Project proposal

for incremental capacity between the entry-exit systems of Hungary (‘HU’) and Austria (‘AT’)

2022. 04. 26.

This document shall be published on the website of the transmission system operator concerned in accordance with Chapter V of Commission Regulation (EU) 2017/459 of 16 March 2017.

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1. Description of the incremental capacity project, including cost estimation

Based on the non-binding market demand survey report on incremental capacity between HU and AT (dating 21/10/2019), FGSZ prepared a technical design study on the incremental capacity. The incremental capacity project aims to implement physical reverse flows from HU to AT. The feasibility study for the expansion of the capacity of the Mosonmagyaróvár border crossing point will be developed up to 120,000 m3 / h (15 ° C) based on the submitted request, however, as can be seen in the tables below, a lower supply level of 100,000 m3 / h (15 ° C) was also evaluated which can be achieved with a lower investment volume.

FGSZ submitted the draft project proposal for public consultation between 13/01/2013 and 02/14/2014, however, comments were not received.

i. Parameters and components of the technical design of 100,000 Sm³/h (15°C)

Parameter	HU section
Technical capacity	100 000 Sm³/h (15°C)
Capacity type	Firm
Interconnection point	Exit Mosonmagyaróvár
Flow direction	HU > AT
Border pressure	38 barg (minimum)
Length of pipeline	80 km new pipeline between Kozármisleny and Kaposvár
Above ground installations	Compressor station at Dorog ('CS') (2 x 6,75 MW + 1 x 4 MW)
	Node modification at Mosonmagyaróvár to ensure automatic change of flow direction
Cost estimation	156,4 million EUR (2021 value)
Cost estimation accuracy	140,1 million EUR (2021 value)
Cost estimation acuracy	+/- 10%

i. Parameters and components of the technical design of 120,000 Sm^3/h (15°C)

Parameter	HU section
Technical capacity	120 000 Sm^3/h (15°C)
Capacity type	Firm
Interconnection point	Exit Mosonmagyaróvár
Flow direction	HU > AT
Border pressure	38 barg (minimum)
Length of pipeline	80 km new pipeline between Kozármisleny and Kaposvár
Above ground installations	Compressor station at Dorog ('CS') (2 x 6,75 MW + 1 x 4 MW), Compressor station at Adony ('CS') (2 x 3,5 MW).
	Node modification at Mosonmagyaróvár to ensure automatic change of flow direction
Cost estimation	182,49 million EUR (2021 value)
Cost estimation accuracy	166,18 million EUR (2021 value)
Cost estimation acuracy	+/- 10%

2. Offer levels for bundled capacity products at the interconnection point

Based on the above description of the incremental capacity project, and setting aside an amount of 10% of the incremental technical capacity pursuant to Article 8(8) of the NC CAM, and applying a gross calorific value of 11.19 kWh/Nm³ (0 °C) the offer levels for bundled capacity products at the interconnection point are as follows:

i. Offer level I

Gas year	Offer level in the direction from HU to AT for the technical design of 100,000 Sm³/h (15°C) (kWh/h rounded to integers)	Resulting joint offer level in the direction from HU to AT (kWh/h rounded to integers)
2026/27	954 657	954 657
2027/28	954 657	954 657
2028/29	954 657	954 657
2029/30	954 657	954 657
2030/31	954 657	954 657
2031/32	954 657	954 657
2032/33	954 657	954 657
2033/34	954 657	954 657
2034/35	954 657	954 657
2035/36	954 657	954 657
2036/37	954 657	954 657
2037/38	954 657	954 657
2038/39	954 657	954 657
2039/40	954 657	954 657
2040/41	954 657	954 657

ii. Offer Level II

Gas year	Offer level in the direction from HU to AT for the technical design of 120,000 Sm³/h (15°C) (kWh/h rounded to integers	Resulting joint offer level in the direction from HU to AT (kWh/h rounded to integers)
2026/27	1 145 609	1 145 609
2027/28	1 145 609	1 145 609
2028/29	1 145 609	1 145 609
2029/30	1 145 609	1 145 609
2030/31	1 145 609	1 145 609
2031/32	1 145 609	1 145 609
2032/33	1 145 609	1 145 609
2033/34	1 145 609	1 145 609
2034/35	1 145 609	1 145 609
2035/36	1 145 609	1 145 609
2036/37	1 145 609	1 145 609
2037/38	1 145 609	1 145 609
2038/39	1 145 609	1 145 609
2039/40	1 145 609	1 145 609
2040/41	1 145 609	1 145 609

3. Suggested alternative allocation mechanism

FGSZ has not received any offer that would justify an alternative allocation mechanism under Article 30 (2) of the CAM NC, so it will not be used in the present incremental capacity procedure.

4. Provisional timeline of the incremental capacity project

Milestone	FGSZ planned date
Auctions and economic tests	July 2022
Final investment decision	2022 Q4
Permitting and construction start	2023 Q1
Commercial start-up	2026 Q4

FGSZ has decades of experience in the design and implementation of natural gas transmission infrastructure construction projects and carries them out according to internationally recognized project management standards and procedures, with the involvement of proven experts in their field. If delays are expected on the part of Hungary during the implementation of the project, FGSZ will strive to reduce the delays or their effects to a minimum.

5. General rules and conditions for the binding capacity allocation phase

The acceptance of the following general conditions is mandatory for Network Users to participate in and access capacity in the binding capacity allocation phase of the incremental capacity procedure. In order to participate in the binding capacity allocation procedure and auction, the Network Users must have a valid Network Usage Framework Contract in force, as included in Annex 4.1 of the Business Code of FGSZ. If the Network User has a valid Network Usage Framework Contract in place, the Network User thereby accepts the provisions of the General Conditions of Contract regarding Network Usage Contracts" (hereinafter referred to as GTC 4.d), which is annexed to the Network Usage Framework Contract. Provisions which are different to the ones included in GTC 4.d are laid down in the 'Rulebook – Binding Incremental Capacity Procedure according to Commission Regulation (EU) No. 459/2017', which is approved by the Hungarian Energy and Public Utility Regulatory Authority. In case of successful bidding at the auctions, Network Users sign the 'Capacity Booking Contract Concluded under Incremental Capacity Procedure' with FGSZ, which is different to the contract related to the GTC 4.d.

The conditions governing participation in the capacity allocation phase, access to capacity and the use of capacity, including the guarantees provided by Network Users, as well as any delay in the provision of capacity or the interruption of the project, shall be governed by the aforementioned documents.

The Business Code of FGSZ with its annexxes can be accessed here (https://fgsz.hu/partnereink/rendszerhasznalok/szabalyozasi-kornyezet/uzletszabalyzat), in Hungarian and English languages. This project proposal and the attached sample contract and Rulebook will be published at least two months before the capacity is offered for auction in accordance with Article 28 (3) of the CAM NC. The sample contract for the binding Incremental Capacity Procedure is in Annex 2 of this project proposal, while the Rulebook is in Annex 3.

6. Level of user commitments, estimated f-factor and parameters of the economic test

The level of user commitments, as expressed by FGSZ's estimation:

- the f-factor is 0,896 in the case of the 100 000 m^3/h techical capacity
- the f-factor is 0,911 in the case of the 120 000 m^3/h techical capacity

The parameters of the economic test according to Article 22 (1) of the CAM NC, which are not included in this Project Proposal, are recorded by FGSZ in the Rulebook.

The details of the estimated CAPEX and f-factor of the elements of the Hungarian section of the project can be found in Annex 1 of this project proposal.

7. Additional demand indications

FGSZ did not receive an overdue request for capacity in accordance with Article 26 (7) of CAM NC.

8. Annexes

Annex 1: CAPEX and f-factor details

HU>AT transmission (100e m3/h, 38 barg)	
Direct developments	**CAPEX**
Mosonmagyaróvár node modification *f-factor = 1*	767
SUM 1 (M HUF)	**767**
Indirect developments	
Dorog CS *f-factor = 0,75*	24 128
Kozármisleny-Kaposvár DN600 *f-factor = 1*	32 184
Node connections (Kozármisleny, Kaposvár, Edde) *f-factor = 1*	790
SUM 2 (M HUF)	**57 102**
SUM 1+2 with 10% contingency (M HUF)	**57 869**
Applied EUR/HUF exchange rate	*370*
SUM 1+2 with 10% contingency (M EUR)	**156,40**

HU>AT transmission (120e m3/h, 38>55 barg)	
Direct developments	**CAPEX**
Mosonmagyaróvár node modification *f-factor = 1*	767
SUM 1 (M HUF)	**767**
Indirect developments	
Dorog CS *f-factor = 0,75*	24 128
Adony CS *f-factor = 1*	9 651
Kozármisleny-Kaposvár DN600 *f-factor = 1*	32 184
Node connections (Kozármisleny, Kaposvár, Edde) *f-factor = 1*	790
SUM 2 (M HUF)	**66 753**
SUM 1+2 with 10% contingency (M HUF)	**67 520**
Applied EUR/HUF exchange rate	*370*
SUM 1+2 with 10% contingency (M EUR)	**182,49**

Annex 2: Sample - Capacity Booking Contract Concluded Under Incremental Capacity Procedure

Annex 3: Rulebook - Binding Incremental Capacity Procedure according to Commission Regulation (Eu) No. 459/2017