

# **Incremental capacity between GREECE and ITALY**

## **Public consultation documentation**

**2017 - 10 - 19**

*This document is published on the national transportation system operator's website in accordance with Chapter V of Regulation (EU) No 2017/459 of 16 March 2017.*

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## Introduction

Commission Regulation (EU) 2017/459 of 16 March 2017 (“Regulation”) establishes a harmonised Union-wide process for the offer of incremental capacity across Union borders.

The Italian gas transmission system operator Snam Rete Gas S.p.a. (hereinafter referred as “SNAM”) and the Greek gas transmission operator DESFA SA (herein after referred as “DESFA”) have received on 26/05/2017 non-binding demand indications for the realisation of incremental capacity aimed at interconnecting the Greek and Italian gas systems, as described in the following chapter A.

On 27 July 2017, according to the process set in article 26 of the Regulation, SNAM and DESFA have jointly published the Demand Assessment Report (“DAR”)<sup>1</sup> of the received requests with the conclusion to initiate an incremental capacity project for the potential creation of an interconnection between Greece and Italy.

This document has been jointly prepared by SNAM and DESFA in accordance to the provisions set in article 27 comma 3 of the Regulation to conduct a consultation on the identified draft project proposals to fulfil the received requests.

All interested parties are invited to send their comments and proposals to this document, in writing, to the list of contacts on the last page, by 18 December 2017.

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<sup>1</sup> The Demand Assessment Report is available at

-[http://www.snamretegas.it/export/sites/snamretegas/repository/file/ENG/Thermal\\_Year\\_20162017/Capacity\\_booking\\_and\\_transactions/request\\_incremental\\_capacity/demand-](http://www.snamretegas.it/export/sites/snamretegas/repository/file/ENG/Thermal_Year_20162017/Capacity_booking_and_transactions/request_incremental_capacity/demand-assessment/DAR_for_incremental_capacity_between_Greece_and_Italy.pdf)

[assessment/DAR for incremental capacity between Greece and Italy.pdf](http://www.snamretegas.it/export/sites/snamretegas/repository/file/ENG/Thermal_Year_20162017/Capacity_booking_and_transactions/request_incremental_capacity/demand-assessment/DAR_for_incremental_capacity_between_Greece_and_Italy.pdf)

-<http://www.desfa.gr/wp-content/uploads/2017/07/DAR-for-incremental-capacity-between-Greece-and-Italy.pdf>

## A. Description of the incremental capacity project and relative cost estimate

### A.1. Market demand for incremental capacity

The following non-binding demand indications have been received by SNAM and DESFA in the eight weeks following the entry into force of the Regulation and consequently considered in the design phase of the incremental capacity project. No further requests have been received until this Consultation Document publication date.

FROM		TO		THERMAL YEAR	CAPACITY	REQUEST SUBMITTED TO OTHER TSOs	CONDITIONS [Ref. Art. 26 Par.9 of Regulations]
EXIT CAPACITY		ENTRY CAPACITY					
ENTRY-EXIT SYSTEM	EXIT POINT NAME	ENTRY-EXIT SYSTEM	ENTRY POINT NAME	[YYYY/ YYYY+1]	[kWh/day]	<i>[If positive answer, please indicate the TSOs' name]</i>	
Greece		Italy		2019/2020 – 2038/2039	357.672.000	Same request submitted to Snam Rete Gas and DESFA	

*Note1: for calculation purpose will be assumed a gross calorific value equal to 10,4 kWh/m<sup>3</sup> (@20°C)*

*Note 2: Demand Request referred to long-term, mid-term and short-term*

*Note 3: DESFA received a non-binding demand indication of 460.512.000 kWh/day related to the interconnection between Turkey and Greece for the same period.*

## **A.2. Description of the Incremental Capacity Project**

On the basis of the capacity requests received in the non-binding demand indication phase, SNAM and DESFA have started coordinating for the development of a preliminary technical study identifying different possible alternatives to make available transportation capacity between Greece and Italy to fulfil the non-binding demand indication. SNAM and DESFA will use the remaining months until the submission of the final project proposal to the NRAs in order to identify the most suitable solution amongst the identified alternatives in terms of costs and realization timing. Therefore, the investments described in this document might be subject to modifications in the course of the next steps of the design phase.

The TSOs will design the potential new infrastructures on the basis of the technical best practices and taking into account city planning and the environmental constraints. In particular, the studies for the pipelines layout will be developed with the aim of reducing at the possible minimum level the environmental impacts excluding the most significant areas for environmental aspects. The pipelines design will evaluate different alternatives and develop the best one in terms of environmental sustainability. The project that will be proposed at the end of the design phase will represent the synthesis of the analysis carried out to minimize the environmental impacts and will represent the best design solution to optimize costs and duration for realizing the new infrastructure.

In general terms, the overall project consists of an onshore infrastructure in Greece, an offshore pipeline from the Greek coast to the Italian coast, an onshore interconnection with the existing network in Italy and an onshore pipeline along the south-north Italian backbone. The project has been studied also in order to offer different levels of capacity. The different configurations of infrastructural development are described in the following paragraphs A.2.1 and A.2.2.

### **A.2.1. Project and cost for offer level 1**

The infrastructures related to this offer level are presented below:

- Greek infrastructure: The Greek onshore part of the Greece – Italy natural gas interconnection system will transport natural gas from the Turkish border at Kipi to Florovouni, near the Thesprotia coast, where it will tie-in to the subsea part. It consists of the following main components and facilities:
  1. Existing 36" (DN 900) MOP 75 barg pipeline between Kipi and Komotini
  2. New gas pipeline approximately 613 km long DN 1050 diameter MOP 93 barg
  3. two new Compressor Stations, located at:
    - Kipi Evros (Greek/Turkish border)
    - Komotini

4. A new Operation and Maintenance Base located at Ioannina (Region of Epirus).
- Sealine: different alternatives are possible to interconnect the Greek and the Italian coast. The identification of the optimal route requires more detailed technical studies to evaluate the best solution in terms of realization timing, project costs and environmental impacts, considering also other planned projects to interconnect Greece and Italy directly or indirectly. The identified solution will be presented in the final incremental capacity project proposal which will be submitted to the NRAs for their approval. The pipeline diameter will be carefully designed taking into account the offshore distance, the related pressure level as well as the bathymetry. All alternatives will include the realization of a compressor station close to the Greek coast.
  - Italian infrastructure: the connection of the offshore section with the existing Italian network will depend on the optimal identified solution for the sealine. Therefore, the corresponding onshore section on the Italian territory in terms of size and length will depend on the landing point. The landing point will be identified with the aim to minimize the distance to the existing network.

Based on the above assumptions, a preliminary estimation of the overall project cost is around 2,5 billion €.

#### **A.2.2. Project and cost for offer level 2**

The infrastructures related to this offer level are presented below:

- Greek infrastructure: The Greek onshore part of the Greece – Italy natural gas interconnection system will transport natural gas from the Turkish border at Kipi to Florovouni, near the Thesprotia coast, where it will tie-in to the subsea part. It consists of the following main components and facilities:
  1. Existing 36" (DN 900) MOP 75 barg pipeline between Kipi and Komotini
  2. New gas pipeline approximately 613 km long DN 1050 diameter, MOP 93 barg
  3. Three new Compressor Stations, located at:
    - Kipi Evros (Greek/Turkish border)
    - Komotini
    - Nea Messimvria
  4. A new Operation and Maintenance Base located at Ioannina (Region of Epirus).
- Sealine: different alternatives are possible to interconnect the Greek and the Italian coast. The identification of the optimal route requires more detailed technical studies to evaluate the best solution in terms of realization timing, project costs and environmental impacts, considering also other planned projects to interconnect Greece and Italy directly or indi-

rectly. The identified solution will be presented in the final incremental capacity project proposal which will be submitted to the NRAs for their approval. The pipeline diameter will be carefully designed taking into account the offshore distance, the related pressure level as well as the bathymetry. All alternatives will include the realization of a compressor station close to the Greek coast.

- Italian infrastructure: the connection of the offshore section with the existing Italian network will depend on the optimal identified solution for the sealine. Therefore, the corresponding onshore section on the Italian territory in terms of size and length will depend on the landing point. The landing point will be identified with the aim to minimize the distance to the existing network. In addition to the connection to the Italian network in order to fully match the incremental capacity request of the non-binding demand indication, also a development of the Italian network backbone will be required.

Based on the above assumptions, a preliminary estimation of the overall project cost is around 4 billion €.

## B. Offer Levels

According to the two different project configurations described above it will be possible to propose two distinct offer levels as bundled firm capacity at the interconnection point between Greece and Italy<sup>2</sup>.

SNAM and DESFA propose to set aside 10% of the incremental capacity as per article 8.8 of the Regulation.

### B.1. Offer Levels 1

The realization of the infrastructure as described in paragraph A.2.1 will enable the creation of a firm transmission capacity at the interconnection point of about 211,6 GWh/d. Considering a 10% of incremental capacity to be set aside as per Art. 8.8 of the Regulation, the first offered capacity level will be approximately 190,4 GWh/d as shown in the following picture.

	GWh/d	MSm <sup>3</sup> /d	MNm <sup>3</sup> /d
Firm Capacity	211,6	20,0	19,0
Offered Capacity	190,4	18,0	17,1

<sup>2</sup> In this part a GCV of 11,16 kWh/Nm<sup>3</sup> (or 10,4 kWh/m<sup>3</sup> @ 20°C) has been considered

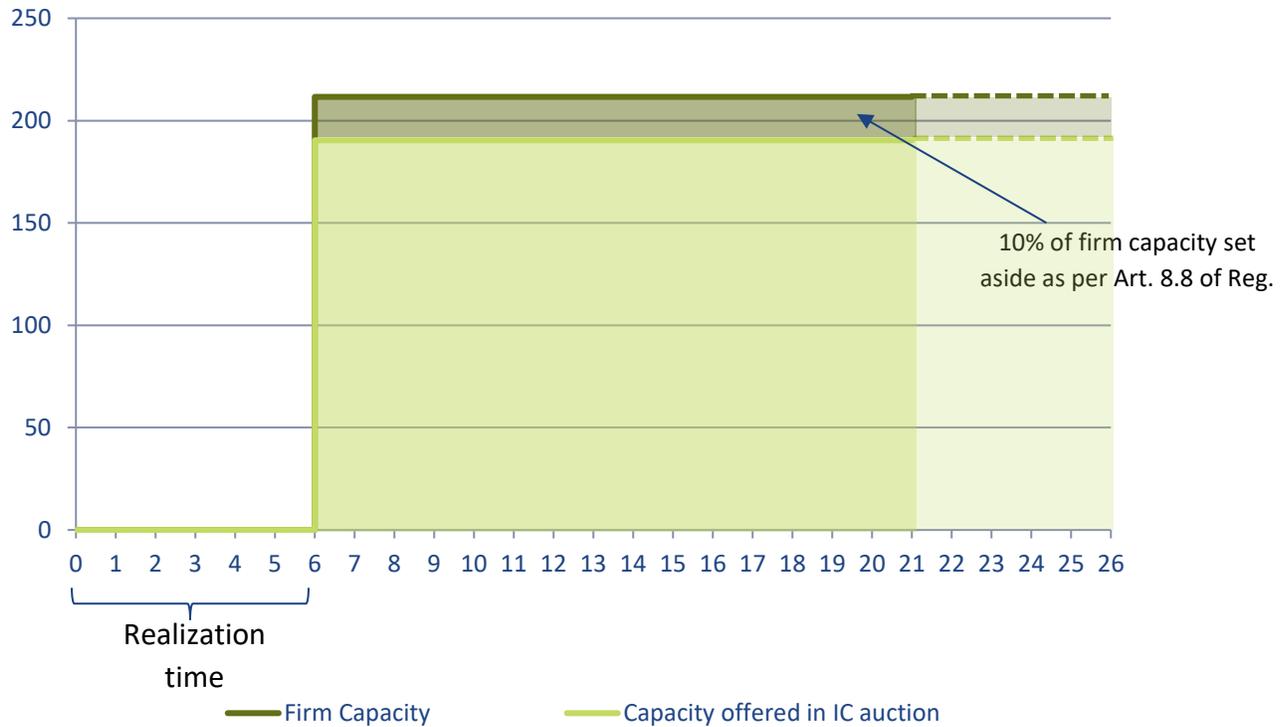


Figure 1 offer level 1 [GWh/d]

## B.2. Offer Levels 2

The realization of the infrastructure as described in paragraph A.2.2 will enable the creation of a firm transmission capacity at the interconnection point of about 397,4 GWh/d<sup>3</sup>. Considering a 10% of incremental capacity to be set aside as per Art. 8.8 of the Regulation, the first offered capacity level will be approximately 357,7 GWh/d as shown in the following picture.

	GWh/d	M <sup>3</sup> /d	MNm <sup>3</sup> /d
Firm Capacity	397,4	37,6	35,6
Offered Capacity	357,7	33,8	32,0

<sup>3</sup> This level of capacity is lower than the indication received by DESFA with regard to the interconnection between Turkey and Greece (460,5 GWh/d). This difference can be covered by the other import points of the DESFA system.

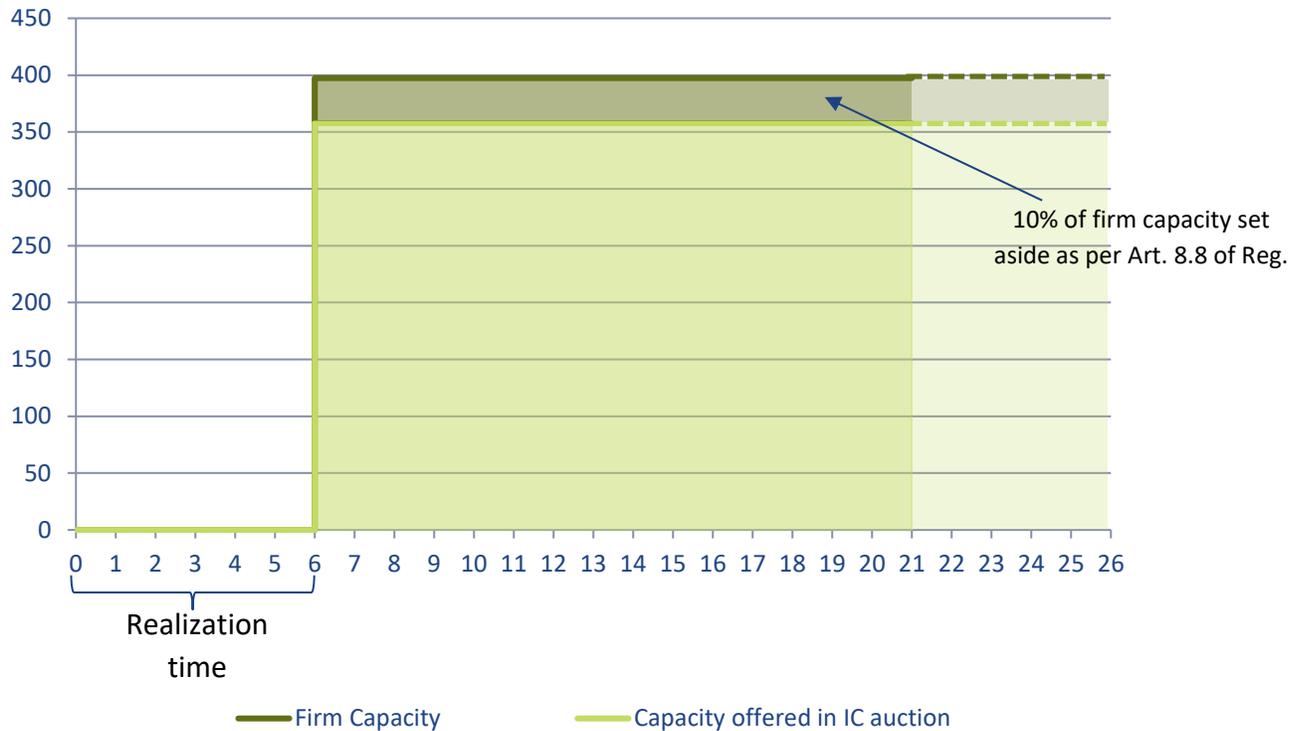


Figure 2: offer level 2 [GWh/d]

### C. Alternative allocation mechanism

In consideration of the request received by DESFA for the creation of interconnection capacity at the Turkey and Greek border for the same period of time and for a compatible amount of capacity, subject to the approval of concerned NRAs, DESFA and SNAM are considering the possibility to implement an alternative allocation mechanism which will follow the same process and rules of the allocation mechanism for incremental capacity envisaged in article 29 of the Regulation but for an extended time horizon by up to 5 additional years.

### D. Provisional Timeline of the incremental capacity project

This chapter describes the proposed timeline for the conclusion of the incremental capacity project and an estimate of the possible duration of realization of the new incremental capacity.

#### D.1. Incremental capacity cycle timeline

The public consultation on the incremental capacity project will be open from 19th October 2017 until the 18th December 2017.

The Design phase will be finalized in October 2018 - subject to the respect of the conditions described in the following chapter E - and it will be concluded with the submission of all the relevant documentation to the Italian and Greek NRAs for their evaluations and approvals. In case of coordinated approvals of the proposed project by the NRAs, an allocation notice is expected to be published in May 2019 and the incremental capacity to be offered in 2019 annual yearly auctions.



Figure 3 Incremental Capacity timeline

## D.2. Duration of project realization

The duration of the activities to build the new capacity (both in case of realization of level 1 or level 2) will take approximately 6 years after the positive outcome of the economic test both on Italian and Greek sides, the conclusion of the incremental capacity procedure with approval by the respective NRAs and the subscription of the Transportation Contract with the respective TSOs. Should any delay in the project realization occur, they will be treated in accordance with the contractual clauses described in paragraph E.

## E. General rules and condition for binding phase

This chapter describes the general rules and conditions which the involved TSOs intend to apply for participation in the binding capacity allocation phase.

Access to the transportation service on the respective TSOs systems is permitted impartially and on equal conditions to all parties that possess specific requirements as shown below, be they physical or legal entities. Where not differently expressed, for the purpose of the present document, the definitions of the Network Code or General Terms and Conditions of the respective TSOs apply.

Transportation capacity will have to be booked on a common capacity platform, according to Regulation 2017/459 (Art. 37), jointly identified by the concerned TSOs.

In order to proceed with the next steps of the design phase (with particular reference to the potential design of the sealine section) the subject(s) who have presented the non-binding demand indications (“Subject(s)”) will have to sign by end of January 2018 a contractual commitment with SNAM and DESFA for the payment of the actual costs which will be incurred to perform the relevant technical studies<sup>4</sup>. Currently such costs are estimated to around 4,5 million euros.

As a guarantee for the payment of the actual costs the Subject(s) will have to provide to SNAM and DESFA by the above deadline financial guarantee(s) equal to the cost estimate above indicated. The guarantee(s) will be reimbursed after the respective Transportation Contract(s) are signed with the relevant TSOs. In absence of the fulfillment of the above conditions the required technical studies will not be initiated and therefore the incremental capacity procedure will be considered as concluded.

### **E.1. Yearly Auction Participation**

The procedure which will be used by SNAM to auction the incremental capacity is described in paragraph 2 of the Attachment 5/U of the SNAM Network Code. DESFA will implement a similar procedure, as provided for in the DESFA Network Code, with the aim to make possible a bundled capacity auction with uniform rules.

Any statement of possession of requirements (requests, commitments, declarations or acceptances), as well as any request/communication or expression of will, made by the Shipper, including via the relevant functionality of the Transporter’s website or the jointly identified capacity platform, constitutes a formal obligation and commitment on the part of the Shipper, which accepts – even in respect of third parties – any and all liability arising from any breaches/errors or omissions.

Parties intending to participate in the transportation capacity booking process must:

- a) be enabled to operate on the jointly identified capacity Platform;
- b) submit a bank guarantee, as described below.

The shipper shall present to SNAM a bank guarantee before the yearly auction starting date process, cashable at first request, issued by an Italian financial institute or Italian branch of a foreign bank, equal in value to 20% of the maximum annual capacity charge. Similarly, the shipper shall present to DESFA a bank guarantee before the yearly auction starting date process, cashable at first request, issued by a Greek financial institute or Greek branch of a foreign bank, equal in value to 20% of the maximum annual capacity charge. SNAM and DESFA will publish on

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<sup>4</sup>This with particular reference to the costs related to activities performed by external contractors.

their own web sites the value of the capacity charge referred to the incremental capacity project (in case of a new interconnection the value will be an estimation).

Shipper accepts that:

- booking capacity referred to incremental capacity process is subject to the economic test described into Chapter 5 of the Regulation (UE) 2017/459;
- in case of a negative outcome of the economic test, SNAM and DESFA will give back the bank guarantee referred to point b) and no transport capacity will be contractually defined;
- in case of a positive outcome of the economic test the Shipper shall subscribe Transportation Contract and transmit to SNAM and DESFA a bank guarantee as described below;
- if the Shipper does not sign the Transportation Contract, it shall pay a penalty equal to the value of the bank guarantee referred to point b).

Bids by the Shipper will be accepted only within the limits of the guarantees which will have been presented by TSO according to point b). The positive outcome of the auction will be subject to the fulfilment of the required contractual obligations of both TSOs involved in the incremental capacity project.

The binding commitments of network users for contracting capacity, including whether the conditions for a repeated auction pursuant to Article 29(3) of the Regulation are met, will be made available no later than the next business day after the closing of the bidding round to all Shippers participating in the respective auction. The results of the economic test(s) will be made available no later than 2 business days after the closing of the bidding round to all Shippers participating in the respective auction.

In case no Offer Level results in a positive outcome, the incremental capacity process is terminated.

## **E.2. Transportation Contract**

In case of a positive outcome of the economic test described in Chapter V of the Regulation, the Shipper is bound to the commitments expressed in relation to the successful Offer Level and SNAM and DESFA will send to the Shipper the respective Transportation Contract to be subscribed within 30 days.

It is intended that the final positive outcome of the economic test leading to the realization of the incremental capacity project is subject to the subscription of the Transportation Contract(s) by all the Shipper(s) with successful binding commitments.

Shipper shall present to SNAM by the above deadline a bank guarantee, cashable at first request, issued by an Italian financial institute or Italian branch of a foreign bank, equal in value to the amount required in SNAM Network Code (Chapter 5 Paragraph 1.3.4 and 1.3.5). DESFA will require the same guarantee issued by a Greek financial institute or Greek branch of a foreign bank, subject to the Greek Regulatory Authority for Energy not expressing objections.

The guarantee shall remain valid for the entire duration of the Transportation Contract, with an expiry date at the end of the sixth month following the end of the transportation contract.

If Shipper doesn't subscribe the Transportation Contract it shall incur the penalty described in paragraph E.1.

With the Transportation Contracts subscription the Shipper is required to pay to SNAM and DESFA all the applicable transmission charges with start date from the date the capacity is made available and for full duration of the Transportation Contract.

### **E.3. Progress of the project, lack of permits, delays in making available transportation capacity**

SNAM in coordination with DESFA, will share with the relevant Shippers the progress of the incremental capacity project.

By signing the Transportation Contract, the Shipper agrees that, if the authorizations, permissions and servitudes necessary for the construction phase of the project are not obtained or delayed the execution times will be considered correspondingly protracted, without any liability to the TSO.

It is stated, as an example and not exhaustive and therefore non-binding for SNAM and DESFA, that for permits are intended all the authorizations, the servitudes and the legal obligations necessary for the construction phase.

It is additionally stated that for DESFA in case any delays occur due to the required authorizations or court proceedings in the framework of contracts award for the project implementation, or during construction of the project in case of archaeological findings, the execution times will be considered correspondingly protracted, without any liability to the TSO.

### **E.4. Force Majeure**

With reference to "Force Majeure", particularly concerning the treatment of possible delays in the provision of capacity or the event of a disruption of the project, the conditions defined in SNAM Network Code chapter 19.4 apply.

“Force Majeure” for the DESFA part of the project is defined in art. 104 of the Greek Network Code (Government Gazette B 1549/5.5.2017).

## **F. Element IND and RP for fixed price approach**

Consistently with the respective tariff regulatory frameworks in place, both SNAM and DESFA propose to apply the respective floating applicable payable price derived from their reference price methodologies also to incremental capacity. The TSOs are therefore not considering the adoption of a fixed price approach and consequently elements IND and RP foreseen by Regulation 2017/460 are not relevant.

## **G. Level of user commitments (F factor)**

This chapter describes the preliminary TSOs proposal for the level of the user commitments (f-factor) to be considered in the execution of the economic test envisaged in articles 22 and 24 of the Regulation.

A final proposal by the TSOs on the level of f-factor(s) will be submitted to the Italian and Greek NRAs at the end of the design phase in accordance with the provisions of article 28.1 of the Regulation.

The f-factors used to perform the economic test will be finally set by the Italian and Greek NRAs according to article 28 of the Regulation.

### **G.1. Economic test parameter for Italian project**

The preliminary levels of user commitments (f-factor) proposed for the individual economic test on the Italian side is 0,8 both for the Offer Level 1 and for the Offer Level 2.

### **G.2. Economic test parameter for Greek project**

The preliminary levels of user commitments (f-factor) proposed for the individual economic test on the Greek side is 0,8 both for the Offer Level 1 and for the Offer Level 2.

### **G.3. Combination into a single economic test**

In order to facilitate the offer of bundled capacity products, SNAM and DESFA individual economic test parameters for the given Offer Levels will be combined into a single economic test in the following stages of the incremental capacity process according to provisions of article 24 of

the Regulation. In relation to the individual f-factors above the combined f-factor proposal is 0,8 both for the Offer Level 1 and for the Offer Level 2.

## **H. Additional demand Indication**

By the publication date of this consultation document no further demand indications have been received after the deadline of the non-binding phase for incremental transmission capacity between Greece and Italy.

## **I. Decrease in the utilisation of other non- depreciated gas infrastructure**

### **Implication for the Italian/Greek systems**

At the current stage it is not possible to anticipate whether the incremental capacity commissioning might determine a sustained, significant decrease in the utilisation of other gas infrastructure (existing and/or planned) in the Italian and in the Greek or in adjacent entry-exit systems or along the same gas route, as this effect could also depend on the supply strategies and portfolios of commercial players.

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