

Annual Monitoring Report pursuant to KAP+

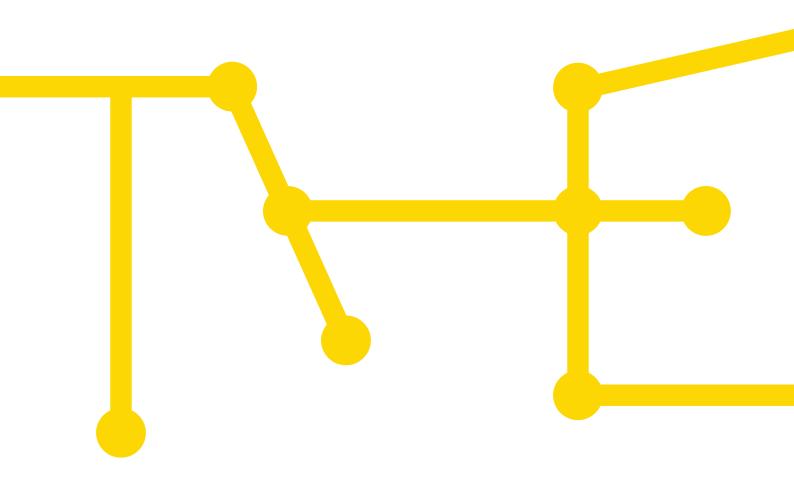




Table of contents

1	Introduction	4
2	Background and functioning of the MBIs and the capacity buy-back system	5
3	MBI use in GY 21/22	8
4	Capacity buy-backs in GY 21/22	10
5	Curtailment of firm capacities in connection with market area congestion in GY 21/22	11
6	Summary/conclusion	11
	st of figures ure 1: Graphical representation of third-party network use	6
_	ure 2: Graphical representation of VIP wheeling	
	ure 3: Graphical representation of the spread product	
Figu	ure 4: Graphical representation of the capacity buy-back mechanism	8
Figu	ure 5: Process flow for MBI use	9
Figu	ure 6: Capacity buy-back process flow	10



List of abbreviations

BNetzA	Federal Network Agency
Gas TSO	Gas transmission system operator
GY	Gas year
KAP+	Decision by BNetzA of 25.03.2020 on the approval of an oversubscription and buy-back system of gas transmission system operators for the offer of additional capacities in the Germany-wide market area (Ref.: BK7-19-037)
CBB	Capacity buy-back
MBI	Market-based instrument(s)
MAM	Market area manager
NCG	"NetConnect Germany" market area
THE	"Trading Hub Europe" market area
THE GmbH	Market area manager "Trading Hub Europe GmbH"
VIP	Virtual interconnection point



1 Introduction

On the basis of operative part 3 (b) of the decision of the Federal Network Agency (BNetzA) of 25 March 2020 approving the oversubscription and buy-back mechanism developed by the gas transmission system operators (TSOs) for additional capacities in the Germany-wide market area ("KAP+"; ref. no.: BK7-19-037) in conjunction with section 27 (1)(b), sub-para (dd) of the Balancing Group Contract Terms & Conditions, gas TSOs that use market-based instruments (MBI) provided for in the KAP+ ruling and the German market area manager (MAM), Trading Hub Europe GmbH (THE GmbH), publish a joint report on the use of such instruments and the capacity buy-back mechanism for each gas year (GY). The annual monitoring report describes the use of MBIs and capacity buy-back transactions in the Trading Hub Europe (THE) market area throughout the relevant gas year and has to be submitted to BNetzA by 1 December of each year, for the first time in 2022.

This monitoring report is the first of its kind according to KAP+ and covers GY 21/22. It was prepared jointly by THE GmbH and the following TSOs:

- bayernets GmbH
- Ferngas Netzgesellschaft mbH
- Fluxys Deutschland GmbH
- Fluxys TENP GmbH
- GASCADE Gastransport GmbH
- Gastransport Nord GmbH
- Gasunie Deutschland Transport Services GmbH
- GRTgaz Deutschland GmbH

- Lubmin-Brandov Gastransport GmbH
- NEL Gastransport GmbH
- Nowega GmbH
- ONTRAS Gastransport GmbH
- OPAL Gastransport GmbH & Co. KG
- Open Grid Europe GmbH
- terranets bw GmbH
- Thyssengas GmbH

The report is structured as follows:

Chapter 2 provides a detailed description of MBIs and the capacity buy-back option as instruments according to KAP+ in the way they are currently used in the THE market area. Chapters 3 and 4 contain more specific information on the use of MBIs and capacity buy-back transactions in GY 21/22, while chapter 5 provides information on reductions in firm transmission capacities in connection with the congestions underlying the use of MBIs or capacity buy-backs. Chapter 6 concludes the report with a summary and a final conclusion for GY 21/22.



2 Background and functioning of the MBIs and the capacity buy-back system

With effect from 1 October 2021, the two former German market areas GASPOOL and NetConnect Germany (NCG) were merged to form the new Germany-wide market area THE. This market area merger would have led to a significant reduction in firm freely allocable entry capacities in the H-gas system, so in order to enable the gas TSOs to offer additional firm entry capacities, an oversubscription and buy-back system was introduced as part of KAP+.

KAP+ provides various options for dealing with congestion (hereinafter also referred to as "market area congestion") caused by the use of additional capacities within the THE market area. The first option is to use so-called market-based instruments (MBIs). If MBIs are not available or not available in sufficient quantities, the capacity buy-back option can be used as a last resort to overcome market area congestion.

Three different MBIs are available:

- Third-party network use
- VIP wheeling
- Spread product

Before MBIs are used, an MBI MOL is drawn up according to which the individual instruments are deployed in the most cost-efficient way, i.e. the MBI used in a congestion situation will always be the most cost-effective option at the time of the congestion.

Third-party network use:

Third-party network use (see Figure 1) involves the transmission of gas via a maximum of two adjacent, foreign transmission networks outside the market area to resolve a congestion situation. This option requires the MAM to book transportation capacities on the PRISMA platform. Third-party network use can only be used as a market-based instrument if the MAM has been awarded the required transportation capacity in the respective auction.



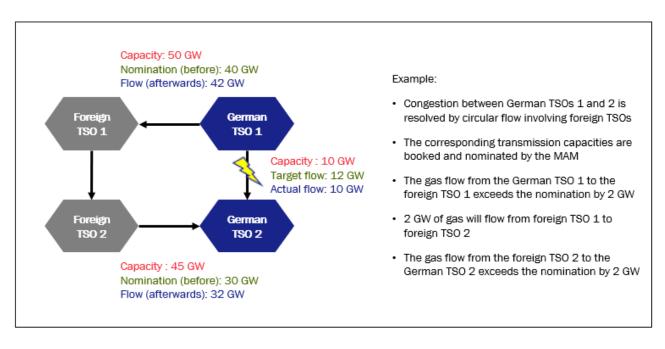


Figure 1: Graphical representation of third-party network use

VIP wheeling:

VIP wheeling (see Figure 2) involves shipping gas via an adjacent, foreign transmission system outside the market area at the usual transportation fees in order to eliminate congestion within the market area. In this case, entry and exit capacities are booked at only one congestion-straddling virtual interconnection point (VIP). VIP wheeling can only be used if the MAM has actually been awarded the required transportation capacity in the respective auction.

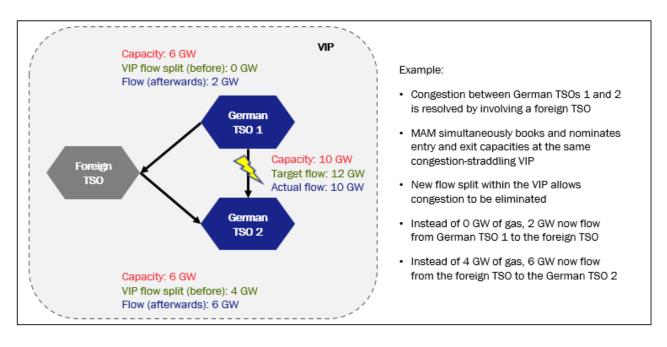


Figure 2: Graphical representation of VIP wheeling



Spread product:

Unlike third-party network use or VIP wheeling, the MBI known as "spread product" cannot directly be used by the MAM to clear a market area congestion but involves transactions on the exchange by third parties (see Figure 3). However, the spread product is not an exchange product in its own right. It is a combination of different simultaneous trades involving the use of the local exchange products suitable for congestion elimination when there is an MBI demand. For this purpose, the THE market area has been divided into two so-called "balancing areas" within the H-gas quality zone, which cover the congestion zones identified. When the locational products in H-gas are deployed to meet MBI requirements, the MAM simultaneously buys and sells gas in the different balancing areas upstream and downstream of the market area congestion. i.e. the MAM sells gas in the respective oversupplied balancing area ("upstream zone") while buying gas in the respective undersupplied balancing area ("downstream zone"). Given that some entry and exit points in the market area will have a physical effect on both balancing areas, three different product types ("area products", "cluster products" and "VIP products") have been introduced on the exchange for spread product trading in order to take account of the fact that the maximum congestionserving effect of flow changes at these points is limited (consideration of the so-called "potential"). The actual "spread" results from the difference between the buying and selling prices of the trades executed by the MAM. The balancing group managers participating in the trade are obliged to cause a corresponding physical effect after the respective trade has been executed in order to eliminate the congestion. The relevant product rules are set out in section 25 of the Balancing Group Contract Terms & Conditions.

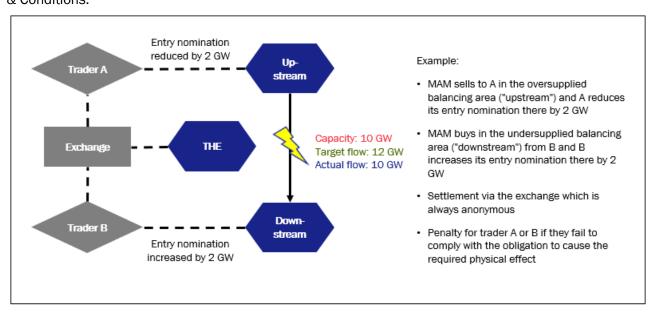


Figure 3: Graphical representation of the spread product



Capacity buy-back:

The capacity buy-back option (see Figure 4) is only available if the market area congestion cannot be eliminated by using MBIs ("last resort"). In contrast to the MBIs, capacity buy-backs are only executed for the upstream zone. The buy-back is executed via bilateral tenders on the MAM's capacity buy-back portal. All shippers that have registered on the portal can participate in capacity buy-back tenders. The providers undertake to reduce their physical entries in the upstream zone in the amount of the awarded capacity. The details are set out in the "Terms and Conditions for Capacity Buy-backs".

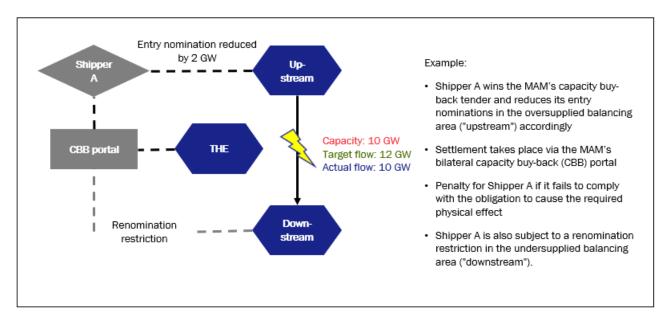


Figure 4: Graphical representation of the capacity buy-back mechanism

3 MBI use in GY 21/22

THE GmbH will publish a demand for MBIs as a demand range in accordance with section 27(1) (b) (aa) of the Balancing Group Contract Terms & Conditions. As a rule, this will be done no later than three and a half hours before the required start of delivery¹. Publication of the demand comes with a request for potential providers to place bids on the exchange for the physical trading products envisaged as part of a spread product deployment. Continuous trading via the MAM can then occur until the three-hour lead time on the exchange has expired. If the prices offered on the exchange indicate that third-party network use or VIP wheeling are more cost-effective than the use of spread products, THE GmbH will participate in the corresponding capacity auctions on the PRISMA booking platform in parallel to the trades on the exchange in order to purchase the required capacities at auction. THE GmbH will subsequently report on its website² which of the MBIs were actually used (incl. quantity and costs).

The following diagram is a simplified flow chart for the use of MBIs starting at 6 a.m.

¹ https://www.tradinghub.eu; > Publications > MBI and capacity buy-back > MBI demand

² https://www.tradinghub.eu > Publications > MBI and capacity buy-back > MBI use



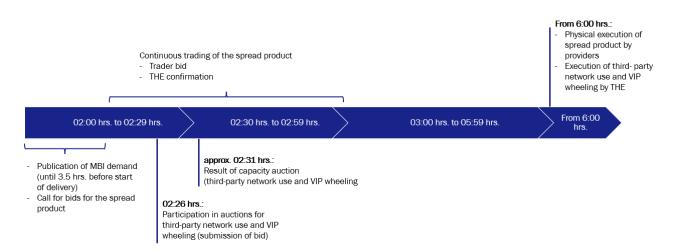


Figure 5: Process flow for MBI use

As there was no demand for MBIs in the THE market area in GY 21/22, no MBIs have been used as yet3.

Estimates of MBI demand for GY 21/22 were based on several planning scenarios which differ substantially in terms of actual MBI use. An increased demand for MBIs was assumed primarily for scenarios involving large supplies from Russian sources or transit gas flows through Germany above historical values. Both of these situations did not occur in the current GY.

Furthermore, in actual practice, the operational situation in the networks allowed for higher gas exchanges between the individual network areas (on an interruptible basis). Operational flexibilities, e.g. swaps with adjacent network operators or a distribution of flows at VIPs to facilitate network operation also helped in avoiding the need for MBIs for operational purposes.

³ The cases of third-party network use published on THE GmbH's website for GY 21/22 were tests of the respective transmission routes, i.e. not an MBI use as provided for in KAP+.



4 Capacity buy-backs in GY 21/22

If there is a demand for MBIs and the available MBIs (see chapter 3) are not sufficient to eliminate the market area congestion underlying the MBI demand, THE GmbH will launch a tender on its bilateral capacity buy-back portal at short notice. The capacity buy-back demand will be published in the form of a demand range on the THE website at least three and a half hours before the start of the contract period in accordance with section 27 (1) (b) (bb) of the of the Balancing Group Contract Terms & Conditions⁴. The providers admitted to the capacity buy-back process will automatically receive an e-mail telling them about the launch of the tender and they can then submit their bids. The winning bids will be published anonymously on the THE website on the following day⁵.

The following diagram shows an example of the process for a contract period starting at 7 a.m.

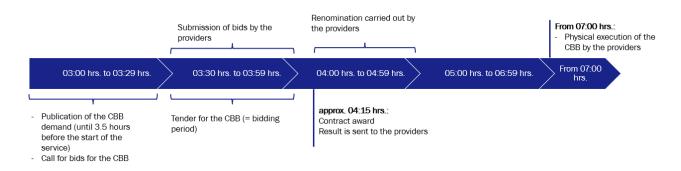


Figure 6: Capacity buy-back process flow

As already explained in chapter 3, it was not necessary to use MBIs in GY 21/22. As there was no MBI demand, there were no capacity buy-backs.

⁴ https://www.tradinghub.eu > Publications > MBI and capacity buy-back > Capacity buy-back requirement message

⁵ https://www.tradinghub.eu > Publications > MBI and capacity buy-back > Capacity buy-back usage



5 Curtailment of firm capacities in connection with market area congestion in GY 21/22

If a market area congestion cannot be eliminated by the use of MBIs or a capacity buy-back, the relevant TSOs must reduce their firm transmission capacities in the market area in the required direction as necessary as set forth in section 16 (2) of the Energy Industry Act (EnWG).

As there was no market area congestion within the meaning of KAP+ in GY 21/22 (see chapter 3), there were no reductions in firm capacities in this context during this period.

6 Summary/conclusion

The merger of the GASPOOL and NCG market areas into the Germany-wide THE market area on 1 October 2021 coincided with the introduction of the MBIs and the capacity buy-back option as instruments for the elimination of market area congestion in accordance with KAP+ (cf. chapter 2 for details on the background and functioning of the MBIs and the capacity buy-back system).

The start of GY 21/22 already saw certain gas flow shifts in Germany, which intensified after February 2022 following the start of Russia's war of aggression against Ukraine and led to a significantly different overall entry situation in the course of summer 2022. However, there was no market area congestion as provided for in the KAP+ decision, so neither MBIs nor capacity buy-backs had to be used in the THE market area in 21/22 GY (see chapters 3 to 5).

Trading Hub Europe GmbH

Kaiserswerther Straße 115 40880 Ratingen / Germany

market-development @tradinghub.eu T +49 (0) 2102 597 96 - 404 F +49 (0) 2102 597 96 - 418 www.tradinghub.eu