to avifauna due to illumination from the terminal facility during the operational phase. Upon further request for clarification, the consultant subsequently clarified that, seabird foraging areas located within the three SPAs will not be significantly influenced by illumination impacts from the terminal facility, because the foraging areas area located at a considerable distance away from the terminal.

## 7. Summary of consultants' findings

The EIA Report has identified a number of potentially impacts on, and risks to, coastal land uptake, visual amenity, geology (due to rock cutting), ecology and avifauna the significance of which depends largely on the thorough implementation of pre-emptive safeguards, construction and operational mitigation measures.

The AA report assessed potential impacts from the proposed project on protected marine species and habitats covered by the provisions of the Flora, Fauna and Natural Habitats Regulations (S.L.549.44), however these are beyond the scope of the AA and are duly assessed in the EIA Report.

The consultant also concluded that on noting the anticipated impacts and their potential mitigation, the proposal and associated works do not, as a whole, adversely affect the integrity of the said Natura 2000 sites.

## 8. COMMENTS RECEIVED BY ERA DURING THE EIA PROCESS

### 8.1. Comments received by ERA during the EIA scoping stage (from 31st March 2018 to 3rd April 2018)

#### A. Ministry for the Environment, Sustainable Development and Climate Change – Agriculture Directorate (email dated 1st February 2018)

| Comments |
|---|
| With reference to the email below, the Agricultural Directorate is pointing out that for soil movement, it is very important that the necessary permits are in place as per Chapter 236 of the Laws of Malta. |

#### B. Ministry for Health - Environmental Health Directorate (email dated 2nd February 2018)

| Comments |
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| With reference to your e-mail dated 29th January regarding subject indicated in caption and following review of the Project Description Statement, please be informed that we would like to have the following issues related to public health included in the terms of reference for this proposed development:<br><br>1. Air pollution impacts assessment<br>• For dredging, demolition, excavation and construction<br>• Emissions from heavy vehicles<br>• Transports, storage and handling of dust laden materials<br>• Particulates generated by project<br>• And their effects on the surrounding area included marine environment.<br>• Necessary monitoring and mitigating measures must be clearly stated.<br><br>2. Noise and vibration impacts including those associated with dredging, excavation, demolition and/or construction of the proposed works. Required monitoring and mitigating measures must be clearly stated.<br><br>3. Effects on water quality and mitigation measures. The effects of sediments and water quality discharge during the construction and operational stages must be included, especially with regards to the proposed release of 38,600m³ seawater that contains a small amount of corrosion inhibitors, in view of the potential effect on public health.<br><br>4. Risk assessment on waste management shall be implemented which includes the impacts from waste generated both during the construction (excavated and dredged material) and operation phase. Hence the importance of detailed Construction and Waste Management Plans which should be enforced by the site project manager and which should also address waste management both during the construction and operational phases of this project. Details of monitoring and feedback mechanisms must be clearly stated and adhered to.<br><br>5. The overall cumulative impacts of the development on the general public.<br><br>6. Details of measures proposed to be taken to prevent nuisances at all stages of the project on the Area of Influence.<br><br>7. A hydrology assessment should be made available. It must included details of collection, storage, overflow and use of rainwater. Details of any air cooling system that will discharge into sea water if any.<br><br>The EIA should also include a detailed description of the measures envisaged to prevent, minimise and where possible offset any significant temporary or permanent adverse health effects and nuisances on the Area of Influence and the general public. This should include details regarding monitoring programmes that may be proposed. The EIA should also identify, describe and discuss in detail the possible health effects of any residual impacts that cannot be mitigated. |

## C. BirdLife Malta (email dated 1st March 2018)

**Comments**

BirdLife Malta has reviewed the Project Description Statement (PDS) for the proposed development "Construction of the Malta-Italy gas pipeline EU Project of Common Interest, including a terminal station at DPS, an onshore HDD route through Delimara Peninsula and the laying of an offshore 22". Due to its nature and location, the proposed development qualifies for a full Environmental Impact Assessment (EIA) and an Appropriate Assessment (AA). BirdLife Malta suggests addressing the following points in these environmental studies:

- Regarding the route selection: certain types of areas should be avoided to be considered as proposed routes for gas pipelines[1], including (1) Protected areas (e.g., UN World Heritage sites; UN Biosphere Reserves; Ramsar sites), (2) areas meeting IUCN's categories I to VI, and marine categories I-V (e.g., fishing or fish breeding reserves), proposed or recognized protected area, areas maintaining conditions vital for protected areas (e.g., watersheds, buffer zones), and (3) Areas critical for rare, vulnerable, migratory or endangered species (listed on the IUCN Red List) as well as (4) conditions vital for protected areas (e.g., watersheds, buffer zones),

➔ The project is proposed to cross through a marine Natura 2000 site (Il Bahat tal-Lvant MT0000108) which should be avoided given the sensitivity of the area among other factors due to sea birds and Posidonia meadows. In the case that the pipeline will cross through any of the above-mentioned areas, light and noise pollution need to be addressed in the EIA and a separate Appropriate Assessment needs to be carried out. Operations during breeding periods of seabirds should be avoided. BirdLife Malta furthermore recommends to install monitoring stations for observation of the behaviour of fish, marine mammals and birds and to establish a specific fund designed dedicated to obtain data and Information on and to increase the existing knowledge of the marine environment in the area impacted by the proposed development,

➔ Onshore, the proposed development furthermore overlaps with a Site of Ecological Importance (SEI) designated among other criteria due to its costal garrigue. Any impact needs to be addressed and mitigated appropriately in the EIA.

- Major concerns to the environment (especially sea mammals, fish and birds as well as other protected species) resulting from the proposed development can impact in the following manner[2]:
    - Physical damage to the seabed (including increase in water turbidity, release of nutrients and hazardous substances and impacts on bottom currents)
    - Discovery of dumped munitions and barrels which need to be removed (including leakage, poisoning in the area)
    - Munitions clearance of dumped munitions which can cause severe sediment disturbance in the process of removal

➔ A difference exists between the installations of gas pipelines onto the seabed or buried into the sediments of the seabed. Soft benthic communities will recover in a shorter period (within two years) and hard substrate of seabed where the re-colonialization process can take up to ten years. This number increases with depth of the installation as well as drop of temperature. The EIA needs to identify the approaches of developing best possible planning and environmentally friendly construction and management procedures as well as environmental monitoring programmes throughout the period of the entire project to minimize potential impacts during construction of the pipelines and address the above concerns holistically and fully,

- An environmental and social impact assessment (ESA) should be considered for this project, (1) to prevent impacts, (2) to minimize the impacts that cannot be entirely prevented, (3) to mitigate the residual minimal impacts on both social and environmental levels. Furthermore, (4) residual minimized impacts should be fully compensated so that the impacted people and environment are better off with the project.

➔ If these points will not be addressed through a separate study, the EIA should include an analysis of the above,

- Alternatives to the proposed pipeline, such as the already existing marine tanker need to be identified to justify the proposed development,
- Oil Spill Prevention and Management: The EIA needs to ensure that oil spill response plans are in place before completion of the pipeline up to several years after operation of the pipeline has started,
- Legislation relevant to the project includes the UN Convention on the Law of the Sea, the UNECE Convention on Environmental Impact Assessment in Transboundary Context (ESPOO), the EU Directive on environmental impact assessment (EIA) as well as national legislation. Especially the Espoo Convention (Italy (19 Jan 1995) ratified the convention whereas Malta (20 Oct 2010) accessed the treaty) needs to be addressed appropriately at all stages of the project, whereas:
    - Contracting Parties are obliged to notify and consult each other on all major projects that might have adverse environmental impact across borders
    - Individual Parties have to integrate environmental assessments into the plans and programmes at the earliest stages

➔ The EIA as well as further consultation processes need to be carried out in a transboundary manner where the public is given the chance to contribute equally to minimize stakeholder conflicts,

- Cumulative assessments should be carried out as part of the EIA to ascertain if there is another project – existing or planned -- that may influence the proposed pipeline,
- Decommissioning, rehabilitation and restoration plans need to be addressed in the EIA.

[1] https://cmsdata.iucn.org/downloads/book_on_pipeline_best_practice.pdf
[2] https://www.bonusportal.org/files/1144/Leppanen_Nord_Stream_Pipeline.pdf

**D. Continental Shelf Department (email dated 3rd April 2018)**

| **Comments** |
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| I would appreciate if you could consider including the following TOR's for the EIA:<br><br>(i) The effect of possible (albeit remote) gas releases from the pipeline during its operational phase on the marine, coastal or land environment.<br>(ii) The effect of inspection and maintenance of the pipeline on the marine, coastal or land environment.<br>(iii) The impacts and mitigation measures associated with the drilling of the Malta onshore pipeline route using horizontal directional drilling. This shall include the handing of drill cuttings, drilling muds and chemicals. |

## 8.2. Comments received by ERA during the EIA Review (From 14th March 2020 – 15th April 2020)

### 8.2.1 Consultees' Comments on EIA Report (14th March 2020 – 15th April 2020)

**E. Regulator for Energy and Water Services (email dated 24th March 2020)**

| Comments | Coordinator's reply (25/05/2020) |
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| The Regulator for Energy and Water Services has no further comments. | Noted. |

**F. Occupational Health & Safety Authority (email dated 26th March 2020)**

| Comments | Coordinator's reply (25/05/2020) |
|---|---|
| The pipeline terminal will be located adjacent to an existing upper tier COMAH site. In this respect the major accident prevention policy, safety report and internal emergency plan of the Delimara power station will have to be revised to take into account this new development which, in case of an accident, could have a domino effect. Moreover, the gas terminal will be connected directly to the infrastructure within the power station to supply natural gas to D3 and D4.<br><br>Currently the whole Delimara site is considered as one COMAH establishment with two operators, Enemalta and Electrogas, storing gasoil, HFO and LNG. Both operators had submitted their safety report, major accident prevention policy and internal emergency plan and coordinated reports covering the whole site. With the introduction of the natural gas terminal, these documents will have to be revised to take into account additional hazards posed by this installation within the Delimara power station perimeter. If the intention is to remove the LNG FSU from its current location, it is required that the revised documents consider this scenario and also the transition period when the gas pipeline and the FSU are both on site.<br><br>The applicant is required to take every measure and precaution, in collaboration with the other operators within the Delimara site, to minimise the risks of an accident and, or mitigate the consequences of an accident during construction, installation and commissioning.<br><br>The applicant shall abide by all relevant Occupational Health and Safety legislation in the execution and operation of the terminal. | A technical study was specifically carried out for this purpose and forwarded to the COMAH authority. |

**G. Superintendence of Cultural Heritage (email dated 9th April 2020)**

| Comments | Coordinator's reply (25/05/2020) |
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| The area subject to this project extends across a large area of the Delimara peninsula and reaches up to the median line between Malta and Sicily in Maltese Territorial waters.<br><br>The Delimara Peninsula and the sea separating Malta and Sicily are archaeologically sensitive areas owing to their long history of maritime activity. Archaeological remains and cultural heritage features recorded at the Delimara Peninsula include Punic ruins, salt pans, Knights' period fortifications and Fort Delimara.<br><br>Recorded offshore remains in close proximity to the site include ashlar blocks at Marsaxlokk Bay, lead anchor stocks off Delimara Bay, several shipwrecks and aircraft wrecks, ceramic scatters, unexploded ordinance amongst other remains.<br><br>**Proposal**<br>The project entails the construction of the Malta-Italy gas pipeline including a terminal station at Delimara, the reclamation of land at Marsaxlokk Bay, an onshore HDD route through Delimara Peninsula and the laying of an offshore 22" diameter pipeline up to the median line between Delimara, Malta and Gela, Sicily. | Noted. |

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| **Review of results identified in the Environment Impact Assessment**<br>The Superintendence assessed the data gathered and complied in the technical reports entitled Architectural, Archaeological, Historical & Cultural Heritage and related Material Assets and Visual amenity in relation to an Environmental Impact Assessment.<br><br>**Heritage Assessment**<br>The conducted field-walking surveys resulted in the identification of salt pans and rubble walls within the site. However, in view that the onshore construction method involves the boring of a micro tunnel at a level of 10-30m below ground level, the project should not affect any potential cultural heritage features situated on or immediately below the surface.<br><br>Offshore studies carried out within the site resulted in the identification of about five features of cultural heritage importance which consist of an airplane wing and wrecks. The identified remains are not located on the proposed pipeline route. The positioning of the catenaries and the formation of a suitable anchoring pattern will be considered in relation to their proximity to the Underwater Cultural Heritage targets. A qualified archaeologist is to be present in the event of construction or the laying of pipeline within 500 metres of an Underwater Cultural Heritage target. The methodology as proposed is acceptable from a cultural heritage point of view.<br><br>Given the above, the Superintendence approves the proposed mitigation and monitoring measures.<br><br>**Visual Impact**<br>The Superintendence notes that the proposed terminal station will be located on the southern end of the Delimara Power Station complex. The station will be visible mainly from the area in front of Fort Delimara. The whole of Delimara peninsula is designated as an Area of High Landscape Value in the context of the coastal cliffs (G.N. 400 of 1996).<br><br>Whilst the Superintendence is generally opposed to drastic changes which affected views and vistas to and from national monuments and scheduled/protected areas, given that the terminal is an extension to an already committed area, and is related to a project of national infrastructure, the Superintendence does not object to the proposal.<br><br>It is however suggested that if the operational use permits, possible visual mitigation measures are adopted to lessen the impact.<br><br>**Conclusion and conditions**<br>The Superintendence is in agreement with the results of the Environment Impact Assessment.<br><br>When consulted during the planning process of application PA/08757/17, the Superintendence will recommend the folllowing:<br>- archaeological monitoring conditions;<br>- possible visual mitigation measures of the proposed terminal. | |

**H. Department for Health Regulation - Environmental Health Directorate (email dated 15th April 2020)**

| Comments | Coordinator's reply (25/05/2020) |
|---|---|
| With reference to Environmental Impact Assessment dated March 2020 regarding subject indicated in caption, kindly be informed that this Directorate would like to submit the following comments/recommendations regarding this proposal.<br><br>The justification proposed for this development is to supply Malta with a reliable source of natural gas and hence remove the need of the FSU. The Directorate has no objection with this regard. However, the Directorate is concerned with the effects that this project might have on the bathing areas present opposite the scheme. Bathing season is from third week of May till the end of October. It is of high importance that all the monitoring and mitigation measures identified are implemented to prevent the risk of sea water contamination from the excavation, construction, land reclamation and operation of these proposal.<br><br>Should this proposal be accepted, the applicant is to adopt best practice methods together with good site practices and ensure compliance with Environmental Management Construction Site Regulations during all phases of construction and land reclamation. Moreover, applicant is to implement all proposed mitigation measures to cause the least nuisance and mitigate adverse air pollution (from dust dispersal and emissions from vehicles and machinery), noise and vibration impacts on sensitive receptors in the Area of Influence, sea water and on the general public. Hence the importance of drawing up and implementation of a Construction Management Plan to ensure adherence to proper site management practices to address groundwater, sea water and surface water pollution, to mitigate other adverse construction impacts, including construction traffic impacts and to ensure safety measures. Monitoring of construction works is also highly recommended to ensure implementation of all necessary mitigation measures and adherence to work practices throughout all the phases of the project.<br><br>All the vehicles that will be used on shore and offshore in relation to the construction, land reclamation and operation phase of the proposal have to be in good working condition and adopt good working practiced preventing that any oil, fuels and lubricants reach the, ground, surface and sea water. Adequate preventive measures are to be taken regarding the potential oil spill from machinery used during construction and operation.<br><br>Safe and proper handling of raw materials on site should also be ensured. Chemicals, oils and lubricants are to be placed in enclosed containers to prevent any leakage on ground and sea Adequate preventive measures are to be taken regarding the potential oil spill from machinery/vehicles used during construction and operation phase to prevent the contamination of ground water, surface water and seawater.<br><br>All necessary mitigation measures are to be implemented during the construction phase to reduce the level of air pollution. All mitigation measures to control dust must be carried out with caution to prevent runoff ending in the sea water. Measures to ensure that surface run-off, water used for dust control, water used for wheel washing and general cleaning are to be adopted and maintained during construction and operational phase.<br><br>If water spraying is used as a dust suppression technique to limit dust emissions it must be treated with chlorine to prevent risk from Legionaries disease. It is to be noted that uncontrolled periodic spraying of excavated material with water to mitigate dust emissions may result in the production of run-off slurry that would flow down slope and pool in low-lying areas. Similar effect may result from washing vehicle wheels with sprinklers and hence further mitigation measures or else other de-dusting systems are to be considered. In the case that a mist cannon is used as dust suppression equipment, water in cannon must be first class and treated with chlorine. It is of utmost importance that mitigation measures with respect to air quality are implemented so as to significantly reduce the impacts on public health resulting from the deterioration of air quality.<br><br>Any water disposal and/or overflowing at sea from the construction, land reclamation and operational phase is to be free from contaminates and particles. All the necessary monitoring and mitigation measures are to be implemented.<br><br>All the necessary mitigation measures during the construction and operation phase of the project are to be implementing to prevent and/or reduce the level of noise and vibration pollution in the surrounding area. | Noted. These requirements will be inserted in the EPC Contractor's scope of work.<br><br>Regarding the Request for a Decommissioning plan for the removal of the FSU, please note that the FSU is owned and operated by another company. Melita TransGas has no direct remit on the FSU. As indicated in the coordinated assessment, the decommissioning of the FSU does not form part of this planning application. The gas pipeline will transport gas to the Delimara Power Station thus replacing the need for the FSU to supply LNG to the power station. In view of this comment, the Non-Technical Summaries and all technical studies were aligned to the Coordinated Assessment. |

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| With regards to waste generated during the construction works the developer is to abide to the proposed waste management plan and waste handling procedures as per the current Waste Management Policy. It is recommended that all proposed mitigation measures, including those proposed for the operation and maintenance phase, are to be strictly implemented by the applicant to mitigate to the maximum any possible adverse impacts on public health and sea water. Operators are to make sure that good practice and the necessary measures are taken in account to prevent any littering from anthropogenic materials and/or remain in the sea from construction land reclamation and operation of the scheme. Monitoring and mitigation measures are to be adopted.<br><br>Second class water collected in reservoir is not to be used for human consumption.<br><br>Mobile toilets present on scheme should be supplied with a wash hand basin and adequate source of ventilation and light. The wash hand basin should be supplied with potable water. These must be regularly emptied by licensed person to prevent that foul water ends on the ground, and sea.<br><br>Necessary permits for the construction of cesspit must be obtained. Said cesspit must be registered with the Superintendent for Public Health and any other relevant authorities. Cesspit is to be double skin and leak proof. It must be emptied on a regular basis by a licensed liquid waste collector person and make sure that it does not overflow onto the street and sea.<br><br>It is recommended that light dispersion is to be controlled to avoid undesirable pollution effects on the neighbouring environment is highly recommended both during the construction and operation phase.<br><br>It is recommended that construction traffic follows established specific routes and adequate site management together with other measures such as storing or transporting constructional waste properly covered to prevent dispersal of dusts, washing of wheels and other dust control measures are taken to mitigate adverse dust impacts and nuisances from heavy vehicles during transportation. No water or liquid substance should drip from the vehicles transporting wet construction material from on shore and offshore. All other mitigation measures which may be necessary to minimise nuisances and adverse health impacts from construction traffic are to be implemented.<br><br>Any other unpredicted impacts and nuisances which may arise and that may have a significant adverse effect on public health should be immediately addressed by the developer and the necessary mitigation measures taken.<br><br>A pollution incident control plan should also be in place. Records of all pollution incidents, especially regarding potential pollution of the surrounding environment, are also to be kept and reported to the respective authorities accordingly. Operators should also be made responsible for the cleaning of any construction and operation material, fuel, and oil slick that may reach the shoreline especially at the official bathing areas during the official bathing season.<br><br>A Decommissioning plan for the removal of the FSU to be set up. A full decommissioning plan should be prepared for approval by the relevant competent authorities.<br><br>All relevant complaints lodged should be investigated and remedial action taken immediately. All complaints lodged and actions taken are to be recorded and such records are to be readily available to the Competent Authorities when requested. | |

**8.2.2 Comments received from the public (14th March 2020 – 15th April 2020)**

**A. Individual 1 (email dated 6th April 2020)**

| **Comments** | **Coordinator's reply (25/05/2020)** |
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| I am hereby recommending that a Social Impact Assessment is carried out.<br><br>A social impact assessment reviews the social effects of development and social change, both intended and not.<br><br>The International Association for Impact Assessment defines an SIA as the process of analysing, monitoring and managing the intended and unintended social consequences, both positive and negative, of planned interventions and any social change processes invoked by those interventions.<br><br>Such changes may range from natural disasters to population growth and from policy interventions to singular development projects. Consequently, SIAs investigate the effects on people's everyday lives in terms of culture, politics, community, health, well-being, aspirations, needs, rights and responsibilities, to name a few. They provide data for policymaking, which is based on evidence.<br><br>Social impacts under assessment should include all those things relevant to people's everyday life. This may include one's culture, community, political context, environment, health, well-being, personal and property rights as well as fears and aspirations.<br><br>Social impact assessments can help verify the consequences and impacts of development proposals in relation to the communities involved. Hence, a basic starting point for such assessments should be the compilation of a community profile. A social impact assessment that does not understand the society in question is practically worthless.<br><br>This can help bring about genuine processes of engagement between communities, developers and authorities as well as identify and implement mitigation measures and compensation mechanisms. As things stand in Malta, various developers do quite the opposite, often causing huge inconvenience to residents and leaving a mess behind in surrounding infrastructure.<br><br>Various methods, both quantitative and qualitative could be used within social impact assessments. The former refers to generalisable data especially through numbers, while the latter produce in-depth data on matters.<br><br>Research methods in SIAs may therefore include surveys of concerned populations who are asked questions on their perceptions of the change in question. Ethnographic methods may involve a deeper look into everyday practices of people, while elite interviews may verify the advice, concerns and interpretations of persons who are experts or who have experience in the respective field under analysis.<br><br>Methods may also involve the analysis of discourse on the subject in question, for example by looking at what is being pronounced in the public sphere, whether by the public, civil society, political actors, the media and the like.<br><br>SIAs should involve the participation of different stakeholders, ideally through mixed research methods.<br><br>Some other factors which should be included in social impact assessments include the consideration of reasonable alternatives to development proposals as well as comparative analysis of similar development proposals and related good or bad practices.<br><br>Analytic indicators should be provided and the entire process should be subject to peer review by independent experts in the field.<br><br>Social impact assessments should not be one-off exercises which are rubber-stamped by authorities without any sense of critical engagement. To the contrary, they should be ongoing processes which engage with various stakeholders and which report back so as to ensure effective policy processes. They should also use complementary research methods so as to ensure reliable and valid data. | Discussions were held with the respective Competent Authorities and a social impact assessment was not requested as part of the screening letter. |

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| Recommendations and mitigation measures could therefore be in place, and these would be based on social-scientific evidence.<br><br>It is also important that SIAs are peer-reviewed. This means that if a study is being carried out by a team of social scientists, this should be scrutinised by other independent social scientists. This could help identify shortcomings, conflicts and possible improvements to the same SIA.<br><br>Such ongoing processes should also take account of changes in the social context in question, such as cumulative impacts of other developments. For example, a social impact assessment that focuses on one development but ignores another development in the region is not realistic. | |

## 8.3. Comments received ERA during the Espoo Transboundary consultation (31st August 2020)

| Comments | Response |
|---|---|
| **OGGETTO: [ID VIP:5269] : CONSULTAZIONE AI SENSI DEGLI ARTICOLI 4 E 5 DELLA CONVENZIONE SULLA VIA IN CONTESTO TRANSFRONTALIERO (CONVENZIONE DI ESPOO) SULLA PROPOSTA DI GASDOTTO DI INTERCONNESSIONE MALTA-ITALIA –**<br><br>**CONSULTATION IN ACCORDANCE WITH ARTICLE 4 AND 5 OF THE CONVENTION ON EIA IN A TRANSBOUNDARY CONTEXT (ESPOO CONVENTION) FOR THE PROPOSAL OF MALTA-ITALY GAS PIPELINE INTERCONNECTION.**<br><br>A seguito della lettera firmata digitalmente il 28 Agosto 2020 ricevuta da Melita TransGas dall'ERA di Malta il 2 Settembre 2020 con lo stesso oggetto del presente documento, Melita TransGas sta riproducendo qui la lettera e le seguiti risposte ai commenti gentilmente inviate a cura del Ministero dell'Ambiente e della Tutela del Territorio e del Mare.<br><br>Le risposte sono qui riportate sia in inglese che in italiano.<br><br>*"We make reference to the note dated 7th of April 2020 from the Ministry of the Environment, Climate Change and Planning of Malta, received through verbal note no. 33/2020 of the Embassy of the Republic of Malta in Rome, and which follows the previous communications cited therein, on the interest to participate in transboundary consultations in the context of the EIA procedure in question, in accordance with the provisions of the "Espoo Convention ", of the Directives 2011/92/EU and 2014/52/EU, as well as of the Italian legislation on Environmental Impact Assessment (Legislative Decree No. 152 of 2006).*<br><br>*In this regard, the Directorate-General for Sustainable Growth and Quality of Development proceeded to make the project documentation available at the web address indicated in the note mentioned above, and, at the same time, launched the public consultation of the Italian authorities and public, which ended on 14th of July 2020.*<br>*With reference to the competence of this Ministry, the following may be observed.*<br><br>*From the analysis of the Non-Technical Summary (NTS) of Malta-Italy gas pipeline interconnection project of 28th of February 2020, it should be noted that the SEA only refers to the part of the work that falls within the territory of Malta, consisting of the underwater gas pipeline in Maltese waters, the onshore pipeline and the terminal plant at Delimara on the island of Malta.* | ***[EN]*** *Due to the nature of the project, the applicant has undergone two separate EIA studies as required by the Italian and Maltese competent authorities. As required by various EU Directives and the Espoo Convention described above, the applicant has submitted the EIA documentation carried out in Malta to the Italian competent authority.*<br>*The Maltese permitting EIA documentation includes the Coordinated Assessment, the Technical Studies, the Appropriate Assessment and the Non-Technical Summary (in Italian).*<br><br>*The latter document, should not be read in isolation, as it only provides a brief summary of the findings from the EIA process that has been undertaken in the Maltese islands. For further technical and scientific information, kindly refer to the other chapters that have been submitted in the English language [These can be accessed from the following link: https://drive.google.com/drive/folders/1oWXEZLnSEfbh6jliEY43cyigkRWlxHO1?usp=sharing].*<br>*Furthermore, kindly note that the Italian permitting EIA documentation detailing the findings and impacts within the Italian territory has been published in a separate submission to the various competent authorities both in Italy and in Malta, as required by law.*<br><br>***[IT]*** *A causa della natura del progetto, il richiedente è stato sottoposto a due studi VIA separate come richiesto dalle autorità competenti italiane e maltesi. Come richiesto da varie Direttive UE e dalla Convenzione di Espoo sopra descritte, il richiedente ha presentato all'autorità italiana competente la documentazione VIA effettuata a Malta.*<br>*La documentazione Maltese che consente la VIA comprende la Valutazione Coordinata, gli Studi Tecnici, la Valutazione Adeguata e la Sintesi Non Tecnica (in italiano). Quest'ultimo documento, non dovrebbe essere letto isolatamente, in quanto fornisce solo un breve riassunto dei risultati del processo di VIA che è stato intrapreso nelle isole maltesi. Per ulteriori informazioni tecnico-scientifiche si rimanda agli altri capitoli che sono stati presentati in lingua inglese [È possibile accedervi dal seguente link: https://drive.google.com/drive/folders/1oWXEZLnSEfbh6jliEY43cyigkRWlxHO1?usp=sharing].* |

| Comments | Response |
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| | *Inoltre, si ricorda che la documentazione italiana che autorizza la VIA che dettaglia i risultati e gli impatti all'interno del territorio italiano è stata pubblicata in una dichiarazione separate alle varie autorità competenti sia in Italia che a Malta, come richiesto dalla legge.* |
| *The pipeline connects Malta's gas infrastructure to the Transnational European Gas Network and aims at acting on energy markets and market integration in the two EU countries, promoting competition in energy markets and contributing to the EU's energy security by diversifying sources and achieving the EU's climate and energy objectives by integrating renewable energies.*<br><br>*The document describes the project works and the construction methods, specifying how to manage the waste generated during the works. The choice of the project proposal derives from the evaluation of four alternatives compatible with local planning expectations, just as the choice of the technology to be used derives from the choice of the best possible alternative.*<br><br>*Any impacts on the soil, seabed, landscape, hydrogeology, ecological aspects and marine and terrestrial habitats, architectural, archaeological, historical and cultural heritage, infrastructure and services, traffic, as well as those due to noise, vibration and outdoor lighting, both temporary (therefore associated with the execution of the work) and permanent, are then assessed.*<br><br>*The preliminary assessment of environmental risk identified thirteen potential environmental threats or sources of contamination that include major accident scenarios such as contamination, emissions, floods and major spills, which could arise during the pipeline's excavation, construction, operation and dismantling phases.*<br><br>*The risks concerning "rock/soil instability that could affect the ecological/agricultural characteristics or land uses in the vicinity" (essentially connected to the construction phases of the works) and "floods or water damage to the Terminal Plant in due to heavy rains" are considered of moderate importance by the environmental assessment study.*<br>*As no actions are reported, it is hoped to consider and implement the necessary mitigation measures.* | ***[EN]** Applicant will implement the necessary mitigation measures and adhere to any permitting conditions imposed by the competent authorities.*<br><br>***[IT]** Il richiedente attuerà le misure di mitigazione necessarie e si atterrà alle condizioni di autorizzazione imposte dalle autorità competenti.* |
| *As regards the profiles relating to the quality of the water, it is hoped that the excavation and sediment handling activities for housing the building will be conducted in such a way as to minimize the diffusion of the finer fraction and the consequent transfer of pollutants into Pag.5/6 the water column and the biota and, in general, towards areas of particular environmental value.*<br><br>*During the intervention it is also desirable that environmental monitoring is carried out with particular attention to the dispersion towards the coastal areas and that the use of lesser impact techniques for sensitive biocenoses is preferred, avoiding that the pipeline route crosses areas of environmental value.* | ***[EN]** Applicant will implement all the necessary mitigation measures to safeguard the environment and to comply with any conditions imposed during the construction phase.*<br><br>***[IT]** Il richiedente implementerà tutte le misure di mitigazione necessarie per salvaguardare l'ambiente e per rispettare le condizioni imposte durante la fase di costruzione.* |

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| *As regards, instead, the theme of marine biodiversity, the following is necessary to assess and minimise the potential effects on the marine components, given the trans-border nature of the project under assessment and Italy's proximity to Malta.*<br>*It would, therefore, be desirable:*<br>*- investigate the effects due to the subtraction of marine habitats and species (for example Posidonia oceanica) resulting from the excavation and laying of the marine cable. In particular, the loss should be estimated and quantified and related to the environmental context. With reference to Posidonia oceanica, the state of conservation should be estimated, in addition to the extension of the prairie.*<br><br>*- investigate the effects due to the fragmentation of marine habitats resulting from the anthropization of the seabed due to the physical presence of the new pipeline.*<br><br>*- investigate the effects during the construction phase of the work due to the alteration of the biocenosis; in particular, as far as marine species are concerned, migratory movements of Avifauna and Marine Mammals, nursery areas, feeding areas, etc. should also be considered;* | ***[EN]*** *A detailed environmental programme is provided in Section 8.5 of the Coordinated Assessment Report. The programme includes measures that safeguard the coastal areas and the biocenoses included within them.*<br><br>***[IT]*** *Un programma ambientale dettagliato è fornito nella Sezione 8.5 del Rapporto di Valutazione Coordinata. Il programma prevede misure che salvaguardano le zone costiere e le biocenosi incluse in esse.*<br><br>***[EN]*** *The loss of P.oceanica and other benthic habitats has been quantified in the revised Ecology Technical Study and Appropriate Assessment reports. Kindly refer to the revised documentation for further information [These can be accessed from the following link: https://drive.google.com/drive/folders/1oWXEZLnSEfbh6jliEY43cyigkRWlxHO1?usp=sharing].*<br><br>***[IT]*** *La perdita di P.oceanica e altri habitat bentonici è stata quantificata negli studi tecnici sull'ecologia e nei rapporti di valutazione appropriata. Si prega di fare riferimento alla documentazione rivista per ulteriori informazioni [È possibile accedervi dal seguente link: https://drive.google.com/drive/folders/1oWXEZLnSEfbh6jliEY43cyigkRWlxHO1?usp=sharing].*<br><br>***[EN]*** *Within the context of the Maltese territory, the impact of seabed fragmentation and loss*<br>*of habitats is discussed in detail in the revised documentation. The impact areas are located close to the Maltese shorelines, whilst the remaining sections of the new pipeline (within the*<br>*Maltese territory) are not located on benthic habitats of conservation value.*<br>*Further details about the marine impacts on the Gela nearshore habitats are included in the EIA documentation that was presented separately to the Italian authorities.*<br><br>***[IT]*** *Nel contesto del territorio maltese, l'impatto della frammentazione del fondale marino e della perdita di habitat è discusso in dettaglio nella documentazione rivista. Le aree di impatto sono situate in prossimità delle coste maltesi, mentre le restanti sezioni del nuovo gasdotto (all'interno del territorio maltese) non si trovano su habitat bentonici di valore di conservazione. Ulteriori dettagli sugli impatti marini sugli habitat nearshore di Gela sono inclusi nella documentazione VIA che è stata presentata separatamente alle autorità italiane.*<br><br>***[EN]*** *The EIA includes two dedicated Appendices that describe the effects during the construction of the gas pipeline. Kindly refer to the following technical studies: Noise, Vibration & Exterior Lighting and Ecology Technical Studies for further information. The* |

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| *- investigate the direct and indirect effects for all species protected by EU directives, and with particular conservation status, by quantifying - for each Natura 2000 habitat and for each habitat connected to the individual species listed in the annexes to the Habitat Directive 92/43/EEC and Birds Directive 2009/147/EC (feeding, reproduction, migration and wintering areas) - the area affected by both the work and the construction sites;* | *Coordinated Assessment report also includes the EIA Coordinator's summary on the aforementioned impacts.*<br><br>***[IT]** La VIA comprende due appendici dedicate che descrivono gli effetti durante la costruzione del gasdotto. Si prega di fare riferimento ai seguenti studi tecnici: Rumore, vibrazioni e illuminazione esterna e studi tecnici sull'ecologia per ulteriori informazioni. Il rapporto di valutazione coordinata include anche il riepilogo del coordinatore VIA sugli impatti di cui sopra*<br><br>***[EN]** The direct and indirect effects for species protected by EU directives (92/43/EEC & 2009/147/EC) are mentioned in the EIA documentation provided, particularly in the Appropriate Assessment (AA) report. This document assessed the various Natura 2000 sites that lie in close proximity to the project within the Maltese territorial boundaries. This also includes a detailed description of all the marine, terrestrial and bird habitats that are present and the likely impacts to be induced on such features of ecological importance during the construction and operation of the proposed project.*<br><br>***[IT]** Gli effetti diretti e indiretti per le specie protette dalle direttive UE (92/43 / CEE e 2009/147 / CE) sono menzionati nella documentazione VIA fornita, in particolare nella relazione di valutazione appropriata (AA). Questo documento ha valutato i vari siti Natura 2000 che si trovano nelle immediate vicinanze del progetto entro i confini territoriali maltesi.*<br>*Ciò include anche una descrizione dettagliata di tutti gli habitat marini, terrestri e ornitologicipresenti e dei probabili impatti da indurre su tali caratteristiche di importanza ecologica durante la costruzione e il funzionamento del progetto proposto.* |
| *- evaluate the compatibility of the intervention with the principles of conservation of the Sites of the Natura 2000 Network; in particular, the possible effects of the implementation and operation phases on the fauna and habitats of Community interest should be estimated. Therefore, it is desirable that actions for mitigation measures are implemented to ensure the conservation of the structural and functional integrity of habitats and the protection of protected species;* | ***[EN]** These evaluations and a detailed proposal for mitigation measures and monitoring is included in the EIA documentation and the Appropriate Assessment report.*<br><br>***[IT]** Queste valutazioni e una proposta dettagliata di misure di mitigazione e monitoraggio sono incluse nella documentazione VIA e nella relazione di valutazione appropriata.* |
| *- deepen the monitoring plan (MAP) for the biodiversity component at all stages. The monitoring methods should be detailed for the different taxa known in the area, both by season and by number of survey sessions;* | ***[EN]** A detailed biodiversity monitoring plan is included in the Coordinated Assessment, the Ecology Technical Study and the Appropriate Assessment chapters. The applicant will follow all monitoring requirements imposed by the competent authorities during the construction and operation of the proposed gas pipeline project.*<br>***[IT]** Un piano dettagliato di monitoraggio della biodiversità è incluso nei capitoli Valutazione coordinata, Studio tecnico ecologico e Valutazione appropriata. Il richiedente seguirà tutti I requisiti di monitoraggio imposti dalle autorità competenti durante la costruzione e l'esercizio del progetto del gasdotto proposto.* |

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| *- consider in the MAP the monitoring of habitats and species that are assumed to be subject to repopulation along the new marine pipeline, favouring the natural phenomena of recolonization following the construction site activities, estimating their ecological operation with respect to the environmental context.* | ***[EN]** As previously described, a detailed monitoring plan of habitats and species has been described in the EIA documentation.*<br><br>***[IT]** Come descritto in precedenza, nella documentazione VIA è stato descritto un piano di monitoraggio dettagliato di habitat e specie.* |
| *With regard to marine environmental planning and policies, the available documentation only mentions the Marine Strategy Framework Directive MSFD Directive 2008/56/EU; It's desirable that the same attention could be given to Maritime Spatial Planning MSP (Directive 2014/89/EU) and Integrated Coastal Zone Management (ICZM).* | ***[EN]** The above directives will be included in the revised Coordinated Assessment report.*<br>***[IT]** Le direttive di cui sopra saranno incluse nella relazione di valutazione coordinata rivista."* |
| **Il Vicario del Direttore Generale**<br>Giacomo Meschini<br>(documento informatico firmato digitalmente<br>ai sensi dell'art. 24 D.Lgs. 82/2005 e ss.mm.ii) | *"Furthermore, kindly note that the Italian permitting EIA documentation detailing the findings and impacts within the Italian territory has been published in a separate submission to the various competent authorities both in Italy and in Malta, as required by law."*<br><br>Inoltre, con riferimento al paragrafo seguente dalle nostre risposte a questi commenti sulla consultazione transfrontaliera:<br><br>Si prega di notare che volevamo chiarire che la VIA per la sezione maltese del progetto è stata presentata all'ERA di Malta mentre la VIA per la sezione italiana è stata presentata al MATTM in Italia. La VIA italiana non è stata presentata all'ERA di Malta. Detto questo, abbiamo compilato un modulo di notifica transfrontaliera che includeva un contatto dell'ERA. Come indicato, la presentazione alle autorità italiane è stata effettuata alla fine di agosto ed è ora disponibile sul sito web del MATTM per la revisione pubblica.<br>Melita TransGas resta a disposizione per eventuali chiarimenti che potrebbero essere richiesti. |