







Publication acc. to Art. 25 Para 2, Art. 28 Para 3 REG (EU) 2017/459 (NC CAM) regarding the procedure, initiated in 2019, for incremental capacity in form of a capacity upgrade at the interconnection point Lubmin II between the Russian Federation and the market area Trading Hub Europe (THE)

# 5 May 2021

#### I. Introduction

Following the conclusion of phase 1 of the procedure initiated in 2019 in accordance with Regulation (EU) 2017/459 (network code on capacity allocation mechanisms in gas transmission systems; hereinafter "NC CAM") for incremental capacity at the market area border between the Russian Federation and the market area THE, the participating transmission system operators (TSOs) executed the design phase for the technical projects (phase 2) and concluded their consultations in autumn 2020. The Technical Study described how the transmission system can be expanded efficiently in consideration of the transmission system topology and economic aspects. The project application, submitted and published on 7 October 2020, is a joint document of the involved German TSOs FLUXYS Deutschland GmbH, hereinafter FLUXYS, GASCADE Gastransport GmbH, hereinafter GASCADE, Gasunie Deutschland Transport Services GmbH, hereinafter GUD, and ONTRAS Gastransport GmbH, hereinafter ONTRAS. The project proposal was approved by Bundesnetzagentur (hereinafter: BNetzA) with decision **BK9-20/002**.<sup>1</sup>

# Publication acc. to. Art. 28 Para. 3 NC CAM

- II. Approval contents according to Art. 25 Para. 1 NC CAM
- a. Offer Level acc. to Art. 28 para. 1 lit. a NC CAM

The involved TSO will offer one offer level to upgrade already booked dynamically allocable capacity (DZK 1 and DZK 2) in freely allocable capacity (FZK) at the interconnection point Lubmin II. Unbundled capacity will be marketed since the project planning was solely based on the entry point into the future German market area THE. The auction will take place on the **PRISMA Capacity Booking Platform**. Registration is required to participate in the auction.

The incremental capacity project aims to upgrade existing capacity contracts for different DZK products. A project for capacity upgrade is possible up to the amount at which the network

<sup>&</sup>lt;sup>1</sup>https://www.bundesnetzagentur.de/DE/Beschlusskammern/1 GZ/BK9-GZ/2020/2020 bis0999/BK9-20-0002/BK9-20-0002 Antrag BKV.html?nn=745220

<sup>&</sup>lt;sup>2</sup> https://platform.prisma-capacity.eu/#/start









user already has booked capacity contracts. The period marketed to date is considered. The requested upgrade can be done by booking of the incremental capacity (upgraded product).

Sine for the time period starting from gas years (GY) 2039/2040 DZK was not offered yet and thus there are no capacity bookings, the total amount of incremental capacity can be booked in the offer level starting from GY 2039/2040. The mandatory reservation of 20% for incremental capacities pursuant to Art. 8 (8) NC CAM and the ruling by the Federal Network Agency (BNetzA) BK7-15-001 (KARLA Gas) will be taken into account starting from GY 2039/2040. The offer level will be offered from GY 2027/2028 until GY 2041/2042. The capacity products are shown in the following table.









	Offer level								
		1	II	III	IV	V	VI	VII	
From	То	technical DZK1 for upgrade to FZK	technical DZK2 for upgrade to FZK	from I: amount of bookings of the project initiator	from II: amount of bookings of the project initiator	amount of FZK realised by the incremental capacity project	from V: amount of incremental capacity which is set aside	capacity offered	
01.10.2027	01.10.2028	670,599	4,547,245	670,599	4,547,245	5,217,844	-	5,217,844	
01.10.2028	01.10.2029	670,599	4,547,245	670,599	4,547,246	5,217,844	-	5,217,844	
01.10.2029	01.10.2030	670,599	4,547,245	670,599	4,547,247	5,217,844	-	5,217,844	
01.10.2030	01.10.2031	670,599	4,547,245	670,599	4,547,248	5,217,844	-	5,217,844	
01.10.2031	01.10.2032	670,599	4,547,245	670,599	4,547,249	5,217,844	-	5,217,844	
01.10.2032	01.10.2033	670,599	4,547,245	670,599	4,547,250	5,217,844	-	5,217,844	
01.10.2033	01.10.2034	670,599	4,547,245	670,599	4,547,251	5,217,844	-	5,217,844	
01.10.2034	01.10.2035	670,599	4,547,245	670,599	4,547,252	5,217,844	-	5,217,844	
01.10.2035	01.10.2036	670,599	4,547,245	670,599	4,547,253	5,217,844	-	5,217,844	
01.10.2036	01.10.2037	670,599	4,547,245	670,599	4,547,254	5,217,844	-	5,217,844	
01.10.2037	01.10.2038	670,599	4,547,245	670,599	4,547,255	5,217,844	-	5,217,844	
01.10.2038	01.10.2039	670,599	4,547,245	670,599	4,547,256	5,217,844	-	5,217,844	
01.10.2039	01.10.2040	670,599	4,547,245	-	-	5,217,844	1,043,569	4,174,275	
01.10.2040	01.10.2041	670,599	4,547,245	-	-	5,217,844	1,043,569	4,174,275	
01.10.2041	01.10.2042	670,599	4,547,245	-	-	5,217,844	1,043,569	4,174,275	
	in kWh/h								

The capacity upgrade will be offered per TSO and per GY. Thus, there will be one auction per TSO for the offer level and per GY. The detailed overview per TSO can be found in Annex 2.









#### <u>Scenarios</u>

Since several projects for incremental capacity are considered in the incremental capacity cycle initiated in 2019, there are significant overlaps of the measures necessary to offer the incremental capacity at the different market area borders.

Therefore, an individual examination of the requests for incremental capacity including the individual necessary measures is not expedient. The necessary measures in particular depend on which requested market area border the economic test for incremental capacity is successful. That is why different scenarios are considered. Each scenario is based on a single market area border, as well as a combination of non-binding requested capacity at the other market area borders. In total there are 31 different possible combinations, which are shown in the following scenario matrix:









Scenario Matrix						
Scenario	Denmark	Russia	Greifswald Upgrade	Lubmin II Upgrade	Poland Mallnow	
1	1					
2		1				
3			1			
4				1		
5					1	
6	1	1				
7	1		1			
8	1			1		
9	1				1	
10		1	1			
11		1		1		
12		1			1	
13			1	1		
14			1		1	
15				1	1	
16	1	1	1			
17			1	1		
18	1			1	1	
19	1	1		1		
20	1	1			1	
21	1		1		1	
22		1	1	1		
23		1		1	1	
24		1	1		1	
25			1	1	1	
26		1	1	1		
27			1	1	1	
28		1		1	1	
29		1	1		1	
30		1	1	1	1	
31	1	1	1	1	1	
	1: economic test is positive					
	Empty cell: economic test was not positive					









There are 16 possible scenarios for this project. Each of these scenarios has specific parameters, which can be found below.

Outo	Outcome of the economic test per scenario with Upgrade Lubmin II						
Scenario	Denmark	Russia	Greifswald Upgrade	Lubmin II Upgrade	Poland Mallnow		
4			10	1			
8	1			1			
11		1		1			
13			1	1			
15				1	1		
17	1		1	1			
18	1			1	1		
19	1	1		1			
22		1	1	1			
23		1		1	1		
25			1	1	1		
26	1	1	1	1			
27	1		1	1	1		
28		1		1	1		
30		1	1	1	1		
31	1	1	1	1	1		
	1: economic test is positive Empty cell: economic test was not positive						

# b. Supplementary Terms and Conditions for the auction for incremental capacity acc. to Art. 28 para. 1 lit. b NC CAM

The Supplementary Terms and Conditions for the auction for incremental capacity are attached to this document<sup>3</sup>.

Fluxys Deutschland GmbH:

https://www.fluxys.com/en/products-services/empowering-you/terms-conditions/tandc fluxys-deutschland Gasunie Deutschland Transport Services GmbH: https://www.gasunie.de/en/downloads
ONTRAS Gastransport GmbH: https://www.ontras.com/en/company/downloads

<sup>&</sup>lt;sup>3</sup> In the course of participation in the annual auction on 5 July 2021, the general terms and conditions of the respective transmission system operator must also be accepted. You can find them here: GASCADE Gastransport GmbH: <a href="https://www.gascade.de/en/download">https://www.gascade.de/en/download</a>









# c. Timeline for the incremental capacity project and measures to prevent delays and to minimise the impact of delays acc. to Art. 28 para. 1 lit. c NC CAM

The following table shows the further steps for the project for incremental capacity in form of a capacity upgrade and also outlines a rough timeline for the technical project. This timeline already includes time buffers for the avoidance of delays in provision of the capacities.

Milestones	Years of completion of project phases of the measures
Project concept	2021
Basic evaluation/feasibility review	2021-2022
Design planning	2022-2023
Preparation of general planning procedure	2022
Implementation of general planning procedure	2023-2024
Preparation of Federal Emission Control Act (BImSchG)	2023
Property acquisition	2025
Preparation of plan approval procedure	2023
Implementation of plan approval procedure	2024-2025
Acquisition of right of way	2025-2026
Implementation of Federal Emission Control Act (BImSchG)	2024-2025
Construction approval process	2025
Material and service procurement	2023-2026
Preparation and start of construction	2025-2026
Assembly/construction	2025-2027
Commissioning	2027
Project conclusion/completion	2028

The aforementioned dates are provisional and subject to change.

## d. Parameters defined in Art. 22 Para. 1 lit. d NC CAM

i. Parameter defined in Art. 22 Para. 1 lit. a NC CAM

# **Estimated Reference price**

The estimated reference price for incremental capacity offered is 3.73 €/(kWh/h)/a.

## **Auction premium:**

The algorithm for ascending clock auctions pursuant to Art. 17 NC CAM applies to the auction of the incremental capacities pursuant to Art. 29 (1) NC CAM. This may result in an auction premium which will only be determined at the end of the 2021 annual auction. For this reason, it was not taken into account in the calculation of the f-factor, but it must be included in the economic test.









# Mandatory minimum premium:

Acc. to decision BK9-20/002 and with the help of the BNetzA Tool<sup>4</sup> the following range of the mandatory minimum premium was approved and comes into effect:

booking scenario (positive economic test)	Mandatory minimum premium
scenario 4	17.90 €/(kWh/h)/a
scenario 8	15.41 €/(kWh/h)/a
scenario 11	13.30 €/(kWh/h)/a
scenario 13	12.11 €/(kWh/h)/a
scenario 15	10.74 €/(kWh/h)/a
scenario 17	9.97 €/(kWh/h)/a
scenario 18	9.58 €/(kWh/h)/a
scenario 19	11.46 €/(kWh/h)/a
scenario 22	8.12 €/(kWh/h)/a
scenario 23	7.83 €/(kWh/h)/a
scenario 25	7.13 €/(kWh/h)/a
scenario 26	7.40 €/(kWh/h)/a
scenario 27	6.92 €/(kWh/h)/a
scenario 28	7.67 €/(kWh/h)/a
scenario 30	6.73 €/(kWh/h)/a
scenario 31	6.65 €/(kWh/h)/a

<sup>&</sup>lt;sup>4</sup> For the sake of transparency and for the purposes of economic test according to Article 22 NC CAM, the BNetzA created and published a calculation tool, hereinafter "BNetzA-Tool". The BNetzA tool can be found at the following website:

 $<sup>\</sup>frac{https://www.bundesnetzagentur.de/EN/Areas/Energy/Companies/GridDevelopment/Gas/IncrementalCapacities/Incre$ 









# Present value of binding commitments of network users:

Acc. to decision BK9-20/002 and with the help of the BNetzA Tool the following present value of binding commitments of network users were calculated and approved:

booking scenario	Present value of binding
(positive economic test)	commitments of network users
scenario 4	817,636,510 €
scenario 8	710,301,371 €
scenario 11	619,834,453 €
scenario 13	568,563,655 €
scenario 15	509,579,244 €
scenario 17	476,644,134 €
scenario 18	459,710,308 €
scenario 19	540,857,031 €
scenario 22	397,004,881 €
scenario 23	384,497,291 €
scenario 25	354,693,157 €
scenario 26	366,032,273 €
scenario 27	345,484,127 €
scenario 28	377,582,844 €
scenario 30	337,530,465 €
scenario 31	333,859,713 €









## ii.Parameter defined in Art. 22 Para. 1 lit b NC CAM

Acc. to decision BK9-20/002 and with the help of the BNetzA Tool the following estimated allowed revenue increases were calculated and approved:

booking scenario	Present value of estimated allowed
(positive economic test)	revenue increases
scenario 4	851,704,697 €
scenario 8	739,897,261 €
scenario 11	652,457,318 €
scenario 13	598,488,057 €
scenario 15	542,105,578 €
scenario 17	507,068,227 €
scenario 18	489,053,519 €
scenario 19	569,323,190 €
scenario 22	426,886,968 €
scenario 23	413,437,947 €
scenario 25	385,536,040 €
scenario 26	397,861,166 €
scenario 27	375,526,225 €
scenario 28	406,003,057 €
scenario 30	366,880,940 €
scenario 31	362,890,992 €









# iii. f-Faktor acc. Art. 22 Abs. Para. 1 lit. c NC CAM

Acc. to decision BK9-20/002 and with the help of the BNetzA Tool the following f-factors were calculated and approved:

booking scenario (positive economic test)	f-factor
scenario 4	0.96
scenario 8	0.96
scenario 11	0.95
scenario 13	0.95
scenario 15	0.94
scenario 17	0.94
scenario 18	0.94
scenario 19	0.95
scenario 22	0.93
scenario 23	0.93
scenario 25	0.92
scenario 26	0.92
scenario 27	0.92
scenario 28	0.93
scenario 30	0.92
scenario 31	0.92









# iv. Overview of all parameters

	Overview of all parameters per scenario Upgrade Lubmin II								
Scenario	Denmark	IRussia	Greifswald Upgrade	Lubmin II Upgrade	Poland Mallnow	estimated allowed	Present value of binding commitments of network users	Mandatory minimum premium	f-factor
4	1				1	851,704,697€	817,636,510€	17.90 €/(kWh/h)/a	0.96
	3	1			1	739,897,261€	710,301,371€	15.41 €/(kWh/h)/a	0.96
1:	L	1			1	652,457,318€	619,834,453€	13.30 €/(kWh/h)/a	0.95
13	3		1	L :	1	598,488,057€	568,563,655€	12.11 €/(kWh/h)/a	0.95
1.	5				1	1 542,105,578 €	509,579,244 €	10.74 €/(kWh/h)/a	0.94
1	7	1	1	L :	1	507,068,227€	476,644,134 €	9.97 €/(kWh/h)/a	0.94
18	3 1	1			1	489,053,519€	459,710,308€	9.58 €/(kWh/h)/a	0.94
19	) 1	1 1			1	569,323,190€	540,857,031€	11.46 €/(kWh/h)/a	0.95
2:	2	1	. 1	L :	1	426,886,968€	397,004,881€	8.12 €/(kWh/h)/a	0.93
2:	3	1			1	<b>1</b> 413,437,947€	384,497,291€	7.83 €/(kWh/h)/a	0.93
2	5		1	L	1	1 385,536,040€	354,693,157€	7.13 €/(kWh/h)/a	0.92
20	5	1 1	. 1	L	1	397,861,166€	366,032,273€	7.40 €/(kWh/h)/a	0.92
2	7	1	1	L	1	1 375,526,225€	345,484,127€	6.92 €/(kWh/h)/a	0.92
28	3	1 1			1	1 406,003,057€	377,582,844€	7.67 €/(kWh/h)/a	0.93
30		1	. 1		1	1 366,880,940€	337,530,465€	6.73 €/(kWh/h)/a	0.92
3:	1	1 1	. 1	L	1	1 362,890,992€	333,859,713€	6.65 €/(kWh/h)/a	0.92
	1: economic test is positive Empty cell: economic test was not positive								









- e. Exceptionally extended marketing horizon acc. to Art. 28 Para. 1 lit. e NC CAM An extended marketing horizon is not used.
- f. Alternative allocation mechanism acc. to Art. 28 Para. 1 lit. f NC CAM
  An alternative allocation mechanism is not used.
- g. Fixed price approach acc. to Art. 28 Para. 1 lit. g NC CAM A fixed price approach is not used.

#### III. Contact Data

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## IV. Annex

- 1. Supplementary Terms and Conditions for incremental capacity
- 2. Offer Level Lubmin II Upgrade per TSO