Consultation Document

on the procedure initiated in 2019 for incremental capacity at the Market Area Border between the Russian Federation and THE

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This documents represents a joint assessment of the demand for incremental capacity by the following companies:

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I. Introduction

After completion of Phase 1 of the procedure initiated in 2019 pursuant to Regulation (EU) 2017/459 (Network Code on Capacity Allocation Mechanisms in Transmission Networks; hereinafter "NC CAM") for incremental capacities at the market area boundary between the Trading Hub Europe (THE) and Title Transfer Facility (TTF) market areas and between the Russian Federation (RU) and THE, the involved transmission system operators (TSOs) have started the planning phase for the related projects (Phase 2). The involved TSOs are listed on pages 2 to 3.

In accordance with point (d) of Art. 26 (8) NC CAM, the aforementioned demand indications for incremental capacity must be considered in combination. During the planning phase, the involved TSOs consequently decided to consider jointly the above demand indications for incremental capacity. The identified measures are interdependent, so it is not possible to consider individual indications with directly attributable measures and a joint realisation of the expansion measures is expedient.

As shown in the 2019 Market Demand Assessment Report (published on 21 October 2019), there is a permanent demand for additional capacity at both the market area boundary THE-TTF and the market area boundary RU-THE. The market demand assessment reports based on the submitted market demand indications are publicly available on the website of FNB Gas e. V.[1] The conclusion of both market demand assessment reports was that the involved TSOs would initiate a project to create new capacity.

This project proposal will be conducted for the market area border RU and THE. All measures that are needed to meet the demand for incremental capacity between RU– THE as well as the TTF are described in the following, since the demand for incremental capacity at the borders to RU and TTF were stated in a joint approach and should be dealt with in combination. Nevertheless, there will be to separate project proposals for the borders RU and TTF. The allocation of incremental capacity at the border between RU and THE is dependent on the allocation of incremental capacity at the border between THE and TTF.

In addition to the above shown unbinding request, numerous other unbinding requests for incremental capacity have been received by German TSOs. This results in a wide range of modelling scenarios, which have to be conducted as a basis for the technical study. That is

[1] To be found at: https://www.fnb-gas-capacity.de/zyklen/incremental-capacity-zyklus-2019-2021/marktnachfrageberichte/

why the initial timeline was adapted and the consultation of the present document was postponed.

The planned market area merger of both German entry-exit-systems to one German market are ("Trading Hub Europe", THE) as of 1st October 2021 has an impact on the existing capacity to be considered. Only the approved capacity (following "Basiskapazität") can be considered for the incremental capacity process (acc. to § 9 Abs. 4 S. 1 GasNZV).

For this incremental capacity project the technical studies are conducted for potentially all Interconnection Points (IPs) of the entry-exit system border for which the project was initiated. Thereby economical aspects and aspects of grid topology are taken into account. After finishing the technical studies the involved TSO's started the process of designing coordinated offer level in order to enable bundled products also including the identified incremental capacities.

This consultation report has been prepared jointly by five German TSOs (see pages 2–3).

II. Project Proposal

1. Measures on the German Side of the Boundaries

Technical studies were carried out on the basis of the non-binding demand indications described in the market demand assessment report for the market area borders RU-THE. At Entry RU, a demand indication for entry incremental capacity of 7.8 GW as freely allocable capacity (FZK) and 4.1 GW as DZK with allocation requirement Exit Netherlands has been submitted.

The demand for incremental capacity at the border RU-THE was stated in a joint approach together with demand for incremental capacity at the border THE-TTF: This demand consists of 10,7 GW additional capacity. The exit incremental capacities are to be offered as dynamically allocable capacity (DZK) with allocation requirement Entry Russia (hereinafter "Entry RU") and Entry Mallnow. It is therefore not identical with the new DZK with an allocation-only requirement Entry RU, which was taken into account in the draft document for the network development plan Gas 2020–2030 (published on 1 July 2020; hereinafter "NEP").

In order to provide the demanded incremental capacity at the borders between THE, RU and TTF one project was conducted. However, the project proposals for the two market area borders RU-THE and THE-TTF will be consultated and later on applied for separately.

All demand indications were made for the period from gas year (GY) 2025/2026 up to and including GY 2039/2040. The realisation of the incremental capacity will lead to extensive need for expansion, which means that the capacity cannot be made available until GY 2027/2028.

In total, the technical studies of the present cycle for incremental capacity considered 63 scenarios, each based on a different combination of projects based on non-binding demand indications. The expansion measures were developed under the premise that all indicated capacities would be booked and that all economic tests would be positive. In this document, only those measures of the maximum variant are described in text form that are partly caused by the above-mentioned requested capacities. All expansion measures of the maximum scenario are shown in Figure 1. A detailed breakdown of costs is not provided here. The basis of the listed expansion measures is the infrastructure contained in the draft document for the NEP, including the network expansion measures resulting from the so called "basic variant". The investment costs are initial estimates. In addition to the investment costs, there will also be operating costs for fuelgas required for operation of the compressors and other expenses. The annual costs for the maximum scenario are given below. These costs include the price of the commodity, natural gas tax and CO_2 costs.

Incremental Capacity Cycle 2019-2021 – Expansion

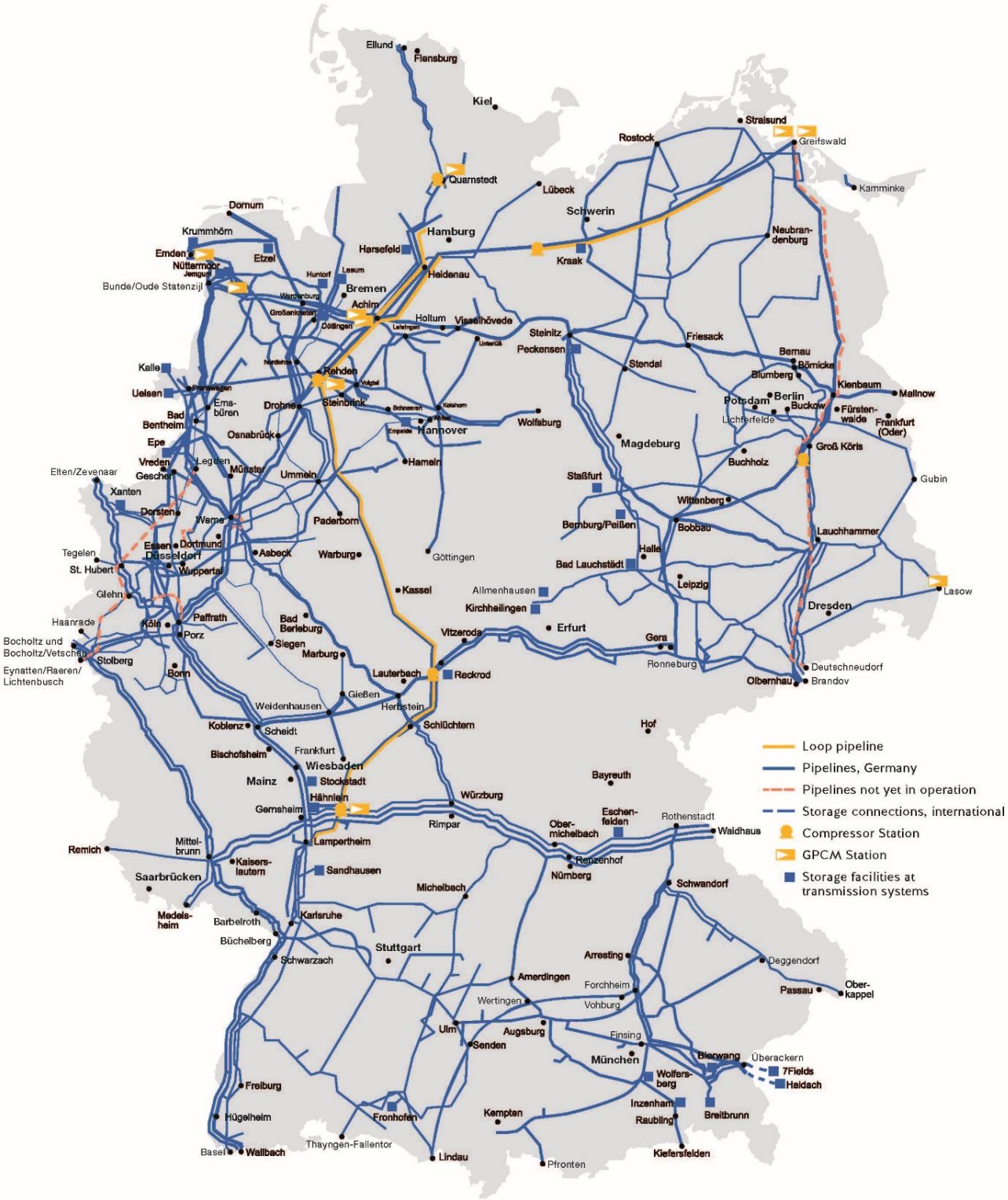

Figure 1: Expansion Measures for the Maximum Scenario

The following measures are required for the scenario considered here. This mentioned scenario consists of two separate project proposals between RU-THE and THE-TTF, which are assessed in a joint matter since the demand for the incremental capacity was also combined:

The Greifswald landfall station and the Lubmin II natural gas receiving station must each be expanded. The measures are already included in the NEP (GPRM facility landing station Greifswald — facility expansion 3, ID no. 632-01; GPRM facility Lubmin 2, ID no. 631-01). All in all, no additional investments will be required here.

The following measures are necessary on the NEL pipeline east of the Achim shut-off station: A compressor station with a compressor capacity of about 75 MW. This is already included in the NEP with a compressor capacity of 50 MW (VDS NEL (middle), ID No. 633-01). The additional investments amount to approx. EUR 136 million. East of the compressor station, a loop line with a length of approx. 118 km is to be constructed in DN 1400. The investments amount to approx. EUR 500 million. To the west of the compressor station, a loop pipeline with a length of approx. 72 km in DN 1400 is to be constructed, ending at the Achim shut-off station. The investments amount to approx. EUR 305 million. In total, the additional investments on this pipeline section amount to approx. EUR 941 million. The annual cost of fuelgas for this section is approximately EUR 19.6 million.

An alternative using two compressor stations was considered: one station with approximately 99 MW, of which a compressor capacity of 50 MW is already included in the NEP (VDS NEL (Middle), ID No. 633-01), and another station with 99 MW near Buchholz. The additional investment for this option would be around EUR 547 million compared to the NEP. The annual operating costs would be a maximum of approximately EUR 87 million. This option is not being pursued at present. The TSOs reserve the right to revert to this option for the concrete specifications of the measures during the preparation of the NEP Gas 2022–2032.

On the NEL gas pipeline west of the Achim shut-off station, the following measure is necessary: A loop pipeline with a length of approx. 67 km in DN 1400 has to be constructed. Of this, 52 km in DN 1400 are already included in the NEP (pipeline NEL West, ID no. 634-01). The additional investments amount to approx. EUR 64 million. In total, the additional investments on this pipeline section amount to approx. EUR 64 million.

In the western part of the GUD transmission system, the following expansion measures are necessary. The GPRM facility Achim must be expanded. The expansion has already been included in the NEP (GPRM facility Achim, ID No. 639-01). The GPRM facility Embsen must also

be expanded. The expansion has already been included in the NEP (GPRM facility Embsen, ID no. 635-01). The GPRM facility Folmhusen must also be expanded. The expansion has already been included in the NEPNEP (expansion GPRM facility Folmhusen, ID No. 504-02b). In addition, the already in NEP 2018 approved transfer station must be expanded between the GUD transmission system and the GTS transmission system. The expansion has already been included in the NEP (GPRM facility Emden, ID no. 504-02c). As stated in the last paragraph of Section II.7.2., the confirmation of these measures in the NEP is pending. They have been included in Figure 1 for this reason. If the measures are not confirmed in the NEP, the additional investments on this pipeline section would amount to approximately EUR 26.8 million.

The following expansion measures are necessary on the MIDAL gas pipeline: The Rehden compressor station must be extended by a compressor capacity of approx. 48 MW. The investments amount to approx. EUR 261 million. In Rehden, a GDRM station with a capacity of 2.2 million Nm³/h must also be constructed. The investments amount to approx. EUR 17 million. A loop pipeline with a length of approx. 260 km in DN 1400 is to be constructed from Rehden to Reckrod. Of this, 61 km are already included in the NEP (pipeline MIDAL Mitte Nord, ID no. 627-01; pipeline MIDAL Mitte Süd, ID no. 628-01). The additional investments amount to approx. EUR 905 million. A compressor station with a compressor capacity of 84 MW is to be built near Reckrod. This is already included in the NEP with a compressor capacity of 36 MW (VDS Reckrod, ID-No. 629-01). The additional investments amount to approx. EUR 150 million. From Reckrod to Lampertheim a loop pipeline with a length of approx. 200 km in DN 1400 is to be constructed. Of this, 115 km in DN 1000 are already included in the NEP (Wirtheim-Lampertheim line, ID no. 609-01). The additional investments amount to approx. EUR 535 million. A compressor station with a compressor capacity of approx. 46 MW is to be built near Herchenrode. The investments amount to approx. EUR 170 million. In addition, a GDRM station with a capacity of approx. 4 million Nm³/h is to be built in Herchenrode. The investments amount to approx. EUR 31 million. In total, the additional investments on this pipeline section amount to approx. EUR 2,069 million. The annual cost of fuelgas for this section is approximately EUR 33 million.

Due to the large number of non-binding demand indications for incremental capacity, depending on booking behaviour in the 2021 annual auctions or within the framework of the alternative allocation mechanism for the RU-THE and THE-TTF borders, there are interdependencies with regard to the project costs to be allocated. Depending on the incremental capacity to be provided on a grid section, synergies or dyssynergies may arise.

Synergies are mainly generated by economies of scale. For example, the larger the diameter of a loop line is selected, the lower the specific transport costs will generally be for the same relative capacity utilization. Dyssynergies arise mainly through additional investments, e.g. when the combined incremental capacity requirements of several projects trigger a dimensional leap in a line measure. The cost per measure are allocated to the projects according to the provided incremental capacity. The dependencies of the projects as well as the present value of increase of allowed revenues are shown in the Annex to this consultation document.

The costs to be compared to the bindingly submitted bookings will therefore only be known finally after the annual auctions and the alternative allocation mechanism have been carried out.

2. Offer Level

The economic test pursuant to Art. 22 NC CAM determines for each offer level whether the present value of the total revenues from binding commitments of network users for contracting capacity in July 2021 ("revenues") are at least equal to the present value of the estimated increase in the TSOs' allowed revenue included in the offer level as defined by the f-factor ("costs"). The process under discussion in this document involves one offer level per project proposal; consequently, there are no competing offer levels.

Product Design

As defined in Article 3 (5) NC CAM, an offer level means the sum of available[2] capacity and the incremental capacity. In conjunction with Art. 29 (1) NC CAM, an offer level may possibly have to contain a number of standard bundled capacity products (e.g. in the event of more than two relevant network interconnection points (IP) between market areas). The offered capacity products will not be bundled, since there is no counterpart on the other side of the border. The relevant capacities will be published in May 2021 as standard products for each GY, IP, TSO and product. The offer level is published on the website www.fnb-gas-capacity.de. The offer level includes all incremental capacity products as well as the existing capacity products for which there must be complete binding commitments as a prerequisite for initiating the economic test.

Potentially equivalent existing capacity products are shown in Table 1. The extent to which they are taken into account is described in more detail in the section "Concrete Offer Levels".

[2] The terms "available" and "existing" are used synonymously in NC CAM.

Case	Demand for incremental capacity product indicated	Potentially equivalent or higher-value products (at the indicated IP/market area boundary)
1	FZK	➢FZK
2	DZK with allocation to specific IP/market area boundaries	➢FZK ➢DZK with allocation to the indicated IP/market area boundaries as a minimum

Table 1: General Case Matrix of Products of Equal or Higher Value Compared to an Indicated Capacity Product

Marketing Horizon

In accordance with Art. 11 (3) second sentence NC CAM, offer levels that include incremental capacity can be offered and booked for a period of up to 15 years after the projected start of operational use of the incremental capacity products. In this case, this corresponds to the period from GY 2027/2028 up to and including GY 2041/2042. Under the alternative allocation mechanism, capacity products can be marketed for an additional 5 years in accordance with Art. 30 (1) NC CAM. The TSOs are not exercising this option at this point.

Allocation Methodology for Existing Products

As regards the marketing of yearly capacity in 2021, the involved TSOs plan to market the existing capacity as well as the offer levels including the incremental capacity. Capacity products for existing capacity and incremental capacity have to be booked separately. Transport customers interested in existing capacity products must take into account that they need to participate in multiple auctions if such a capacity product is offered in both the regular yearly auction as well as the offer level.

Amount of Offered Capacity

The amount of offered capacity per product is calculated in accordance with Article 11 (6) NC CAM. The reservation rate of 20 percent for existing as well as new capacities pursuant to Art. 8 (8) NC CAM and determination of the Federal Network Agency (Bundesnetzagentur, hereinafter: ”BNetzA”*)* BK7-15-001 (hereinafter: “KARLA Gas”) is taken into account.

Concrete Offer Levels

Offer Level 1 is shown in Annex 2. The economic test is positive when there are binding commitments for 100 percent of the offered capacities. The offer level includes the following products:

Existing Capacity Products		
TSO/IP	**Greifswald Entry**	**Lubmin II Entry**

FluxysD	1. DZK 1 (*inter alia* with allocation TTF) 2. DZK 2 (with allocation TTF)	1. DZK 1 (with allocation TTF) 2. DZK 2 (*inter alia* with allocation TTF)
GASCADE	./.	FZK
GUD	FZK	1. DZK 1 (with allocation TTF) 2. DZK 2 (*inter alia* with allocation TTF)
NGT	DZK (*inter alia* with allocation TTF)	./.
ONTRAS	./.	1. DZK 1 (with allocation TTF) 2. DZK 2 (*inter alia* with allocation TTF)

Table 2: Overview of Existing Capacity Products in the Offer Level

New Capacity Products		
TSO/IP	**Greifswald Entry**	**Lubmin II Entry**
FluxysD	1. DZK 3 (with allocation TTF) 2. FZK	1. DZK 6 (with allocation TTF) 2. FZK
GASCADE	./.	1. DZK 6 (with allocation TTF) 2. FZK
GUD	1. DZK (with allocation TTF) 2. FZK	1. DZK 6 (with allocation TTF) 2. FZK
NGT	1. DZK 1 (with allocation TTF) 2. FZK	./.
ONTRAS	./.	1. DZK 6 (with allocation TTF) 2. FZK

Table 3: Overview of Incremental Capacity Products in the Offer Level

Existing capacities at the IPs Greifswald and Lubmin II are considered to the extent relevant. DZK products without allocation in the direction of TTF do not fall within this scope. In addition, potentially equivalent DZK products with an allocation in the direction of TTF can be

booked solely in an amount that can be transported in the direction of TTF via the existing exit capacities. A breakdown of existing bookings by free capacity per product is determined for each GY.

3. Alternative Allocation Mechanisms

The alternative allocation mechanism is expected to be used for provision of the incremental capacity at the THE-RU market area interconnection point to take account of the dependencies of the expansion measures to the incremental capacity at the border THE-TTF. The criteria for the use of an alternative allocation mechanism have been met. More than two entry-exit systems are affected and bids with a duration of more than one year have been requested. It can also be assumed that the ascending clock auction is not suitable. First, in accordance with point (d) of Article 26 (8) NC CAM, the demand indications for incremental capacity treated here were linked to the condition that they be considered together in the further course of the procedure. In contrast to the independant ascending clock auctions, the alternative allocation mechanism allows commitments that link commitments at other interconnection points to be made (cf. point (a) of Article 30 (3) NC CAM). Second, the entry and exit measures are closely linked so that the allocation of specific expansion measures to specific IPs would be arbitrary. The indicated capacity can consequently be met adequately solely by a linked dependent economic test. Third, it is clear from the demand indication that solely an allocation that is fully linked is desired. This would be jeopardised by independant ascending clock auctions. Fourth, during and after the demand period for incremental capacity pursuant to Art. 26 NC CAM, no further demand indications from third parties were received so that the full allocation of the incremental capacity to a transport customer appears to be reasonable and is non-discriminatory and transparent.

Therefore the standard procedure of offering incremental capacity in an independent matter shall be slightly modified. This modification shall apply the independent allocation of the incremental capacity offer level. The TSO plan to propose a dependant allocation of incremental capacity at the border RU-THE. The allocation of the offer level at this border shall depend on the allocation of incremental capacity at the border THE-TTF. This procedure is described in the Supplementary Terms and Conditions in Annex 3.

4. Provisional Scheduling

All above mentioned projects will be initialized after the auction in July 2021. All technical measures will be ready for operation at 1st of October 2027 if the economical test is passed after the auction.

The following steps of the incremental process can be described as follows:

Start Date	End Date	Description
31.08.2020		Publication of the consultation documents
31.08.2020	14.10.2020	Public consultation
14.10.2020	14.11.2020	Planning of the offer levels by the TSOs in close cooperation with the NRA
14.11.2020		Submission of the project proposal to the NRA
14.11.2020	06.04.2021	Processing of the project proposal by the NRA
07.04.2021		Approval and publication of the required parameters by the national regulatory authorities pursuant to Art. 28 (1) NC CAM
08.04.2021	04.05.2021	Adaptation of the offer levels by the TSOs in consideration of the requirements of the NRA
05.05.2021		Publication of the approved parameters, the capacity products and the template of the contract(s) for the capacities offered within the framework of the network expansion project
05.07.2021		Annual auction/Economic test

Table 4: Provisional Scheduling

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 2022-2032 and will be considered in its scenario framework and the (national) modelling.

5. Supplementary Terms and Conditions

A draft of the Supplementary Terms and Conditions (ST&C) is attached to this consultation document as Annex 3.

6. Elements IND and RP Pursuant to NC TAR

The current cycle for incremental capacity does not follow a fixed-price approach. In consequence, there is no need to consider here the elements IND and RP pursuant to point (b) of Art. 24 NC TAR.

7. Economic Test

The BNetzA has developed and issued a calculation tool for the economic test pursuant to Art. 22 NC CAM (hereinafter: the "BNetzA Agency tool"[3]) with the intent of increasing transparency. This was used by the TSOs for the calculations set out below.

According to point 1 of the summary of the resolution of the BK 9 (file number BK9-17/609) entitled INKA, the economic test for each offer level of a project for incremental capacity is carried out by the BNetzA in accordance with Art. 22 NC CAM. In Part II of the determination decision, the BNetzA states that the economic test is an element of the project proposal and that all fundamental questions of the economic test must be clarified therein. The following fundamental questions of the economic test must still be defined:

1. Derecognition requirement of existing capacity products
2. Economic test of the offer levels

The TSOs therefore plan to submit application to the BNetzA for the following procedure for conduct of the economic test:

1. Derecognition Requirement of Existing Capacity Products

The economic test should, pursuant to subpoint (i) of point (a) of Art. 22 (1) NC CAM, include the incremental capacities for which binding commitments have been obtained and, pursuant to subpoint (ii) of point (a) of Art. 22 (1) NC CAM, the amount of available capacity that has been contracted.

A prerequisite for the initiation of the economic test is the determination in consultation with the BNetzA of whether the available capacity products (existing capacity) are fully booked in each GY as shown in the project application so that efficient network expansion is assured. If the offered existing capacity in each GY is fully booked, the amount of the incremental capacity in (kWh/h)/year for each GY for which there is a binding commitment is entered in the BNetzA tool for the economic test. If the offered existing capacity in a GY is not fully booked, the requirements for conducting the economic test for this GY have not been met. No quantities will be included in the economic test for any such GY.

[3]It can be found at: https://www.bundesnetzagentur.de/DE/Sachgebiete/ElektrizitaetundGas/Unternehmen_Institutionen/NetzentwicklungundSmartGrid/Gas/IncrementalCapacity/IncrementalCap_node.html

The information regarding bookings of existing capacities is provided to the BNetzA by the involved TSOs. The BNetzA determines whether the condition for derecognition of the existing capacity in each GY is fulfilled.

2. *Economic Test of the Offer Levels*

Since six projects for incremental capacity are under consideration in this cycle for incremental capacity, there is extensive overlap of the measures necessary to provide capacity at the various market area boundaries as described under II.1. For this reason, a case-by-case examination of the demand indications and the associated measures is not expedient. The procedure agreed by the TSOs to map all possible booking scenarios is described below.

The requested incremental capacity at the market area border THE-TTF and at the border Russian Federation – THE were analyzed in a single scenario since they stem from one single combined request for incremental capacity and, hence, the necessary technical measures cannot be allocated to the either market area border, individually.
For the economic test, the cost of the necessary measures shall be allocated to the respective market area border pro rata based on the requested incremental capacity per border.

Overall, there are demand indications for incremental capacity at five market area boundaries in the current cycle. There was a demand indication for a capacity upgrade at the market area boundary to Russia from the existing DZK to an FZK in addition to a demand indication for incremental capacity at the IPs Greifswald and Lubmin II. Consequently, offer levels can be booked for the following projects in the current cycle:

1. Poland GCP
2. Poland TGPS
3. Russian Federation/The Netherlands (combined in an alternative allocation mechanism)
4. Russian Federation/Greifswald (capacity upgrade)
5. Russian Federation/Lubmin II (capacity upgrade)
6. Denmark

There is one offer level for each of these six projects. Each of the offer levels can be requested independently and must pass the economic test. As a result, all combinations of positive and negative economic tests results are conceivable. Which of the above-

mentioned demand indications are actually binding cannot be determined until after the auctions or the assessment of the alternative allocation mechanism.

The TSOs have mapped every possible combination of demand indications and determined the expansion requirements necessary for each as a means of assuring efficient network expansion. An overview of all 63 combinations can be found in Annex 1. The costs of a necessary expansion measure including operating costs are allocated to the demand indications causing this measure in proportion to the requested service. The present value of the sum of these pro rata costs for specific measures results in the total allowed increase in the revenue ceiling (hereinafter “EOG”) assumed for a project in the economic test.

There are 32 scenarios of combinations with demand indications at the other market area boundaries for each indication. Each of these scenarios has the following specific components that are listed in Annex 4:

1. f-factor
2. Present value of the estimated increase in EOG
3. Obligatory minimum mark-up

When carrying out the economic test using the BNetzA tool, it must first be determined which of the 63 posting scenarios has occurred so that the three components listed above can subsequently be entered in the tool for the economic calculation.

a. f-factor

According to Article 27 (3) NC CAM the consultation shall cover the level of user commitments, expressed as an estimate of the f-factor in accordance with Article 23, which, after having consulted with the transmission system operators, is proposed and subsequently approved by the concerned national regulatory authorities.

The f-factor for each offer level shall be set by the national regulatory authority, taking into account the following (Article 23 (1) NC CAM):

a) the amount of technical capacity set aside in accordance with Article 8(8) and (9);

b) positive externalities of the incremental capacity project on the market or the transmission network, or both;

c) the duration of binding commitments of network users for contracting capacity compared to the economic life of the asset;

d) the extent to which the demand for the capacity established in the incremental capacity project can be expected to continue after the end of the time horizon used in the economic test.

The BNetzA tool contains mathematical analyses for determination of the f-factor. The f-factor is calculated pursuant to point (a) of Article 22 (1) NC CAM as the ratio of the present value of the binding commitments of network users to contract capacity over the time horizon of the first yearly auction in which the incremental capacities were offered to the present value of all expected commitments of network users to contract the pertinent capacities.

In the BNetzA tool, the estimated reference price pursuant to subpoint (i) of point (a) of Art. 22 (1) NC CAM is the current reference price known at present and updated up to the year in question. Since inflation is not taken into account when determining the increase in the revenue ceiling of the pertinent TSO resulting from the incremental capacities in each offer level, the inflation index for the reference prices was also set at 0 percent.

For the purposes of the economic test application pursuant to Art. 23 NC CAM, it has been assumed that the existing capacity within the offer level are completely booked in the initial marketing in which the incremental capacity is offered. The assumptions relating to the booking of the new capacities are explained below.

The proposed f-factors were determined as follows:

a) Pursuant to Art. 8 (8) NC CAM and KARLA Gas, technically available capacity is retained in the amount of 20 percent of the incremental technical capacity contained in the pertinent offer level. It is assumed here that the retained capacities will be fully utilised in subsequent years as part of the marketing of the capacities and will therefore also be booked.

b) No other positive external effects have been evaluated.

c) Pursuant to Article 11 (3) NC CAM, offer levels for incremental capacities can be offered in yearly auctions for a maximum period of 15 years after the start of operational use.

For the period from GY 2027/2028 up to and including GY 2041/2042, it was assumed that the incremental capacities offered in the 2021 yearly auction would be fully booked.

The start of operational use is scheduled for 2027. The economic useful lives of the assets were determined in accordance with the regulatory depreciation periods. The investments described above relate to both compressor stations and pipeline construction. As a result, a normal useful life of 45 years is assumed for pipelines in accordance with the Gas Network Charges Regulation (Gasnetzentgeltverordnung; GasNEV). The start of operational use is scheduled for 2027; the end of operational use is assumed for the time being in GY 2071/72.

The gas infrastructure will also be of great importance on the future energy market. The TSOs assume that the infrastructure will be reused with hydrogen. The transport potential for the transport of hydrogen is assumed to be lower. As a result, a 65 percent use of the infrastructure is assumed for the period from GY 2053/2054 up to and including GY 2071/2072.

The key year for determining the time horizon of the economic useful life and economic test is 2072. No bookings have been taken into account for the period after 2072.

The proposed f-factor is oriented to the accounting scenario that has occurred and is included in Annex 4.

b. Reference Price

The current forecast of the reference price is the reference price for freely allocable capacity of the market area THE for the year 2023 published in the draft of the BNetzA decision REGENT 2021 in the amount of EUR 3.78/(kWh/h)/year. This reference price is used solely for the economic test and does not become part of the contract.

Under the alternative allocation mechanism for the capacities included in this project proposal, a combination of FZK and DZK prices results. The price of the incremental capacities for the marketed capacities is calculated on the basis of the ratio of DZK to FZK and amounts to EUR 3.65/(kWh/h)/year.

c. Present Value of the Estimated Increase in EOG

The present value of the estimated increase in EOG depends on inflation and the amount and timing of the costs allocated to the project. The costs depend on the other projects for

incremental capacity. The present value of the estimated increase in EOG is shown in Annex 4.

d. Obligatory Minimum Mark-up

Analogously to the f-factor and the present value of the estimated increase in the EOG, the obligatory minimum mark-up also depends on what measures become necessary due to the marketing of incremental capacity on 05/07/2021. The obligatory minimum mark-up to be applied to the pertinent booking scenario is shown in Annex 4. The amount for each scenario has been measured so that the economic test will be positive solely if the capacity included in the offer level is fully booked.

8. Non-binding Market Demand Indications Received after the Deadline

After expiry of the deadline for the non-binding demand indications for incremental capacity pursuant to Art. 26 (6) NC CAM, another indication was received. The demand indication concerned the FZK that would be newly created from Denmark to Germany in the amount of 7,088,000 kWh/h from GY 2021/2022 up to and including GY 2041/2042. The late indication was not considered in the current cycle for incremental capacity.

9. Impact on the Use of Existing Gas Infrastructure

The incremental capacity is not expected to lead to a sustained, significant decline in the use of other gas infrastructure that has not been fully depreciated in the market area THE or in adjacent entry-exit systems or along the same gas transport route.

10. Received additional demand indication

No additional demand indications were received after xth xxxx 2019. Therefore the original demand indications from the first phase are basis for all studies in the design phase.

11. Impact on usage of gas infrastructure

GTS does not expect the incremental capacity to have a negative impact on the utilization of other non- depreciated gas infrastructure in her entry-exit systems.

III. Contact Data

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