



ARERA and REWS agreement on the investment request by Melita TransGas Co. Ltd for the MTG pipeline (PCI 5.19) and on the allocation of the investment costs

Regulation (EU) No 347/2013 of the European Parliament and of the Council of 17 April 2013 on guidelines for trans-European energy infrastructures requires that National Regulatory Authorities (NRAs) take a coordinated decision on the allocation of investment costs across borders within six months of receiving an investment request by project promoters.

On 17th April 2019, the Maltese Regulator for Energy and Water Services (REWS) and the Italian Regulatory Authority for Energy, Networks and Environment (ARERA) received an investment request from Melita TransGas Co. Ltd. (the “Project Promoter” or “MTG”) for the Project of Common Interest 5.19 Connection of Malta to the European gas network — transmission pipeline with Italy at Gela (hereinafter: Melita TransGas Pipeline (MTGP)).

On the 13th May 2019, REWS and ARERA requested some further information from the Project Promoter.

On the 17th May 2019, the Project Promoter provided an addendum to the investment request document containing the requested information.

After having assessed the contents of the application and the subsequent information received on the 17th May 2019, REWS and ARERA (“the NRAs”) acting in accordance with the respective national legal framework and taking into account the Recommendation of the Agency for the Cooperation of Energy Regulators (ACER) No 05/2015 of the 18 December 2015 on good practices for the treatment of the investment requests, including cross-border cost allocation requests, for electricity and gas projects of common interest (Recommendation 05/2015), have reached an agreement on cost allocation in respect to the MTGP project. The coordinated Cross-Border Cost Allocation (CBCA) decisions are based on the NRAs’ agreement that Malta should bear 100% of the costs of the MTGP project and as such, no monetary transfer is needed between Italy and Malta. This document sets out REWS’ and ARERA’s detailed reasons for reaching this agreement.

1. Project Description

The MTGP project consists of a 159 km long, 22" diameter, mainly submarine pipeline connecting Delimara in Malta to Gela in Sicily. The MTG pipeline and all its components will be developed, financed, installed, owned, operated and maintained by Melita TransGas Co. Ltd. The gas received from Sicily will be delivered to the Delimara Power Station. At present, gas fired blocks in the Delimara Power Station can only be supplied via LNG deliveries to Floating Storage Unit ("FSU") and Re-gasification Unit ("RU") facilities. The MTGP project will replace LNG deliveries with natural gas supplied via pipeline transmission.

The technical capacity of the MTGP is 2.17 GWh/h or 20 TWh/y (2 bcm/y). Since MTGP will be the only means of gas supply for Malta, the maximum technical flow rate of the pipeline has been designed to meet the national gas demand for the peak-hour conditions. Based on the forecast, the peak-hour gas supply requirements of Malta will constantly increase over the analysed period from 0.97 GWh/h in 2025 to 1.96 GWh/h in 2049, resulting in a pipeline load factor increase from 45% to respectively 90% in peak-hour conditions.

The pipeline is also technically designed to be bidirectional, nevertheless the investment request and the analysis carried out by REWS and ARERA have considered only the possible utilization in the direction Italy to Malta, which is the only foreseen mode of utilization at least in the medium term. An additional compressor station would be required to enable flow in the opposite direction, subject to a technical and financial feasibility study. The MTGP project was identified as a Project of Common interest (PCI) under priority corridor "North-South gas interconnection in Western Europe" in the first PCI list adopted by the European Commission on the 13th October 2013 as an Annex to Regulation (EU) No 347/2013. The MTGP project was subsequently re-confirmed in the second and third PCI lists adopted by the European Commission on the 18th November 2015 and 23rd November 2017, respectively. In the last quarter of 2018, the MTGP project was re-submitted to the selection procedure for the fourth PCI list, which is still under evaluation.

The Investment Request includes a description of the technical details of the project and maps of the planned pipeline route including landing points.

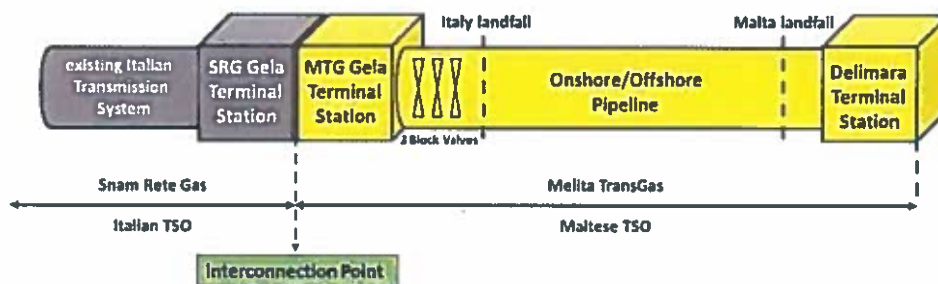
The MTGP pipeline will consist of a 151 km submarine pipeline connected to a 7 km onshore pipeline to Gela (Sicily, Italy) and 1 km onshore pipeline to Delimara (Malta), a geographical overview of the project is provided in figure 1.

Figure 1: Geographical project overview



The interconnection of the MTGP to the network owned and operated by the main Italian transmission system operator Snam Rete Gas S.p.A. (SRG) will occur at the Gela Terminal Station. The SRG terminal station will connect the existing Gela-Enna main gas transmission header to the new interconnection point, which will be located between the SRG terminal station and the MTG terminal Station in Gela as shown in Figure 2. The SRG terminal station, which will be adjacent to the MTG terminal station in Gela (not included in the current MTGP project scope and Investment Request), will be constructed by SRG.

Figure 2: Components of the MTGP project and the interface with SRG network



2. Implementation Plan

The Project Promoter provided information on the key milestones of the project as follows:

Milestone description	(expected) start date	(expected) end date
Consideration	09/2013	04/2015
Feasibility Study	09/2013	04/2015
Planning Approval	04/2013	04/2013
Preliminary design studies	11/2015	07/2017
Market test	04/2018	06/2018
Front End Engineering and Design (FEED)	11/2018	03/2020
Public consultation of Art. 9(4)	03/2018	05/2018
Overall granting process	11/2017	07/2020
Permitting pre-application	11/2017	10/2019
Permitting-statutory procedure	10/2019	07/2020
Environmental impact assessment	10/2018	10/2019
Business plan preparation	06/2018	12/2018
Investment/CBCA request submitted	03/2019	03/2019
CBCA decision granted	06/2019	06/2019
Final investment decision (FID)	07/2020	07/2020
Detailed engineering & material supply	10/2021	02/2023
Tendering for construction	09/2020	10/2021
Construction	03/2023	05/2024
Commissioning	05/2024	09/2024
Start-up	09/2024	09/2024

3. Permitting Process

Pursuant to Article 10 of Regulation (EU) No 347/2013, the permitting process consists of two procedures, the first being a pre-application procedure which includes the preparation of environmental reports, and the second stage being the statutory permit granting procedure.

The pre-application procedure which covers the period between the start of the permitting granting process and the acceptance of the submitted application file by the project promoter to the Competent Authority for permitting, formally commenced on the 20th November 2017.

The statutory permit granting procedure covers the period from the date of acceptance of the submitted application file, until the comprehensive decision is taken. The information provided by the Project Promoter indicates that the full application file will be submitted in Q3 of 2019. The Project Promoter expects the issuance of the Comprehensive Decisions from the competent authorities in Italy and Malta by Q3 of 2020.

4. Assessment of the Investment Request

The investment request was submitted to ARERA and REWS on the 17th April 2019 and additional information was submitted on the 17th May 2019 to ARERA and REWS pursuant to Article 12(3) of Regulation (EU) No 347/2013.

4.1 Admissibility

Pursuant to Article 12(3) of Regulation (EU) No 347/2013, the investment request shall include a request for CBCA accompanied by:

- A project specific cost-benefit analysis;
- A business plan evaluating the financial viability of the project including the results of the market testing;
- A substantiated proposal for a CBCA.

The investment request submitted to the NRAs in terms of Article 12(3) of Regulation (EU) No 347/2013 included a Business Plan, a Cost Benefit Analysis (“CBA”) and a CBCA proposal.

Taking also into account the ACER’s Recommendation 05/2015 on the completeness of the investment request, the NRAs deem that the investment request contains the necessary information to be considered complete.

Article 12 of Regulation (EU) No 347/2013 contain four admissibility criteria, which project promoters need to satisfy for submitting a valid investment request and which require assessment by NRAs, namely:

- the investment request is submitted after having consulted the TSOs from the Member States to which the project provides a significant net positive impact (article 12(3) of Regulation (EU) No 347/2013),
- the project has reached sufficient maturity shortly before the submission of the investment request (article 12(3) of Regulation (EU) No 347/2013),

- the investment request demonstrates that a market demand assessment has been carried out in order to confirm that the efficiently incurred investment costs cannot be expected to be covered by the tariffs (article 12(2) of Regulation (EU) No 347/2013),
- the investment request is submitted to all concerned NRAs (article 12(3) of Regulation (EU) No 347/2013).

4.1.1 Evidence of TSO Consultations

Several meetings were held between the Project Promoter and SRG. The Project Promoter also provided information on a formal consultation carried out with SRG and the response of that consultation. The SRG's input was fed into the MTGP project analysis.

The NRAs find that the Project Promoter has duly consulted the main Italian TSO. However, the analysis carried out by the NRAs (see 4.2.1) concludes that there is no significant net positive impact in Italy and therefore, the consultation of the Italian TSOs is not to be seen as a legal requirement for the admissibility of the investment request. As the only Member State with a significant net positive impact is Malta, this admissibility requirement is positively verified.

4.1.2 Project Maturity

The NRAs have reviewed the information provided by the Project Promoter in the investment request in the light of ACER's Recommendation 05/2015 to assess whether the project meets the "sufficient maturity" criterion for a CBCA decision.

ARERA and REWS also took into due account the completion of preliminary discussions with ARERA and REWS during the first months of 2019 and the consultation carried out by the Project Promoter with SRG in March 2019, which supported the preparation of the investment request.

In particular:

- ACER recommends that a cost certainty of +/- 10% is achieved. The investment request indicates that technical advisors of the project promoter have assessed a range of +/- 30% for the MTGP outlays. In addition, a number of sensitivity analyses have been conducted, which show that neither the conclusions from the financial and economic profitability analyses nor those in relation to the CBCA proposal change within the +/- 30% uncertainty range for the MTGP outlays.
- ACER recommends that the project should be delivered within 60 months from the date of submission of the investment request. The MTGP project is expected to be commissioned by September 2024, indicating that the investment request should have been submitted to the relevant NRAs in September 2019 at the earliest, to comply with ACER's recommendation. Whilst the current submission is therefore five months early, the project promoter noted that no major milestones are scheduled to be completed between April 2019 and September 2019 that would change the content of the investment request. The promoter's analysis makes it clear that securing CEF funding is critical to the viability of the project, and that it is

the timelines of the CEF Energy call for proposal for 2019 which have driven the submission date.

- Permitting procedure having started in all hosting countries. The permitting procedures had already started in November 2017 and the Project Promoter has stated that the permitting procedure is expected be finalized in Q3 of 2020 at the latest.

The Project Promoter has reported progress during the last month which is considered to have increased the maturity of the project, namely:

- progress on the ongoing studies required for the preparation of the Environmental Impact Assessment studies;
- completion of the geophysical marine survey for the entire 151 km offshore route;
- completion of the basic design review, plot plans and general layout of terminal stations and block valve stations, FEED basis of design, P&IDs, Hazard Identification HAZID/SIL and HAZard and OPerability analysis (HAZOP), geotechnical onshore survey in Malta, Engineering Procurement and Construction (EPC) contract execution plan, construction methodology, pipeline mechanical design and pipeline route on cadastral maps in Italy/Malta, fishing and marine traffic assessment, and the optimisation of the 7 km onshore route in Gela.

Given the above and the fact that other maturity criteria have been fulfilled, the NRAs deem the MTGP project to be mature enough for the investment request to be assessed and CBCA decision issued.

4.1.3 Demonstration that the costs cannot be covered by the tariffs

The Project Promoter's analysis shows that with the average annual utilisation factor of 26% (average of 5.2 TWh/y) of the MTGP capacity over the analysed period, resulted from the Market Testing, and without any CEF funds, the average tariff for the use of the MTGP would have to be 5.95 EUR/MWh. This tariff would be the highest tariff at a European level and would make it unlikely for the project to materialise.

Therefore, ARERA and REWS deem that the market demand assessment confirms that the project costs cannot be expected to be covered by the tariffs.

4.1.4 All concerned NRAs have received the investment request

According to section 1.4 of the ACER's Recommendation 05/2015, a project promoter should send its investment request to the NRAs of the Member States hosting the

project and to the NRAs of any other Member States having a potentially significant net positive impact based on the project specific CBA.

The hosting countries are Italy and Malta. The only country having a significant net positive impact is Malta, as further discussed below.

Therefore, ARERA and REWS deem that the investment request was duly submitted to all concerned NRAs.

4.2 CBCA decision Assessment

4.2.1 Evaluation of the Cost-benefit Analysis

The assumptions used by the promoter in the economic analysis (CBA) include:

- An economic life of 25 years reckoned to start from the planned year of commencement of operations of the MTGP as per 2nd ENTSOG CBA methodology;
- Social discount rate (SDR) of 4% at real prices;
- Costs include investment costs and Operational Expenditures (OPEX).

ARERA and REWS deem the socio-economic assumptions as appropriate.

For explicitly stated reasons related to the specific situation of the Maltese sector and the proposed pipeline, ENTSOG Ten Year Network Development Plan (TYNDP)'s calculation outputs were not used for the MTGP investment request. The ENTSO-G TYNDP 2018 considers the MTGP PCI as a 'gasification project', that is a project that brings gas to countries or areas not supplied by natural gas yet. In the case of Malta this approach ignores the FSU & RU intermediate phase which makes certain traditional indicators, such as benefits from switch from more polluting/more expensive fuels, not applicable.

The Project Promoter performed its own CBA analysis in line with the 2nd ENTSOG CBA methodology. This analysis identifies the economic benefits and costs (estimated in 2018 prices) associated with the project from a Europe-wide perspective and for the hosting Member States (Italy and Malta).

ARERA and REWS deem the Project Promoter's approach to better reflect project reality.

Three benefits have been monetised:

- Supply cost savings, representing the value of savings in fuel supply as a result of deploying the project. For Europe as a whole and for Malta, this is monetised by considering the supply of natural gas through the pipeline instead of through LNG deliveries at the FSU and RU facilities.
- CO₂ savings, for Europe as a whole and for Malta, representing the value of avoided emissions of greenhouse gases as a result of deploying the project
- Reduction in Exposure to Curtailed Demand, for Europe as a whole and for Malta, representing the value of avoided energy interruption in Malta from implementing the project.

Regarding the latter benefit, the valuation of reduced curtailed gas demand is evaluated by REWS, as any valuation coefficient and approach applied by ARERA for Italy would not be relevant.

In addition to the benefits, a cross border monetary flow (within the meaning of ACER's Recommendation 05/2015) is expected. For Italy, small savings on gas transportation could be achieved through lowering transmission tariffs as a result of the extra demand from Malta. The monetised positive impact to Italy is a cost to Malta, as the savings achieved in Italy will be paid by the Maltese consumers. This is therefore neutral at a European level.

From a Europe-wide perspective, the promoter's CBA analysis concludes that the project is expected to generate net benefits with an ENPV of 413 EURm (adjusted in the addendum submitted by the Project Promoter to 332 EURm) in the period 2018-2049, discounted as of the end of 2018. The net benefits are expected to mostly occur in Malta, with net benefits with ENPV of 394 EURm (adjusted in the addendum submitted by the project promoter to 313 EURm) compared to 19 EURm in Italy (which includes 26 EURm of socioeconomic benefits and 7 EURm of socioeconomic costs, as Italy will need to incur costs outside the PCI for the expansion of the Italian network to facilitate the implementation of the MTGP). The Project Promoter deems that despite the decrease in the ENPV as presented in the addendum the results of the economic assessment remain robust and the overall conclusion remains unchanged.

The project is therefore expected to derive significant socioeconomic benefits compared to the associated costs in the system-wide perspective. The analysis identified both Italy and Malta as net beneficiaries of the project (in that the socioeconomic benefits outweigh the costs borne by each Member State).

ARERA and REWS observe that the Project Promoter's CBA can be accepted and that the benefits in Italy are well below the 10% specified by the ACER's Recommendation 05/2015 for a net positive impact to be considered significant.

The CBA analysis includes a number of sensitivity analyses to demonstrate the robustness of this conclusion to various assumptions. This analysis showed that the project is expected to be economically beneficial under most of the scenarios considered.

In addition to the monetised benefits identified as part of the CBA, the analysis in the CBA suggests that the project will:

- Contribute to realising the targeted vision of integrated European gas energy markets, by ending Malta's isolation from the EU Gas Network.
- Strengthen the EU Member States' energy solidarity in case of potential gas disruptions, reducing the risk of supply shortages.
- Support the development of regional gas hubs by increasing security of supply, competition and thus market liquidity.

In addition, depending on the supply route taken to deliver the gas through the pipeline, the analysis suggests that the MTGP project may create transfers for transit countries, creating positive cross-border impacts within the EU.

4.2.2 Evaluation of the efficient investment costs and of the business plan by REWS

This paragraph contains the evaluation performed by REWS only: as the NRAs conclude that 100% of costs shall be attributed to Malta, REWS is the only competent regulator to assess the efficiency of the incurred costs and the impacts on the Maltese tariffs. Any valuation of efficient costs applied by ARERA for Italy would not be relevant.

The business plan provided by the Project Promoter as part of the CBCA application contains a detailed description of the project as well as its associated schedule and objectives, the results of the Market Testing and an analysis of the project's financial profitability. The Project Promoter carried out a non-binding Market Testing which was completed in May 2018.

As described in the investment request, the total (undiscounted) capital outlays of the MTGP project are expected to reach 409.8 EURm of which (96% - 393 EURm) to be incurred in the 2022-2024 period. The annual operational expenditure for the MTGP project is expected to be equal to 3.6 EURm.

According to provisions of ACER's Recommendation 05/2015, the Project Promoter should include a detailed assessment of the efficiency of the expected costs of the project, involving their comparison with unit investment costs or other information (standard costs, historical costs) available at national, European or international level and an explanation for any deviations. The Project Promoter has compared the MTGP related CAPEX with that of similar gas pipeline investments (including those operational or under construction and planned projects in the region). The analysis performed indicates that the MTGP unitary CAPEX per 1km of pipeline length is approximately 42% lower than an average cost of similar projects in Europe. The MTGP unitary CAPEX per 1 bcm of pipeline technical capacity is approximately 33% higher than the average cost of similar projects in Europe. The Project Promoter justified the higher unitary cost by the absence of a compressor station which would have increased the technical capacity of the pipeline thus reducing the unitary cost. The demand in Malta would not justify the construction of a compressor station.

The business plan assumes a financial discounting rate of 4.5%.

The expected revenues of the project were derived from an assessment of the expected annual volumes of gas flowing via the MTGP from Italy to Malta. These were based on the results of the Market Testing, which was carried out to assess third parties' interest in the MTGP project. The non-binding market testing concluded in 2018 resulted in an average annual utilisation of the MTGP capacity of 26% (average of 5.2 TWh/y) over the analysed period.

There is currently no applicable tariff methodology in Malta, given its isolation from the European network and the absence of natural gas transmission or distribution. The MTGP will be the first natural gas transmission infrastructure for Malta. As a result, the business plan looked at a variety of options for deriving a reasonable assumption for

tariffs, and selected an approach based on ENTSOG's recommendation of combined/benchmark approach. The combined/benchmark approach is based on a flow-weighted average of the entry and exit capacity charges as well as exit commodity charges in the Italian system. This approach led to a tariff of [REDACTED] for the MTGP, which is comparable to the general EU tariff levels. Under this assumption, the business plan would generate a negative FNPV of [REDACTED], which shows that the project is not financially viable, as the investment costs are not expected to be covered by the revenues stemming from operating the pipeline. The Project Promoter carried out a number of sensitivity analyses to test the financial viability of the project to variations of the key factors such as CAPEX, OPEX, commissioning year, gas flows or the MTGP tariff. The analysis shows that in all likely scenarios, the project remains financially not viable. External financial support would therefore be needed for the project to materialise.

4.2.3 The result of the consultation of the project promoter concerned

REWS and ARERA have had various opportunities to consult with the Project Promoter on the MTGP project before the submission of the investment request:

- On 17th September 2018, a meeting was held between the Project Promoter and the NRAs to discuss the investment request procedure and present preliminary results of the MTGP economic and financial analyses.
- The NRAs were able to provide feedback which led to update the analyses being presented at the meeting between the Project Promoter and the NRAs on 26th October 2018.
- The project promoter submitted a draft investment request to the NRAs in early February 2019, which was discussed with the NRAs during a meeting on 11th February 2019.
- The NRAs were able to provide further feedback to the Project Promoter before their submission of the final investment request on 17th April 2019.

Furthermore, the NRAs communicated to the Project Promoter the possible outcome of the CBCA decision and consulted it during a meeting which took place on 22nd May 2019.

The project promoter did not provide major comments to the proposed outcome of the CBCA decision.

4.2.4 Cross-Border cost allocation

Considering all the information presented above, and after assessing the cost benefit analysis presented and after concluding that the MTGP project generates positive net benefits, REWS and ARERA have decided that Malta should bear 100% of the costs of the MTGP project and as such, no monetary transfer is needed between Italy and Malta.