

**Demand assessment report
for the incremental capacity process starting
2017
between the *Russian Federation* and *GASPOOL***

– External document for publication –

2017-07-27

This report is a joint assessment of the potential for incremental capacity projects conducted by¹

Gasunie Deutschland Transport Services GmbH

Pelikanplatz 5
30177 Hannover
Germany

Tel.: +49 (0) 511 640 607 0
webinfo@gasunie.de
Fax: +49 (0)511 640 607 1001

gasunie

GASCADE Gastransport GmbH

Kölnische Str. 108-112
34119 Kassel
Germany

Tel.: +49 (0) 561 934-0
kontakt@gascade.de
Fax: +49 (0)561 934-1208

 GASCADE

NEL Gastransport GmbH

Kölnische Str. 108-112
34119 Kassel
Germany

Tel.: +49 (0)561 934-0
kontakt@nel-gastransport.de
Fax: +49 (0)561 934-2222

 NEL

OPAL Gastransport GmbH

Emmerichstraße 11
34119 Kassel 40217 Düsseldorf
Germany

Tel.: +49 (0) 561 934-0
kontakt@opal-gastransport.de
Fax: +49 (0)561 934-2383

 OPAL

FLUXYS Deutschland GmbH

Elisabethstraße 11
40217 Düsseldorf
Germany

Tel.: +49 (0) 211 230945-01
info.fluxysnel@fluxys.com
Fax: +49 (0)211 230945-09

FLUXYS 

¹ Since the Commission Regulation (EU) 2017/459 is not applicable to non-EU countries and gas transmission system operators on the other side of the border do not participate in the incremental process up to now, this report is a joint assessment conducted only for the German side of the border.

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A. Non-binding Demand indications

All inquiries received in the course of the demand period comply with the terms and conditions of participation and can be taken into account in the subsequent analysis.

The following **aggregated non-binding demand indications** 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 [Please indicate unit: (kWh/h)/y or (kWh/d)/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 capacity freely allocable)
<i>Russian Federation</i>	<i>GASPOOL</i>	<i>2025/26 - 2039/40</i>	<i>13,191,273kWh/h</i>	<i>No</i>	<i>2</i>	<i>Restricted allocable firm capacity to NCG and/or the Netherlands²</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).

² In the letter accompanying the inquiry form the shipper clarified that „Entry NEL capacities (GASPOOL area) in the amount of 13 191 MWh/h (circa 10 bcm/year (20°C)) go beyond all the existing NEL capacities and also beyond the capacities which are planned to be constructed in the frame of the “More Capacity” Project.” Therefore, 13,191,273 kWh/h is the indicated non-binding demand for incremental capacity. In addition to this, implied non-binding demand indications for existing capacity in the amount of difference between booked and available technical capacity are taken into account in subsequent analysis as well.

B. Demand assessment

i. Historical usage pattern at interconnection points between the Russian Federation and GASPOOL

For the incremental capacity cycle addressed by this report non-binding market demand indications were received. Therefore an analysis of the historical capacity utilization between the aforementioned entry-exit systems is given to support the assessment of a future demand for incremental capacity.

This analysis is performed separately for each of the following interconnection points which connect the aforementioned entry-exits systems for the direction, for which non-binding demand indications were received. If more than one transmission system operator (TSO) is active at a specific interconnection point within one entry-exit-system (pipe-in-pipe) the analysis is also performed for each active TSO. To support the assessment of incremental capacity demand the interconnection point specific analysis is aggregated to entry-exit-system level by the addition of the respective parameters of the single interconnection points. The analysis is performed for GASPOOL side of the border. Technical and commercial parameters for the other side of the border can differ significantly for a number of reasons.

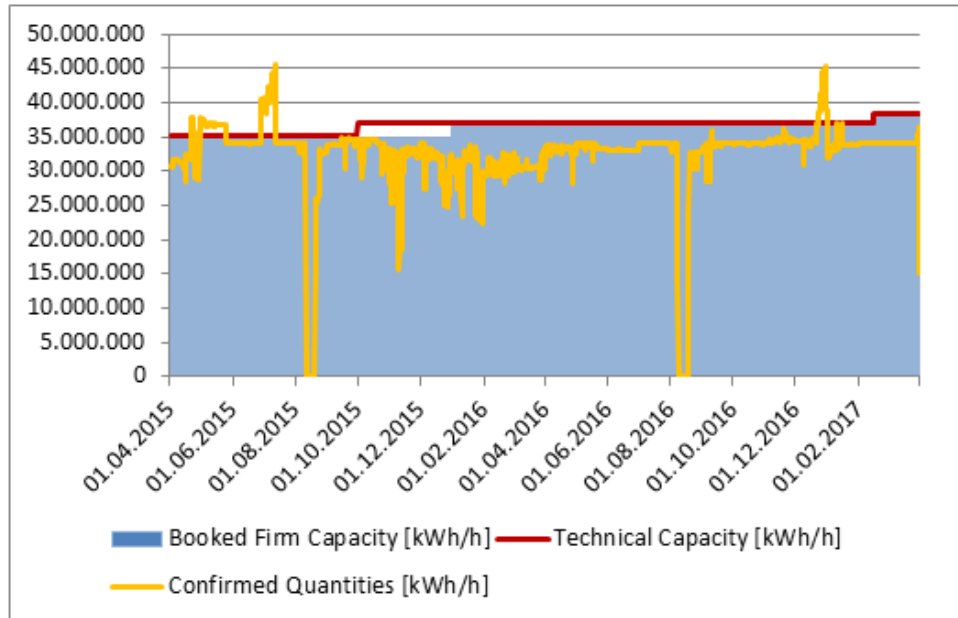
For the analysis the technical capacity, the booked firm capacity and the final confirmed quantities according to Article 3 (8) of Regulation (EU) Nr. 312/2014 is presented on an hourly scale. For the confirmed quantities no distinction between transports in firm or interruptible capacities is performed. The analysis is performed for the time frame from 01.04.2015 06:00 hrs to 01.04.2017 06:00 hrs.

Interconnection Points connecting the aforementioned entry-exit system:

Interconnection Point:	Greifswald-NEL		
Energy Identification Code:	21Z000000000255M		
Entry-exit-system:	Russian Federation	Entry-exit-system	GASPOOL
Pipe-in-Pipe:	No	Pipe-in-Pipe:	Yes
Transmission System Operator:	IP name:	Transmission System Operator:	IP name:
Nord Stream	Greifswald-NEL	FLUXYS Deutschland	Greifswald-NEL
		Gasunie Deutschland	Greifswald-NEL
		NEL Gastransport	Greifswald-NEL

Interconnection Point:	Greifswald-OPAL		
Energy Identification Code:	21Z000000000241		
Entry-exit-system:	Russian Federation	Entry-exit-system	GASPOOL
Pipe-in-Pipe:	No	Pipe-in-Pipe:	Yes
Transmission System Operator:	IP name:	Transmission System Operator:	IP name:
Nord Stream	Greifswald-OPAL	Lubmin-Brandov Gas-transport	Greifswald-OPAL / Lub-min
		OPAL Gastransport	Greifswald-OPAL

a. Entry GASPOOL



Although the confirmed quantities exceeded the technical capacity for a number of times sufficient capacity is available in the future to meet all existing demand. Therefore, no further analysis of congestion management procedures and secondary marketing is performed.

ii. Relations to GRIPS, TYNDP, NDPs

NDP Germany

The last national development plan for Germany is the Netzentwicklungsplan Gas 2016-2026 (NEP Gas 2016-2026), which has been published in April 2016 (with a revision in April 2017). The German NEP Gas is a legally binding NDP. The NEP Gas 2016-2026 has not yet been approved by the German NRA Bundesnetzagentur (BNetzA) due to the necessary revision of the full NEP process including the final results. The legally valid NPD for Germany is therefore still the NEP Gas 2015.

In the planning of the NEP Gas 2016-2026 the modelling variant favored by the TSOs (Q.2) took into account entries from Nord Stream 2. It was not based on the results of the “more capacity” market survey, since at the time of setting up the scenario for the NEP Gas 2016-2026 only non-binding market demand indications were available. Application of modelling methodology resulted in additional compressor units on the NEL (ID 110-08) and NOWAL (411-01), NOWAL measuring capacity expansion (ID 410-01), and a pipeline landing terminal near Lubmin (ID 412-01) within GASPOOL, and a compressor station at Legden (416-01) within

Net Connect Germany. In compliance with a notice from BNetzA, received on 07.07.2017, the analysis is based on the latest knowledge from the NEP Gas 2016-2026, excluding abovementioned projects exclusively linked to the modelling variant Q.2.

TYNDP 2017

The TYNDP 2017 published in April 2017 covers interconnection points between GASPOOL and Russia, including projects with effects across market area borders planned in the NEP Gas 2016-2026.

TYNDP 2017 includes projects for the expansion of the capacities from Russia to GASPOOL in the Advanced Infrastructure Scenario based on the demand indicated by the market in the “more capacity” market survey. Within GASPOOL, these are the projects “EUGAL – Europäische Gasanbindungsleitung (European Link)” (TRA-N-763, advanced status), “Extension Receiving Terminal Greifswald” (TRA-F-768, FID status). “Expansion NEL “ (TRA-N-807, advanced status) also plays a role, even though capacity increases linked to the project were not submitted. “Nord Stream 2” (TRA-F-937, FID status) is included with a capacity of 79 GW from Russia to GASPOOL. The result of the projects would be an increase of the technical capacity from Russia to GASPOOL by about 86 GW.

The TYNDP is a non-binding document whereas NDP in Germany is legally binding. Thus, the development plan used for the analysis on the GASPOOL side of the border is NEP Gas 2016-2026 with adjustments as described above.

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

The assessment of the demand for incremental capacity will be conducted by analyzing the technical capacity, the booked firm capacity and the non-binding demand indications for existing and incremental capacities received for the relevant entry-exit system borders. As the non-binding demand indications were only received for entry-exist-systems borders and not for specific IPs the technical capacity as well as the booked firm capacity for every IP of every TSO connecting the relevant entry-exit systems are combined to one global technical capacity and one global booked firm capacity which are valid for the market area border. The sum of the global firm capacity and the non-binding demand indication for one entry-exit system border is then compared with the existing technical capacity. This analysis is performed for GASPOOL side of the border and in the direction for which non-binding demand indications were received, i.e. GASPOOL entry.

The data used for this analysis is determined on the basis of the published data of the concerned TSOs and their partners. Projects currently under construction and planned projects are also taken into account according to ii. New capacities bindingly booked in the yearly auction of 2017 in the context of “more capacity” at Lubmin II as well as the corresponding new technical capacities are also considered.

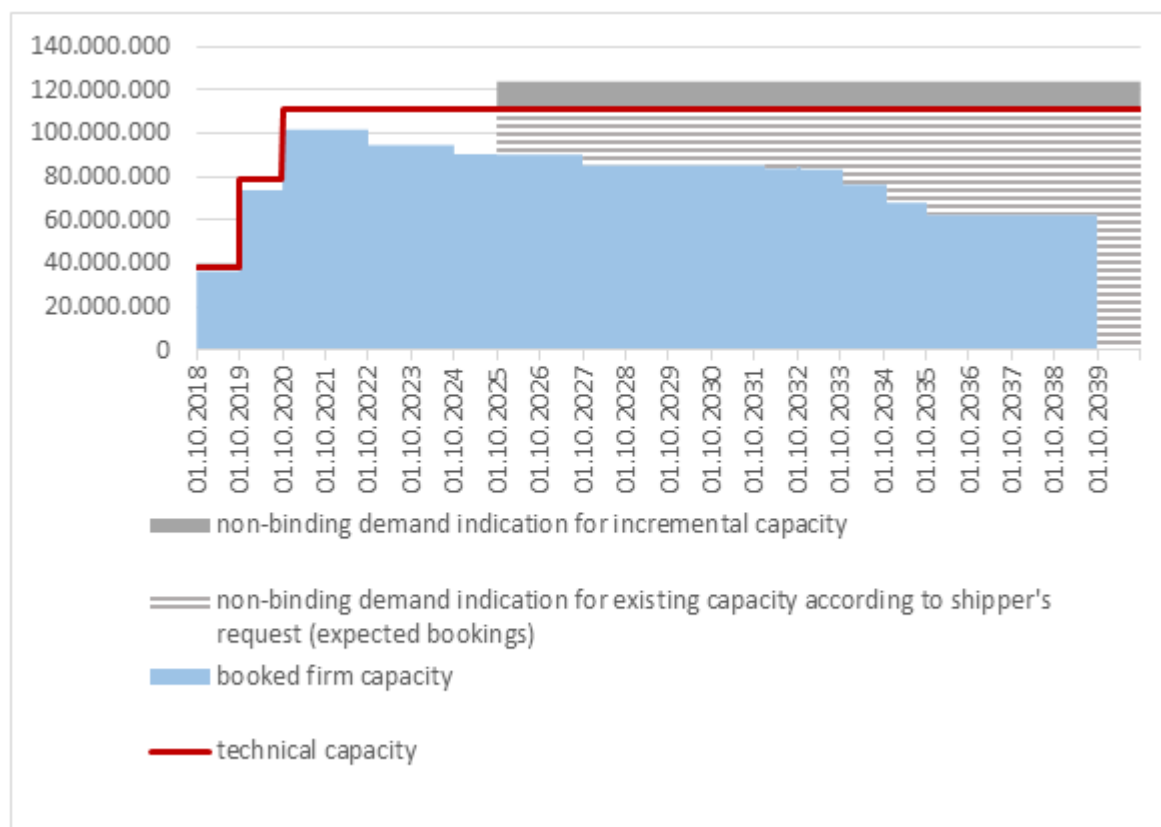
If the sum of the global booked firm capacity and the non-binding demand indications excel the global technical capacity, the expected demand for incremental capacity for the specific timeframe and direction can be calculated as follows:

Expected demand for incremental capacity = Booked firm capacity + non-binding demand indications (existing as well as incremental capacity) – technical capacity

Further effects which could potentially reduce the demand will be also considered. Since only dynamical allocable capacity (DAC) was demanded in this inquiry the entire technical capacity which can be marketed and all booked capacities are considered in the following analysis.

The following chart shows the global technical capacity and the global booked firm capacity on the GASPOOL side.

a. Entry Russian Federation to GASPOOL



In order to determine whether a technical study is necessary, the criteria defined under Point C is checked. This check is carried out for each relevant entry-exit-system. In conclusion, a statement is made as to whether an incremental capacity project is initiated and whether technical studies need to be produced in the eyes of the involved TSOs.

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

The chart shown under B.iii.a. clearly indicates that the sum of both booked capacity and demanded existing and incremental capacity are greater than the technical capacity available at the market area border.

Therefore the TSOs deem it necessary to conduct a technical study for the assessed market area border (GASPOOL-side) according to Art. 27 of Regulation (EU) 2017/459 (NC CAM).

The Federal Council of Germany accepted the new amendment to the German Network Access Regulation (GasNZV) in its meeting on 07.07. 2017. § 21 Para 1 (2) of the amended regulation obliges German TSOs to merge two existing entry-exit zones (GASPOOL and NCG) into one single entry-exit zone until 01.04.2022. The amended regulation is expected to entry into force in the upcoming months. Thus, the new rules and consequences will be analyzed and considered as far as possible in the next phases of this incremental process. For this purpose, it may be necessary to include other TSOs, which have not yet been involved in the preparation of this document. Due to the merging of the market areas, it is not ensured that the given technical capacity will be available from 01.04.2022 onwards.

Offer levels will be assessed later, since they are an output of the technical study thoroughly taking into account aspects of technical feasibility.

D. Provisional timeline

The involved TSOs have planned to conduct the technical studies and the consultation of the draft project proposal according to the following provisional timeline:

Start Date	End Date	Description
27.7.2017		Start of design phase
27.7.2017	19.10.2017	Technical studies by TSOs
19.10.2017	19.12.2017	Public consultation
19.10.2017		Publication of consultation documents

The technical studies and the necessary modelling amongst the German TSOs will be performed independently from the development process and the modelling of the German national development plan NEP Gas 2018-2028. The outcome of the technical studies and the result of the public consultation of the draft incremental projects will feed into the planning of the offer levels by the TSOs in close cooperation with the involved national regulatory authorities. The following process can be described as follows:

Start Date	End Date	Description
19.12.2017	19.3.2018 – 1.9.2018	Planning of offer levels by TSOs in close cooperation with NRAs
19.3.2018 – 1.9.2018	19.9.2018 – 1.3.2019	Approval and publication of the necessary parameters acc. to Art. 28 Para 1 NC CAM by NRAs
19.9.2018 – 1.3.2019	1.5.2019	Adjustment of the offer levels according to NRA decision by the TSOs
1.5.2019		Publication of the approved parameters and of a template of the contract(s) related to the capacity to be offered for the incremental project
1.7.2019		Yearly auction/economic test

The stated dates have provisional character and are therefore subject to change.

If the economic test was positive, the project will feed into the national development process for the national development plan NEP Gas 2020-2030 and will be considered in its scenario framework and the (national) modelling.

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

According to Art. 26 Para 13 j) of NC CAM, the involved TSOs will offer capacities in compliance with Art. 11 Para 3 of NC CAM. The total duration of the non-binding demand indications with relevance for this Demand Assessment Report spans from gas year 2025/26 to gas year 2039/40, thus matching the threshold value stipulated in abovementioned Articles. Therefore no legal obstacles to offering all potential incremental capacities resulting from discussed non-binding demand indications in the yearly auction of 2019 were identified. At the moment the involved transmission system operators are investigating how to apply Art. 11 Para 3 of NC CAM with regards to limitation of the number of years being offered in the yearly auction of 2018.

F. Fees

According to Art. 26 Para 11 of NC CAM TSOs may charge fees for activities which result from the transmission of non-binding demand indications. Whether to demand fees or not will be evaluated by the TSOs for every single incremental capacity cycle. The decision on this matter for one specific incremental capacity cycle is without prejudice for any following cycles.

For the incremental capacity cycle addressed by this report, none of the involved TSOs applied to the submission of non-binding demand indications.

G. Contact information

Gasunie Deutschland Transport Services GmbH

Ksenia Berezina
+49 511 640 607 2831
Ksenia.berezina@gasunie.de

GASCADE Gastransport GmbH

Michael Walkus
+49 561 934 2968
Michael.walkus@gascade.de

NEL Gastransport GmbH

Michael Walkus
+49 561 934 2968
Michael.walkus@gascade.de

OPAL Gastransport GmbH

Michael Walkus
+49 561 934 2968
Michael.walkus@gascade.de

Fluxys Deutschland GmbH

Alessandro Brunoni
+49 211 42090922
Alessandro.brunoni@fluxys.com