



Demand assessment report for incremental capacity between *Hungary* and *Romania*

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27-07-2017

This report is a joint assessment of the potential for incremental capacity projects conducted by

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TSO 2

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Company Limited by Shares

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A. Non-binding Demand indications

Csanádpalota IP connects the Romanian and Hungarian entry-exit system. Although the minimum contracted border pressure is according to the Interconnection Agreement 41 bara, but due to certain technical constraints TRANSGAZ requested the lower border pressure temporarily up to 21 bara.

Currently available capacities:

IP name	Csanádpalota (HU>RO)	Csanádpalota (RO>HU)
	kWh/h/y	kWh/h/y
FGSZ physical capacity	2,150,201	571,415
Transgaz physical capacity	2,145,935	103,290
Published technical capacity (FGSZ/Transgaz)	2,150,201	103,290

The following **aggregated non-binding demand indications** for firm capacity have been used as a basis for this demand assessment:

Indicative demand submitted to FGSZ

Csanádpalota (HU>RO)

From [entry-exit system name] “EXIT CAPACITY”	To [entry-exit system name] “ENTRY CAPACITY”	Gas year YYYY/YY	Amount (kWh/h)/y	Request is submitted to other TSOs [yes, TSO] or [no] (detailed information shall be provided below)	Period when Demand Indication was received* [please include the period according to the numbers 1) - 3)]	Additional Information (e.g. type of capacity, if different from bundled firm freely allocable)
<i>FGSZ Ltd.</i>	<i>Transgaz</i>	<i>2018/19-2034/35</i>	<i>100,000</i>	<i>No</i>	<i>2</i>	<i>n/a</i>

Csanádpalota (RO>HU)

From [entry-exit system name] “EXIT CAPACITY”	To [entry-exit system name] “ENTRY CAPACITY”	Gas year YYYY/YY	Amount (kWh/h)/y	Request is submitted to other TSOs [yes, TSO] or [no] (detailed information shall be provided below)	Period when Demand Indication was received* [please include the period according to the numbers 1) - 3)]	Additional Information (e.g. type of capacity, if different from bundled firm freely allocable)
Transgaz	FGSZ Ltd.	2018/19	120,000	No	2	n/a
Transgaz	FGSZ Ltd.	2019/20	1,400,000	No	2	n/a
Transgaz	FGSZ Ltd.	2020/21	1,400,000	No	2	n/a
Transgaz	FGSZ Ltd.	2021/22	2,684,247	No	2	n/a
Transgaz	FGSZ Ltd.	2022/23	2,684,247	No	2	n/a
Transgaz	FGSZ Ltd.	2023/24	2,684,247	No	2	n/a
Transgaz	FGSZ Ltd.	2024/25	2,684,247	No	2	n/a
Transgaz	FGSZ Ltd.	2025/26	2,684,247	No	2	n/a
Transgaz	FGSZ Ltd.	2026/27	2,684,247	No	2	n/a
Transgaz	FGSZ Ltd.	2027/28	2,684,247	No	2	n/a
Transgaz	FGSZ Ltd.	2028/29	1,400,000	No	2	n/a
Transgaz	FGSZ Ltd.	2029/30	150,000	No	2	n/a
Transgaz	FGSZ Ltd.	2030/31	150,000	No	2	n/a
Transgaz	FGSZ Ltd.	2031/32	150,000	No	2	n/a
Transgaz	FGSZ Ltd.	2032/33	150,000	No	2	n/a
Transgaz	FGSZ Ltd.	2033/34	150,000	No	2	n/a
Transgaz	FGSZ Ltd.	2034/35	150,000	No	2	n/a

Indicative demand submitted to TRANSGAZ

Csanádpalota (HU>RO)

From [entry-exit system name] “EXIT CAPACITY”	To [entry-exit system name] “ENTRY CAPACITY”	Gas year YYYY/YY	Amount (kWh/h)/y	Request is submitted to other TSOs [yes, TSO] or [no] (detailed information shall be provided below)	Period when Demand Indication was received* [please include the period according to the numbers 1) - 3]]	Additional Information (e.g. type of capacity, if different from bundled firm freely allocable)
<i>FGSZ Ltd.</i>	<i>Transgaz</i>	--	--	--	--	--

Csanádpalota (RO>HU)

From [entry-exit system name] “EXIT CAPACITY”	To [entry-exit system name] “ENTRY CAPACITY”	Gas year YYYY/YY	Amount (kWh/h)/y	Request is submitted to other TSOs [yes, TSO] or [no] (detailed information shall be provided below)	Period when Demand Indication was received* [please include the period according to the numbers 1) - 3]]	Additional Information (e.g. type of capacity, if different from bundled firm freely allocable)
<i>Transgaz</i>	<i>FGSZ Ltd.</i>	--	--	--	--	--

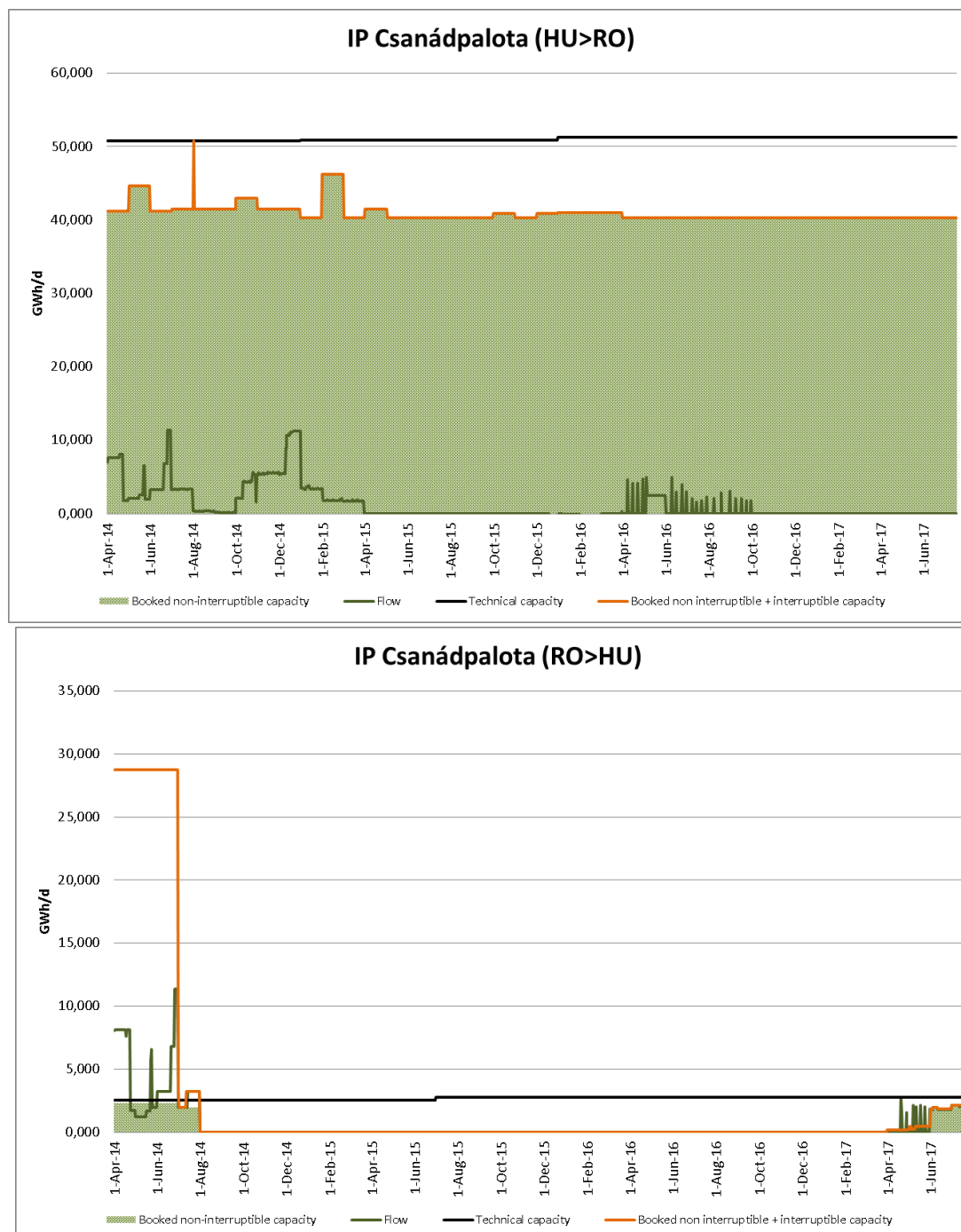
* The following standardised period shall be used for indicating the receiving date of the demand indication:

- 1) later than eight weeks after the annual yearly capacity auction in the previous incremental capacity cycle, that have not been considered previously;
- 2) within eight weeks after this year’s yearly capacity auction (0 – 8 weeks after yearly auction in year);
- 3) later than eight weeks after this year’s yearly capacity auction, but that will be considered in this incremental capacity cycle (9 – 16 weeks after yearly auction in year).

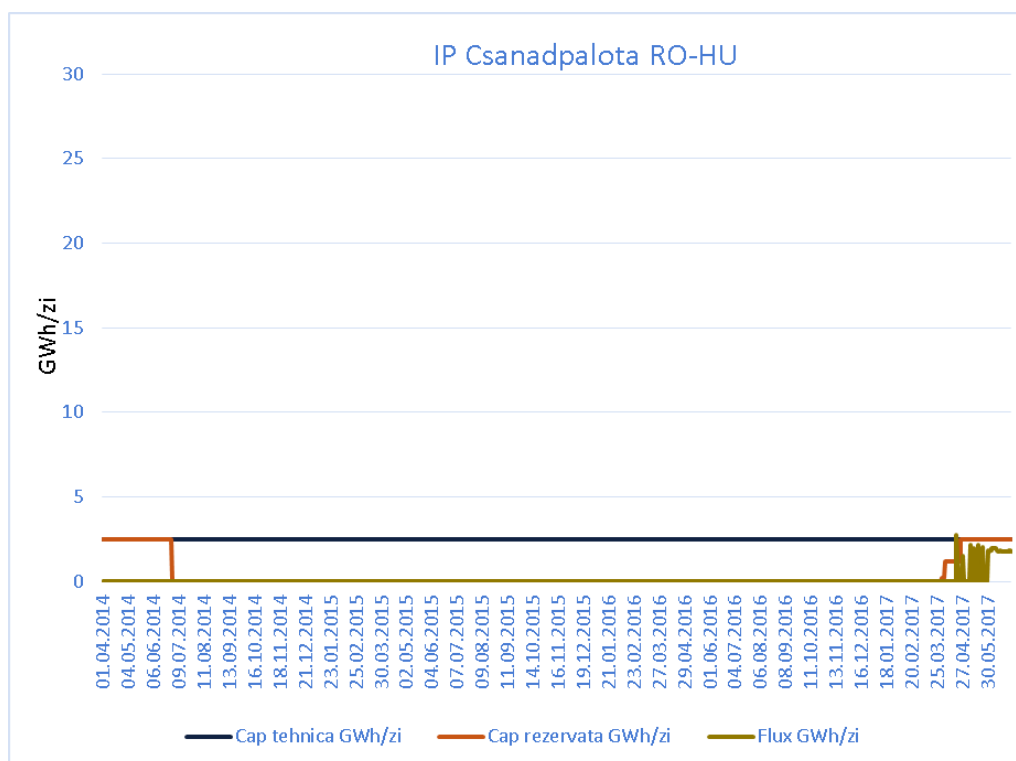
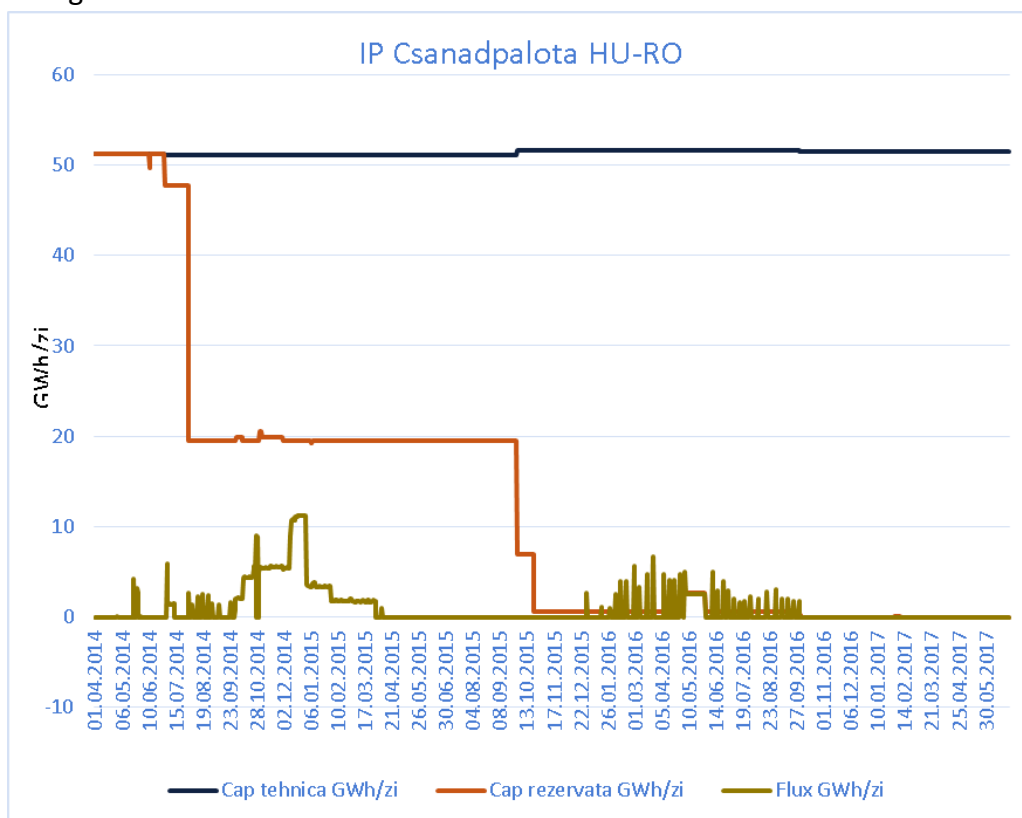
B. Demand assessment

i. Historical usage pattern

Historic usage on the Hungarian side can be found below:



Historic usage on the Romanian side can be found below:



ii. Results of current annual yearly auction

Yearly bundled yearly products (direction from Hungary to Romania and from Romania to Hungary) have been auctioned at the Regional Booking Platform (RBP) in 2017.

The **offered** bundled capacity for direction from Hungary to Romania was:

- 256,549 kWh/h/y between 2017/18 and 2021/22;
- 41,529 kWh/h/y between 2022/23 and 2029/30 and
- 1,716,748 kWh/h/y between 2030/31 and 2031/32

There is no booked bundled capacity.

The **offered** bundled capacity for direction from Romania to Hungary was:

- 92,961 kWh/h/y between 2017/18 and 2021/22 and
- 82,632 kWh/h/y, between 2022/23 and 2031/32

There is no booked bundled capacity.

iii. Relations to GRIPS, TYNDP, NDPs

The Priority Corridor North-South Gas Interconnections in Central Eastern and South Eastern Europe („NSI East Gas“) includes the Cluster phased capacity increase on the Bulgaria - Romania - Hungary - Austria bidirectional transmission corridor (currently known as “RO-HUAT/BRUA”) to enable 1.75 bcm/a in the first phase and 4.4 bcm/a in the second phase (# 6.24). This includes several PCI on both sides of the border.

On the Hungarian side the corresponding projects were studied in the national development plan 2016-2027 but these projects are not approved by NRA yet.

On the Romanian side the following corresponding projects were studied in the National Development Plan 2017-2026 (approved by NRA):

- Phase 1 of the “ROHUAT/BRUA” start of operation: December 2019;
- Phase 2 of the “ROHUAT/BRUA” start of operation: 2020;
- NTS development for taking over Black Sea: 2020.

iv. Expected amount, direction and duration of demand for incremental capacity

According to the Demand Assessment and the planned Open Season FGSZ and Transgaz will study the demand level for RO>HU direction 5,400,000 kWh/h/y firm capacity at both sides.

C. Conclusion for the (non)-initiation of an incremental capacity project/process

The demand assessment concluded that the expected amount is maximum 100,000 kWh/h/year firm capacity is required at Csanádpalota IP (HU>RO) flow direction. On Hungarian side, at this IP there is 1,678,632 kWh/h/year long term booked unbundled capacity until 2029/30 and 471,569 kWh/h/y available capacity. On Romanian side, at this IP there is 10,730 kWh/h/year long term booked unbundled capacity until 2029/30 and 471,569 kWh/h/y available capacity. herefore there is no need for incremental capacity in this direction.

At Csanádpalota IP (RO>HU) flow direction the highest demand on both sides is 2,684,247 kWh/h/y. The required incremental capacity projects are part of the Hungarian National Development Proposal 2016-2025, Romanian National Development Plan 2017-2026 and also included ENTSOG's TYNDP 2017 document with 5,400,000 (kWh/h) capacities.

The planned developments would ensure that the requested capacity fulfils all capacity demand provided the necessary gas volume will be available on existing and future developed entry IPs.

Design phase had been carried out as part of the preparation of planned Open Season. During the preparation of planned Open Season FGSZ and Transgaz determined the required developments, which are able to ensure 5,400,000 kWh/h/year capacities at IP Csanádpalota in both directions.

Yearly capacity shall be made available in the planned Open Season as per approved O/S Rulebook for 15 years.

Therefore there is no need for new incremental capacity projects in the RO>HU direction besides those already included in the National Development Plans.

D. Provisional timeline

Entry Hungary/Exit Romania

Start Date	End Date	Description
to be confirmed		Open Season

If the result of the economic test during the Open Season will be negative, the capacity indications received in the Open Season should be considered for a CAM-NC based incremental process.

E. Interim arrangements for the auction of existing capacity on the concerned IP(s)

There is no interim arrangement.

F. Fees

For the incremental capacity cycle addressed by this report, involved TSOs did not introduce a fee for the evaluation and processing of non-binding demand indications.

G. Contact information

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