



**Demand assessment report
for incremental capacity
between *Polish gas transmission system* and
*Czech gas transmission system***

2017-07-26



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



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A. Non-binding Demand indications

Transmission System Operators GAZ-SYSTEM and NET4GAS have received non-binding demand indications for firm capacity at the interconnection points between the entry-exit system of GAZ-SYSTEM (Poland) and the entry-exit system of NET4GAS (Czech Republic) for future period as presented below.

Indications submitted for each TSO are not equal, due to the fact, that not all market participants decided to submit indications on both sides of the entry-exit zones border. TSOs approached market participant in order to clarify the reason for submitting the demand indication only to GAZ-SYSTEM. The market participant provided to the TSOs the information that since operates only on the Polish Gas Market, it did not submit demand indication to the neighbouring TSO.

All indications were provided no later than 8 weeks after the start of the incremental capacity process, so by 1 June 2017.



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

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)
Poland	Czech Republic	2019/2020	1 167 920	YES, NET4GAS	2	
Poland	Czech Republic	2020/2021	1 267 920	Up to 1 167 920 - YES, NET4GAS, above 1 167 920 - NO	2	
Poland	Czech Republic	2021/2022	1 267 920		2	
Poland	Czech Republic	2022/2023	1 267 920		2	
Poland	Czech Republic	2023/2024	1 267 920		2	
Poland	Czech Republic	2024/2025	1 267 920		2	
Poland	Czech Republic	2025/2026	1 267 920		2	
Poland	Czech Republic	2026/2027	1 267 920		2	
Poland	Czech Republic	2027/2028	1 267 920		2	
Poland	Czech Republic	2028/2029	1 267 920		2	
Poland	Czech Republic	2029/2030	1 267 920		2	
Poland	Czech Republic	2030/2031	1 267 920		2	
Poland	Czech Republic	2031/2032	1 267 920		2	
Poland	Czech Republic	2032/2033	1 267 920		2	
Poland	Czech Republic	2033/2034	1 267 920		2	
Poland	Czech Republic	2034/2035	1 267 920		2	
Czech Republic	Poland	2019/2020	0	No	2	
Czech Republic	Poland	2020/2021	100 000	No	2	



Czech Republic	Poland	2021/2022	100 000	No	2	
Czech Republic	Poland	2022/2023	100 000	No	2	
Czech Republic	Poland	2023/2024	100 000	No	2	
Czech Republic	Poland	2024/2025	100 000	No	2	
Czech Republic	Poland	2025/2026	100 000	No	2	
Czech Republic	Poland	2026/2027	100 000	No	2	
Czech Republic	Poland	2027/2028	100 000	No	2	
Czech Republic	Poland	2028/2029	100 000	No	2	
Czech Republic	Poland	2029/2030	100 000	No	2	
Czech Republic	Poland	2030/2031	100 000	No	2	
Czech Republic	Poland	2031/2032	100 000	No	2	
Czech Republic	Poland	2032/2033	100 000	No	2	
Czech Republic	Poland	2033/2034	100 000	No	2	
Czech Republic	Poland	2034/2035	100 000	No	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).

The following table shows the **non-binding demand indications received by GAZ-SYSTEM**, where a **condition** was attached by the network users:

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)	Conditions** [please include the letter(s) a to c) and describe the conditions in more detail 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)
Poland	Czech Republic	2019/2020	1 167 920	Yes, NET4GAS	a)	2	By the physical reverse flow in Cieszyn should be offered the equal import capabilities during the whole year.
Poland	Czech Republic	2020/2021	1 167 920	Yes, NET4GAS	a)	2	
Poland	Czech Republic	2021/2022	1 167 920	Yes, NET4GAS	a)	2	
Poland	Czech Republic	2022/2023	1 167 920	Yes, NET4GAS	a)	2	
Poland	Czech Republic	2023/2024	1 167 920	Yes, NET4GAS	a)	2	
Poland	Czech Republic	2024/2025	1 167 920	Yes, NET4GAS	a)	2	
Poland	Czech Republic	2025/2026	1 167 920	Yes, NET4GAS	a)	2	
Poland	Czech Republic	2026/2027	1 167 920	Yes, NET4GAS	a)	2	
Poland	Czech Republic	2027/2028	1 167 920	Yes, NET4GAS	a)	2	
Poland	Czech Republic	2028/2029	1 167 920	Yes, NET4GAS	a)	2	
Poland	Czech Republic	2029/2030	1 167 920	Yes, NET4GAS	a)	2	
Poland	Czech Republic	2030/2031	1 167 920	Yes, NET4GAS	a)	2	
Poland	Czech Republic	2031/2032	1 167 920	Yes, NET4GAS	a)	2	
Poland	Czech Republic	2032/2033	1 167 920	Yes, NET4GAS	a)	2	



Poland	Czech Republic	2033/2034	1 167 920	Yes, NET4GAS	a)	2	
Poland	Czech Republic	2034/2035	1 167 920	Yes, NET4GAS	a)	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).

** The following standardised terminology shall be used for describing the conditions:

- a) commitments linking or excluding commitments at other interconnection points;
- b) commitments across a number of different yearly standard capacity products at an interconnection point;
- c) commitments conditional on the allocation of a specific or minimum amount of capacity;
- d) other.



The following **aggregated non-binding demand indications received by NET4GAS** for firm capacity have been used as a basis for this demand assessment:

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)
Poland	Czech Republic	2019/2020	1 167 920	Yes, GAZ-SYSTEM	2	
Poland	Czech Republic	2020/2021	1 167 920	Yes, GAZ-SYSTEM	2	
Poland	Czech Republic	2021/2022	1 167 920	Yes, GAZ-SYSTEM	2	
Poland	Czech Republic	2022/2023	1 167 920	Yes, GAZ-SYSTEM	2	
Poland	Czech Republic	2023/2024	1 167 920	Yes, GAZ-SYSTEM	2	
Poland	Czech Republic	2024/2025	1 167 920	Yes, GAZ-SYSTEM	2	
Poland	Czech Republic	2025/2026	1 167 920	Yes, GAZ-SYSTEM	2	
Poland	Czech Republic	2026/2027	1 167 920	Yes, GAZ-SYSTEM	2	
Poland	Czech Republic	2027/2028	1 167 920	Yes, GAZ-SYSTEM	2	
Poland	Czech Republic	2028/2029	1 167 920	Yes, GAZ-SYSTEM	2	
Poland	Czech Republic	2029/2030	1 167 920	Yes, GAZ-SYSTEM	2	
Poland	Czech Republic	2030/2031	1 167 920	Yes, GAZ-SYSTEM	2	
Poland	Czech Republic	2031/2032	1 167 920	Yes, GAZ-SYSTEM	2	
Poland	Czech Republic	2032/2033	1 167 920	Yes, GAZ-SYSTEM	2	
Poland	Czech Republic	2033/2034	1 167 920	Yes, GAZ-SYSTEM	2	
Poland	Czech Republic	2034/2035	1 167 920	Yes, GAZ-SYSTEM	2	



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The following table shows the **non-binding demand indications received by NET4GAS**, where a **condition** was attached by the network users:

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)	Conditions** [please include the letter(s) a) to c) and describe the conditions in more detail 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)
Poland	Czech Republic	2019/2020	1 167 920	Yes, GAZ-SYSTEM	a)	2	Capacity should be equal through the whole year.
Poland	Czech Republic	2020/2021	1 167 920	Yes, GAZ-SYSTEM	a)	2	
Poland	Czech Republic	2021/2022	1 167 920	Yes, GAZ-SYSTEM	a)	2	
Poland	Czech Republic	2022/2023	1 167 920	Yes, GAZ-SYSTEM	a)	2	
Poland	Czech Republic	2023/2024	1 167 920	Yes, GAZ-SYSTEM	a)	2	
Poland	Czech Republic	2024/2025	1 167 920	Yes, GAZ-SYSTEM	a)	2	
Poland	Czech Republic	2025/2026	1 167 920	Yes, GAZ-SYSTEM	a)	2	
Poland	Czech Republic	2026/2027	1 167 920	Yes, GAZ-SYSTEM	a)	2	
Poland	Czech Republic	2027/2028	1 167 920	Yes, GAZ-SYSTEM	a)	2	
Poland	Czech Republic	2028/2029	1 167 920	Yes, GAZ-SYSTEM	a)	2	
Poland	Czech Republic	2029/2030	1 167 920	Yes, GAZ-SYSTEM	a)	2	
Poland	Czech Republic	2030/2031	1 167 920	Yes, GAZ-SYSTEM	a)	2	
Poland	Czech Republic	2031/2032	1 167 920	Yes, GAZ-SYSTEM	a)	2	
Poland	Czech Republic	2032/2033	1 167 920	Yes, GAZ-SYSTEM	a)	2	



Poland	Czech Republic	2033/2034	1 167 920	Yes, GAZ-SYSTEM	a)	2	
Poland	Czech Republic	2034/2035	1 167 920	Yes, GAZ-SYSTEM	a)	2	

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** The following standardised terminology shall be used for describing the conditions:

- a) commitments linking or excluding commitments at other interconnection points;
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- c) commitments conditional on the allocation of a specific or minimum amount of capacity;
- d) other.



B. Demand assessment

The existing interconnection between Poland and the Czech Republic (interconnection point Cieszyn) enables the firm gas transmission only from the Czech to the Polish transmission system with a capacity of approx. 0,5 bcm annually (technical capacities: October – April 28.4 GWh/d, May – September 4.3 GWh/d). Considering the role in the process of integration and liberalisation of the gas market in this region of Europe, GAZ-SYSTEM and NET4GAS continued the cooperation in the scope of the further development of this or alternative connections. Several concept analyses including hydraulic modelling showed no possibility for an economic feasible extension of the existing interconnection point Cieszyn to provide the assumed gas volumes on the significant level.

Nevertheless, the Polish transmission system operator GAZ-SYSTEM S.A. together with the Czech transmission system operator NET4GAS, s.r.o. are developing a project (Czech – Polish interconnection upgrade, PCI cluster 6.1) whose realisation will establish additional and bi-directional transmission capacity between Poland and the Czech Republic. This action is a part of the second stage of the project implementation. The purpose of the second stage is to increase the transmission capacity between Poland and the Czech Republic through modernization and development of transmission systems on both sides of the border. The implementation of the second stage will enable transmission systems on both sides of the border to provide additional bi-directional capacity in a significant amount.

Capacities of the planned interconnection:

- In the PL direction: 6.5 bcm/a (approx. 200 GWh/d)
- In the CZ direction: 5.0 bcm/a (approx. 140 GWh/d)
- Future increase of capacities is possible

The project fully complies with all EU policies, strategies and action plans, including the Regulation (EU) No 347/2013 the European Energy Security Strategy from 28 May 2014 and the Framework Strategy for Resilient Energy Union from 25 February 2015, since it is a key element to improving diversification of natural gas routes and sources as well as regional gas market development. Therefore, the project is included on the list of Project of common interest since 2013. Moreover, the Project has been identified by the EC as one of the key infrastructure projects critical for the EU's energy security in short and medium terms because its implementation is expected to enhance diversification of supply possibilities and solidarity in the most vulnerable part of Europe.



STORK II, together with an internal extension of the natural gas infrastructure in Poland and the Czech Republic (Czech – Polish interconnection upgrade, PCI cluster 6.1), is the crucial part of the North-South Gas Corridor.

This whole project will cover needs indicated by market participants in this Incremental Procedure.

i. Historical usage pattern

Historical usage pattern may be found directly and up to date on the Transparency Platform (link below):

<https://transparency.entsog.eu/#/points/data?from=2013-06-03&points=CZ-TSO-0001ITP-00158exit>

Physical flow in this point is irregular. Data shows that despite the maintenance usage from time to time, the interconnection is unused. Capacity utilisation in this point may be observed in the fall-winter period, last time at the end of 2014. In Spring-summer period, technical capacity is reduced but mostly still unused.

ii. Results of current annual yearly auction

Bundled capacity in this point in yearly product auction is sold up to gas year 2020/21. Capacity in this point was not allocated in the current yearly auction.

Auctions results may be found on the GSA Platform webpage: <https://aukcje.gaz-system.pl/>

iii. Relations to GRIPs, TYNDP, NDPs

The Czech-Polish Interconnection

ENTSOG TYNDP 2017 and CEE GRIP 2017 mention infrastructure project between the Czech Republic and Poland: Project ID TRA-N-136 “Poland-Czech Republic Interconnection (CZ)” (project promoter is NET4GAS, s.r.o.) and project ID TRA-N-273: “Poland-Czech Republic interconnection (PL section)” (project promoter is GAZ-SYSTEM S.A.). These projects are consisted of necessary



projects to establish a new bi-directional interconnection point between Poland and the Czech Republic (all these projects are part of the PCI cluster 6.1).

The projects are also part of the National Network Development Plans (NNDP) of respective countries:

- NNDP of Poland 2016-2025: Project name “Połączenie Polska – Czechy”
- NNDP of the Czech Republic 2017-2026: project ID TRA-N-136 “Česko-polský propojovací plynovod (CPI)”. This project consists of two subprojects in the Czech Republic: 1) Poland-Czech Republic Interconnector (STORK II) (PCI subproject No. 6.1.1) and 2) Tvrdonice-Libhošť pipeline, including upgrade of the CS Břeclav (PCI subproject No. 6.1.12).

The Czech-Polish Interconnection is joint project of NET4GAS, s.r.o. and GAZ-SYSTEM S.A. Currently the project implementation is postponed to 2022 due to a common understanding reached between the Polish and the Czech prime ministers (Memorandum of Understanding signed on December 12, 2016).

The project will contribute to the efficient functioning of Polish and Czech transmission systems, the gas exchange between the markets, improving the security of supply in Poland, in the Czech Republic and in the whole region of Central and Eastern Europe, by diversification of sources and supply routes, primarily by closer connection of the natural gas market with LNG market, through LNG terminal Świnoujście, Poland.

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

Due to the ongoing investment process, demand for incremental capacity submitted to the TSOs during the Demand Indication phase of Incremental Procedure will be covered when the Czech-Polish Interconnection project would be fully implemented, i.e. including its integral parts like reinforcements of the CZ and PL transmission systems and cross-border part STORK II.

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

Due to the level of non-binding indications submitted to the TSOs during the Demand Indication phase of Incremental Procedure and considering scale and meaning of the already planned project, an additional incremental capacity project will not be initiated.



D. Provisional timeline

Due to the fact that no new incremental capacity project will be initiated, information will not be provided.

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

Due to the fact that no new incremental capacity project will be initiated, information will not be provided.

F. Fees

Fees were not introduced into the non-binding market demand indications phase.



G. Contact information



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