



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

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

TSO 1 TSO 2

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A. Non-binding Demand indications

Drávaszerdahely IP connects the Croatian and Hungarian entry-exit system. Currently available capacities:

IP name	Drávaszerdahely	Drávaszerdahely
	(HU>HR)	(HR>HU)
	kWh/h/y	kWh/h/y
FGSZ physical capacity	8,597,000	8,311,000
Plinacro physical capacity	3,226,376	3,035,709*
Published technical capacity** (FGSZ/Plinacro)	3,226,376	3,035,709*

^{*}currently only interruptible capacity is available from Croatia to Hungary

^{**}currently this capacity is available on the Croatian side

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

Drávaszerdahely (HU>HR)

From	То	Gas year	Amount	Request is submit- ted to other TSOs	Period when De- mand Indication	Additional Infor- mation
[entry-exit sys- tem name] "EXIT CAPACITY"	[entry-exit sys- tem name] "ENTRY CAPAC- ITY"	уууу/уу	(kWh/h)/y	[yes, TSO] or [no] (detailed infor- mation shall be pro- vided below)	was received* [please include the period according to the numbers 1) - 3)]	(e.g. type of capacity, if different from bundled firm freely allocable)
FGSZ Ltd.	Plinacro					

Drávaszerdahely (HR>HU)

From [entry-exit sys- tem name] "EXIT CAPACITY"	To [entry-exit sys- tem name] "ENTRY CAPAC- ITY"	Gas year	Amount (kWh/h)/y	Request is submit- ted to other TSOs [yes, TSO] or [no] (detailed infor- mation shall be pro- vided 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)
Plinacro	FGSZ Ltd.	2020/21- 2029/30	610.160	Yes	3	

Shippers did not submit non-binding demand indicators, where condition was requested.

Indicative demand submitted to Plinacro

Drávaszerdahely (HU>HR)

From [entry-exit sys- tem name] "EXIT CAPACITY"	To [entry-exit sys- tem name] "ENTRY CAPAC- ITY"	Gas year	Amount (kWh/h)/y	Request is submit- ted to other TSOs [yes, TSO] or [no] (detailed infor- mation shall be pro- vided 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)
FGSZ Ltd.	Plinacro	2019/20	530,280	No	2	
FGSZ Ltd.	Plinacro	2020/21	652,624	No	2	
FGSZ Ltd.	Plinacro	2021/22	695,670	No	2	
FGSZ Ltd.	Plinacro	2022/23	631,649	No	2	
FGSZ Ltd.	Plinacro	2023/24	512,786	No	2	
FGSZ Ltd.	Plinacro	2024/25	638,960	No	2	
FGSZ Ltd.	Plinacro	2025/26	666,986	No	2	
FGSZ Ltd.	Plinacro	2026/27	694.887	No	2	
FGSZ Ltd.	Plinacro	2027/28	816,145	No	2	
FGSZ Ltd.	Plinacro	2028/29	938.289	No	2	
FGSZ Ltd.	Plinacro	2029/30	1,003,651	No	2	
FGSZ Ltd.	Plinacro	2030/31	1,108,104	No	2	
FGSZ Ltd.	Plinacro	2031/32	1,166,233	No	2	
FGSZ Ltd.	Plinacro	2032/33	1,211,616	No	2	
FGSZ Ltd.	Plinacro	2033/34	1,247,048	No	2	
FGSZ Ltd.	Plinacro	2034/35	1,274,712	No	2	

Drávaszerdahely (HR>HU)

From	То	Gas year	Amount	Request is submit- ted to other TSOs	Period when De- mand Indication	Additional Infor- mation
[entry-exit sys- tem name] "EXIT CAPACITY"	[entry-exit sys- tem name] "ENTRY CAPAC- ITY"	уууу/уу	(kWh/h)/y	[yes, TSO] or [no] (detailed infor- mation shall be pro- vided below)	was received* [please include the period according to the numbers 1) - 3)]	(e.g. type of capacity, if different from bundled firm freely allocable)
Plinacro	FGSZ Ltd.	2020/21- 2029/2030	610,160	Yes	2	

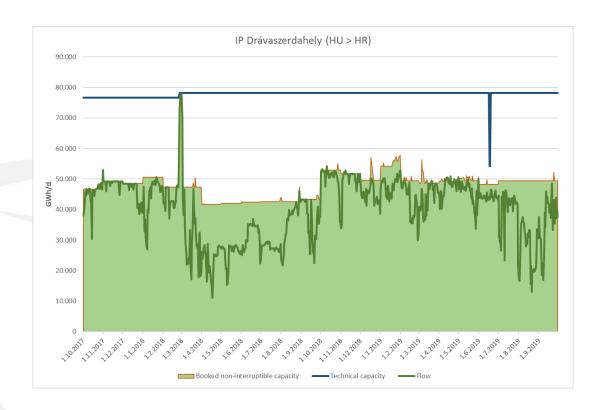
- * The following standardised period shall be used for indicating the receiving date of the demand indication:
 - 1) later than eight weeks after the annual yearly capacity auction in the previous incremental capacity cycle, that have not been considered previously;
 - 2) within eight weeks after this 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).

Shippers did not submit non-binding demand indicators, where condition was requested.

B. Demand assessment

i. Historical usage pattern

Historic usage on the Hungarian side can be found below:



ii. Results of current annual yearly auction

Yearly bundled products (direction from Hungary to Croatia) have been auctioned at the Regional Booking Platform (RBP) in 2019. The offered bundled capacity was 2,903,739 kWh/h/y (GCV 25/0 $^{\circ}$ C) between 2019/20 and 2032/33 year by year, and the booked capacity is 1,641,100 kWh/h/y (GCV 25/0 $^{\circ}$ C) for 2019/2020.

Unbundled interruptible products (direction from Croatia to Hungary) is auctioned at the Regional Booking Platform (RBP) on the Plinacro's system but not booked till now.

iii. Relations to GRIPS, TYNDP, NDPs

According to the documents GRIPs, TYNDP and NDPs FGSZ system is able to provide 8,597,000 kWh/h/y in direction from Hungary to Croatia and 8,311,000 kWh/h/y in direction from Croatia to Hungary which is significantly higher than the maximum non-indicative demands (from Hungary to Croatia 1.274.712 kWh/h/y and from Croatia to Hungary 610.160 kWh/h/y).

On the Croatian side some projects will be developed regarding Drávaszerdahely interconnection point (listed in table below).

No.	Project	NDP	TYNDP Code	PCI
1	Compressor station 1 at the Croatian gas transmission system	5.1	TRA-F-334	6.5.5
2	LNG evacuation pipeline Omišalj - Zlobin (Croatia)	1.18	TRA-N-090	6.5.1
3	LNG evacuation pipeline Zlobin- Bosiljevo-Sisak-Kozarac	1.19, 1.20, 1.21	TRA-N-075	6.5.6
4	LNG Evacuation Pipeline Kozarac- Slobodnica	1.32	TRA-N-1058	6.5.6

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

There is no incremental capacity demand on Hungarian side.

The Plinacro's Compressor Station (CS1) is under construction and the commissioning of CS1 planned for 1 January 2020 will enable firm capacity in the direction from Croatia to Hungary in the amount of 532,741 kWh/h/y (GCV 25/0 °C). In addition to the construction of CS1, Plinacro is in the process of constructing the Omišalj-Zlobin gas pipeline, which will connect the LNG terminal on the island of Krk to the existing gas transmission system. The commissioning of the LNG terminal is planned for 1 January 2021 and it will enable firm capacity in the amount of 2,130,966 kWh/h/y (GCV 25/0 °C) at the Drávaszerdahely interconnection point in the direction from Croatia to Hungary a part of which will be conditional capacity. The conditional capacity will be subject to the entry of gas from the LNG terminal into the transmission system. In 2018 and 2019, Plinacro conducted a binding phase of the Open Season procedure for contracting the firm transmission system capacity for entry from LNG Terminal and exit at the Drávaszerdahely interconnection point. Considering the above mentioned and the fact that in the Open Season procedure the transmission system users did not show interests in contracting the capacity at the Drávaszerdahely interconnection point, there is no need for the incremental project on the Croatian side.

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

There is no incremental capacity on the Hungarian side due to non-indicative demand. There is no incremental capacity on the Croatian side due to non-indicative demand.

C. Provisional timeline

There is no incremental capacity project neither on Hungarian nor Croatian side.

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

Plinacro and FGSZ concluded a Pressure Management Agreement, which temporarily ensures HR>HU delivery of 50,000 cm/h (15°C) FGSZ's compressor station shall be in periodical operation until 1.1.2020.

E. 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.

F. Contact information

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