

Concept for an oversubscription and buyback scheme in the common market area

1 October 2019

1. Introduction

The merger of the NCG and GASPOOL market areas will significantly reduce the fixed, freely allocable entry capacities in the H-gas system offered to date. In order to be able to offer additional capacities, the Federal Network Agency (BNetzA) has asked the gas transmission system operators (TSOs) to come up with an oversubscription and buy-back scheme. The TSOs comply with this request for the H-gas system, without acknowledging any legal obligation, by submitting the concept outlined below.

The application period for the concept for an oversubscription and buy-back scheme submitted by the TSOs is limited to the period from 1 October 2021, 6 a.m. to 1 October 2024, 6 a.m. As suggested by BNetzA, this clearly defined period is to be used as a test phase to demonstrate the functionality and availability of the market-based instruments (MBIs), to obtain empirical values regarding the costs associated with the MBIs in real use and to provide evidence of the efficiency compared to the network expansion alternative. The limitation of the application period is an elementary part of the TSO concept.

2. Capacity offer

According to Section 9 (4) of the Gas Network Access Ordinance (GasNZV), the technical capacity (basic capacity) needs to be approved by BNetzA. The TSOs will offer firm, freely allocable additional capacities in excess of the approved basic capacity, up to a maximum of the capacities approved in the 2018-2028 Gas Network Development Plan (NDP). It is also possible to offer other capacity products such as temperature-dependent firm capacities.

The TSOs' method of determining the additional capacity is based on a consumption or sales-oriented approach, with domestic German consumption and its future development and corresponding additional demand used as a reference.

The basic principle for determining the additional (firm) capacity is shown in Figure 1.



Figure 1: Schematic representation of capacities in the new market area

The two lower capacity blocks represent the basic capacities to be approved pursuant to Section 9 (4) GasNZV. Depending on the individual circumstances at each entry point, the TSOs will offer the relevant additional capacities up to the level of the confirmed 2018-2028 NDP capacities (yellow capacity block – cross-border IP ($G\ddot{U}P$): oversubscribed freely allocable capacities ($\ddot{U}FZK$)).

3. Instruments for securing the additional capacity

The additional capacities are initially secured through the use of MBIs (VIP wheeling, third-party network usage, spread product). If this is insufficient, the TSOs will buy back capacities as a *last resort* in order to eliminate congestion.

3.1. Introductory remark on the allocability and recognition of MBI costs

The MBIs have a market area-wide impact, i.e. they also affect TSO networks where they were not contracted. The demand for MBIs is created by congestion between today's GASPOOL and NCG market areas. These congestion situations are exogenous for the TSOs and cannot be controlled individually. This exogeneity is due to the fact that the congestion is caused by consumption or tradedriven factors. The congestions cannot be attributed to a single network operator, but occur systematically at the borders between today's German market areas, so consequently the costs associated with the procurement of MBIs cannot be assigned to one or several TSOs according to the principle of causation. For this reason, the MBIs are procured centrally, for example by the market area manager (MAM). The costs are distributed among the TSOs using an agreed allocation key. The concrete amount of the costs incurred is determined by the supply situation for MBIs on procurement markets at the time. Efficient, cost-effective use can be ensured by transparent procurement on liquid markets and the selection of the most cost-effective instrument suitable for resolving the relevant congestion situation.

As the costs cannot be controlled by an individual TSO, it must be ruled out that they influence the efficiency comparison. Otherwise, the efficiency comparison could reveal alleged inefficiencies due to MBI costs at individual TSOs, without these having been caused or being controllable by the TSO in any way. Such inefficiencies would rather be the result of the allocation of centrally incurred costs which cannot be assigned according to the principle of causation. Moreover, the inefficiencies would have to be reduced entirely via the costs of the companies identified as not being 100% efficient. It is not possible to use an "efficiency value-neutral" key because neither input parameters (cost basis) nor selected output parameters of the efficiency comparison are known and/or determinable in advance. If the MBI costs were included in the efficiency comparison, the TSOs would unilaterally be exposed to a risk that would not be offset by additional profit opportunities. Such a system would be unbalanced to the detriment of the network operators and would thus also contradict the basic idea of the oversubscription and buy-back scheme in Annex 1 to Regulation (EC) No 715/2009 (see also supplementary comments in Section 5). This would mean that no additional capacities could be offered.

3.2. Merit order

The new MBIs to be introduced with the market area merger will be used as part of a Merit Order List (MOL) to secure the availability of firm capacities in congestion situations. They will only be used once all other free-of-charge network and market-related measures (interruption of interruptible capacities, etc.) have been exhausted. MBIs are generally short-term instruments, i.e. no backup capacity is kept available for this purpose. All products are procured at short notice and remunerated on a commodity charge basis (or equivalent). The MBIs (VIP wheeling, use of third-party network, spread product) to be used for securing capacities are ranked in an MOL according to their costs. When all available MBIs have been exhausted, capacity is bought back as a *last resort*.

A detailed description of each MBI and the capacity buy-back options is provided in Annex 1.

3.3. Price cap

The TSOs consider it appropriate to set a price cap for both the use of MBIs and the buy-back in order to prevent any price abuse.

If a congestion cannot be eliminated at commodity charges below a defined price cap, Section 16 (2) of the Energy Industry Act (*EnWG*) will apply.

3.4. Suspension of short-term marketing

While MBIs are used or capacity is bought back, marketing of short-term capacities (day-ahead and within-day capacity) is suspended for as long as the congestion exists. In order to ensure efficient network access, any additional short-term bookings that may exacerbate the congestion situation should be avoided if congestions are foreseeable or have been identified. This way, potential arbitrage opportunities against the oversubscription scheme can be reduced. The suspension applies to the marketing of firm, freely allocable capacities at all H-gas entry points in the oversubscribed congestion zone.

The suspension of short-term marketing also applies to capacities to be marketed under the short-term UIOLI mechanism pursuant to Section 16 (2) GasNZV as well as short-term shares of the technical capacity approved pursuant to Section 9 (4) GasNZV to be marketed pursuant to Article 8 (6-7) of Regulation (EU) 2017/459 ("NC CAM").

4. Distribution of costs and revenues among network users and TSOs

Section 2.2.2 (1) of Annex I to Regulation (EC) No 715/2009 ('CMP'), calls for the oversubscription and buy-back scheme to be incentive-based. Accordingly, in accordance with Section 2.2.2. No. 2 sentence 1 CMP, the scheme is intended to provide an incentive for the TSOs to make additional capacity available, while the incentive arrangement according to Section 2.2.2. No. 3 CMP is based on the risks for TSOs offering additional capacity.

According to Section 2.2.2 No. 3 sentence 2 CMP, the revenues and costs resulting from the oversubscription scheme are to be shared between the TSOs and network users. The national regulatory authorities are to decide on an appropriate allocation of opportunities and risks for the oversubscription scheme between network users and network operators. The TSOs have understood BNetzA's thoughts on KAP+ to mean that all revenues from the marketing of additional capacities should fully benefit network users and that under no circumstances should any share of the revenues remain with the TSOs. This means that the model must be mirrored in such a way that the costs and risks associated with the oversubscription scheme are also assigned in full to the network users.

Otherwise, the TSOs' assessment of the opportunities and risks would inevitably always result in no additional capacities being offered. This would not be commensurate with the needs of the market and would render the oversubscription scheme ineffective. The classification of congestion management-related costs as volatile costs would be incompatible with the CMP rules as the scheme is not a risk-based incentive scheme. As set out above, the application of the oversubscription model would entail additional risks for the TSOs in the form of a possible poorer performance in the efficiency comparison, without these risks being offset by appropriate incentives.

To comply with the provisions of Section 2.2.2 of the CMP while taking account of the requirements outlined above (Chapter 3.1), the costs of the oversubscription scheme should be passed on nationwide via the network charges (cf. the requirements in Section 20b GasNEV and Section 19a EnWG).

For the price sheet, each TSO will treat the oversubscription scheme costs planned and allocated for the gas year – like the biogas levy and the market area conversion levy (as upstream network costs) –

as a surcharge on the individual revenue cap. With the calculated network charge the (planned) costs are thus passed on in full to the network users.

The 'planned vs. actual' comparison of the costs associated with the oversubscription scheme is then made in the following year as part of the regulatory account applications on the basis of the MBI or buy-back measures actually carried out and the allocation keys defined in advance during planning. The regulatory account also includes the revenues from the additional capacities generated in the form of network charges.

These costs are not taken into account for the revenue caps and for determining the relevant costs in the base year. For complete risk neutrality, it must also be ensured that any provisions resulting from additional revenues in the cost block of a base year are neutralized from the deduction capital.

The costs associated with the implementation of an oversubscription scheme are thus recovered in full and without significant delay via the network charges. The oversubscription scheme allocates all revenues and costs to the network users. This satisfies the fundamental prerequisite that the TSOs should not have to bear any additional risks associated with the oversubscription scheme.

5. Fee validation incl. proceeds from additional capacity and planned costs for MBI use/buy-back

According to NC TAR Article 32 lit. a) in conjunction with Article 29, the reference prices at interconnection points have to be published 30 days before the annual auction, i.e. at the beginning of June of the previous year. Currently, preparations for the consultation on the REGENT 2021 determination are underway, which will define the reference prices in the common market area. As things stand, the TSOs assume that there will be a market area-wide postage stamp. To determine the market area-wide postage stamp reference prices, a forecast has to be provided for the revenue caps and the marketed capacities in the previous year. The validation calculation ensures that the reference prices will allow the revenue cap to be reached.

The oversubscription model will normally produce costs for the use of MBIs or the buy-back. These costs are forecast in the previous year and allocated to the TSOs according to a key. The costs incurred by the TSOs are included in the relevant revenue cap forecast as planned costs and taken into account for the calculation of the fee according to REGENT 2021. At the same time, the TSOs forecast the marketed capacities, which are also included in the calculation of the fee according to REGENT 2021. This forecast covers not only the marketing of the basic capacities approved under Section 9 (4) GasNZV, but also the marketing of the additional capacities offered under the oversubscription model. Including both the costs and the revenues of the oversubscription model ensures that systematic excess revenues and revenue shortfalls are avoided. Furthermore, only by taking the forecast costs and revenues into account can it be ensured that the users of additional capacities also bear the projected costs. If there are any delays in taking these costs into account, the users of additional capacity would no longer bear the costs in the same period.

6. Determining the relevant points in the network

The TSOs only offer additional capacity in the H-gas system. As the market area merger does not provide for a reduction of existing technically available capacity in the L-gas system, there is no need to apply an oversubscription scheme in the L-gas system. Accordingly, no additional capacity will be offered at the L-gas entry and exit points.

With a view to ensuring non-discriminatory, uniform network access, the TSOs will apply the oversubscription scheme described in this document, subject to the respective network-specific determination of the additional capacity, at every entry and exit point in the H-gas systems of the participating TSOs, with the capacity set out in the 2018-2028 network development plan for the respective years concerned defining the maximum capacity on offer. As the market area merger does not provide for a reduction of the basic capacities at the exit points of the TSOs as of 1 October 2021 compared to the situation prior to the market area merger, no additional capacity will be offered at the H-gas exit points.

At all H-gas entry points – including entry points at cross-border IPs, production and LNG facilities – the relevant TSOs will decide at their own discretion on the amount, product quality and duration of any additional capacity offered, taking into account the technical, contractual and regulatory framework, the costs and risks associated with any additional capacity offered and the analysed market demand.

7. Marketing the additional capacity

Capacity offered under the oversubscription scheme is not offered as a separate capacity product but as a uniform capacity product together with all other available capacities of the same capacity product as part of the normal capacity allocation procedures. From the shippers' point of view, therefore, there is no difference between basic capacities and additional capacities resulting from oversubscription. The basic capacities and the additional capacities are subject to the same transport-relevant regulations, e.g. in terms of contractual provisions, tariffs and the operational handling of gas transmission (e.g. interruptions / reductions in the event of congestions / opportunities to participate in buy-back schemes).

Additional capacity may be offered for all standard capacity products. The offer therefore basically includes annual, quarterly, monthly, daily and intraday standard capacity products.

The marketing period for the additional capacity is limited to a maximum of one gas year from the date the oversubscription scheme becomes valid. This means that additional capacity for the 2021/2022 gas year will be offered in the 2020 and 2021 annual auctions. However, in order for additional capacity to be already offered in the 2020 annual auction, BNetzA will have to decide on the oversubscription scheme and approve the basic capacities in accordance with Section 9 (4) GasNZV by March 2020 at the latest. In each of the following two annual auctions, additional capacity will be offered for the next gas year. It is desirable that the marketing period is limited to one gas year as this will allow, among other things, gaining experience with the offer, use and costs of the MBIs used to secure the additional capacities during the trial phase of the oversubscription scheme. A longer marketing period from the start of the new market area could restrict the reactions needed to adjust the additional capacity (e.g. due to changing gas flows resulting from the market area

consolidation) and thus increase the risks associated with the provision of additional capacity. Risks in this respect include an excessive use of MBIs, overpriced MBIs or buy-back of capacities and, in extreme cases, the reduction of firm capacities. During the trial phase, no additional capacity that may be used beyond 1 October 2024 will be marketed.

8. Review process

There will be regular reviews to establish whether network expansion is the more cost-effective and efficient way of meeting the capacity requirements identified. These reviews will take place as part of the NDP process and should be based on the actually incurred and projected MBI costs. The process should also include an assessment as to whether and to what extent the respective congestion situations are likely to be permanent or only temporary.

In addition, the TSOs will prepare a regular report by 30 June of each year on the MBIs used in the previous calendar year and their costs.

9. Concluding remark

For the TSOs, it is essential that the approval by BNetzA of an oversubscription model covers all aspects of the application, i.e. both the design of the model and the handling of costs and revenues, since these areas are closely interlinked and cannot be viewed separately. It would be useful if these aspects could be dealt with in a joint decision by Ruling Chambers 7 and 9.

Annex

1. MBI product description

i. <u>VIP wheeling</u>

Brief description

VIP wheeling has to be distinguished from the wheeling method used to date. For a better understanding, the previous wheeling method is briefly described below.



Short summary of wheeling method used to date

Figure 2: Wheeling method to date

Under the wheeling method used to date, two German TSOs involved in a congestion situation agree on a swap via a cross-border IP with the adjacent foreign TSO. In the case shown, there is congestion in the direction from German TSO 1 to German TSO 2. To remedy this situation, the flow from German TSO 1 to the foreign TSO is increased by 2 GW compared to the trader's nomination. The additional 2 GW are then "forwarded" by the foreign TSO to German TSO 2.

<u>VIP wheeling</u>

Following the creation of a VIP, shippers no longer have to make bookings and nominations at crossborder or market area IPs individually. This means that the German and foreign TSOs at a VIP decide on the split of the gas flows among themselves according to the flow distribution rules laid down in the VIP contract.

VIP wheeling refers to the transportation (over short distances) of gas quantities within a VIP via a foreign TSO to eliminate congestion between the German TSOs belonging to the VIP.



Figure 3: VIP wheeling

Parties	MAM or VIP TSO (on behalf of the MAM) and foreign TSO
Prerequisites for use	Both TSOs affected by the congestion have a physical connection (at
	the cross-border IP) to the foreign TSO.
	The foreign TSO has agreed to the use of the product.
	The technical entry and exit capacities of all network interconnections
	at the VIP (but outside the congestion zone) are not fully utilised.
Delivery points	All network interconnections within a VIP to networks of foreign TSOs.
Direction	Combination of an Entry SWAP Time Series and an Exit SWAP Time
	Series
Product life	For as long as the congestion situation persists.
Availability	The foreign TSO can indicate whether wheeling is 'available' or 'not
	available'.
Call process	MAM informs VIP TSO; VIP TSO "nominates" the wheeling service
	(capacity) – which is subject to a fee – with the foreign TSO
	(on behalf of the MAM, if applicable)
Call lead time	≤ 2 hours
Costs/pricing	Commodity charge-related costs (if applicable) according to use, no
	demand charge. Details to be decided (possibly based on capacity
	costs).

ii. <u>Third-party network use</u>

Brief description

Third-party network use is the term used to describe gas transmission, subject to a charge, via two adjacent, foreign transmission networks outside the market area (TSO) between several bookable VIPs which are physically separated from each other to eliminate congestion within the market area.



Figure 4: Third-party network use

Parties	MAM as shipper and foreign TSOs
Prerequisites for use	The technical entry and exit capacities of the affected network points (outside the congestion zone) are not fully utilised.
	Firm and/or interruptible transmission capacities are available for booking.
	MAM has concluded a BG contract and assumes the BGM role
Delivery points	All cross-border IPs or VIPs to networks of foreign TSOs and unregulated infrastructures
Direction	Combination of an Entry SWAP Time Series and an Exit SWAP Time Series
Product life	Day-ahead or within-day booking - for as long as the congestion situation persists

Availability	Depends on the product range of the adjacent European TSOs and, if applicable, the two German TSOs involved
Call process	Nomination with participating TSOs and foreign TSO after capacity booking via PRISMA (primary or secondary trading).
Call lead time	at least 3.5 hours
Costs/pricing	Capacity fee

iii. Spread product

Brief description

A spread product is an exchange-based product which is used to buy and sell gas simultaneously in different zones. The congestion is resolved in a market-based way through trading transactions upstream (sale) and downstream (purchase) of the congestion (affected zones). The MAM pays the difference between the buy and sell price (spread) for the use of the product on the exchange.



Figure 5: Exchange-based spread product

Parties	MAM and exchange participants
Prerequisites for use	Sufficient liquidity in the market
Delivery points	According to published list
Direction	Combination of a sale ("upstream zone") and a purchase ("downstream zone")
Product runtime	Day-ahead or within-day - for as long as the congestion situation persists
Availability	Permanent availability of the order book on the exchange
Call process	The MAM procures the products centrally on the exchange
Call lead time	3 hours
Delivery control	According to Section 25 of the balancing group contract
Costs/pricing	Spread based on the two legs that are part of the transaction (price difference between buy and sell)

iv. Capacity buy-back product

Brief description

Capacity buy-back is a *last resort* product which is subordinate to the other MBI products (VIP wheeling, third-party network use and spread product) described above. It is used when the other products are unavailable or not sufficiently available.

On behalf of the TSO(s), the service provider buys back firm, freely allocable entry capacity in the upstream congestion zone, e.g. on PRISMA. There is no distinction between capacity that should originally be allocated to the base capacity and capacity to be allocated to the additional capacity.

In contrast to the spread product, where simultaneous action is taken in the zones upstream and downstream of the congestion, the capacity buy-back product relates only to one or more entry points in the upstream zone. The effect on both congestion zones depends on the shippers' behaviour. Since it is not clear whether and how the shippers will act (nominations or renominations in both congestion zones), there is a risk with regard to the required physical effect in the market area, which may fail to occur, or not be useful for the network or vary over time. In case the effects described above actually occur, the TSOs reserve the right to link the capacity buy-back to further prerequisites, such as the exclusion of (re-)nominations by providers of capacity buy-backs, which cancel the effect of the buy-back.



Figure 6: Capacity buy-back product

Parties	MAM or TSO (on behalf of MAM) and shipper
Prerequisites for use	MBI no longer available
Delivery points	According to published list in upstream entry congestion zone
Direction	Buy-back of booked firm entry capacity

Product life	Day-ahead or within-day - for as long as the congest persists
Availability	The shipper offers the capacity booked and nominated in response to the invitation to tender for buy-back.
Call process	Service provider buys back capacity on behalf of TSOs
Call lead time	2 – 4 hours
Costs/pricing	Competitive pricing via reverse auction