ENERGETICKÝ
REGULAČNÍ
ÚŘAD

CONSULTATION DOCUMENT
UNDER ARTICLE 26 OF COMMISSION REGULATION (EU) 2017/460 OF 16 MARCH 2017 ESTABLISHING A NETWORK CODE ON HARMONISED TRANSMISSION TARIFF STRUCTURES FOR GAS

CONTENTS

1 TERMS AND ABBREVIATIONS

The CWD model

The capacity weighted distance reference price methodology

CR or ČR

The Czech Republic

The Energy Act

Act No 458/2000 on conditions for business and state administration in energy industries and amending certain laws (the Energy Act), as amended

ERO

The Energy Regulatory Office

EU

The European Union

Gazprom, GPE

Gazprom Export, LLC

International transmission, transit transmission

The use of the transmission network in the Czech Republic for the purpose of gas transport[1] to customers in other entry-exit systems

NC CAM

COMMISSION REGULATION (EU) 2017/459 of 16 March 2017 establishing a network code on capacity allocation mechanisms in gas transmission systems and repealing Regulation (EU) No 984/2013

NC TAR

COMMISSION REGULATION (EU) 2017/460 of 16 March 2017 establishing a network code on harmonised transmission tariff structures for gas

NET4GAS, the transmission system operator (TSO)

NET4GAS, s.r.o., the holder of an exclusive licence for gas transmission in the Czech Republic

DSO (PDS in Czech)

Distribution system operator

DCC (PPZ in Czech)

Customer directly connected to the transmission network

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[1] Article 2 (1) of Regulation (EC) No 715/2009 of the European Parliament and of the Council

UGS, UGS facility (*PZP in Czech*)

Underground gas storage facility

RAB

Regulatory Asset Base

The Decision

The motivated decision under Article 27 (4) NC TAR

VIP

Virtual cross-border (interconnection) point[2]

National transmission

The use of the transmission network in the Czech Republic for the purpose of gas transport to customers in the Czech Republic

WACC

Reference value of the regulated rate of return

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2 Article 19 (9) NC CAM

2 INTRODUCTION

This document serves for the carrying out of the final consultation prior to the decision referred to in Article 26 to Article 28 NC TAR. The consultation document sets forth the proposed transmission tariff methodology and the relevant regulated prices for the transmission service for public consultation on the proposal. The tariffs determined using the consulted methodology will apply in the Czech Republic from 1 January to 31 December 2025.

Based on the suggestions and comments on this document, raised as part of the public consultation, ERO will issue a decision under Article 27 (4) NC TAR, which will be published by 31 May 2024.

In the development of this consultation document the authors have sought a solution completely in compliance with the binding provisions of NC TAR while taking into account the changes triggered by the war in Ukraine and their impact on the gas market and on gas transmission as such. It will also minimise any adverse effects on the various groups of gas market participants in the Czech Republic and ensure the operation of the critical infrastructure.

This document describes the aspects that ERO has taken into consideration, and summarises the results of the preparations for the implementation of and the proposed future tariff structure.

3 THE LEGAL ENVIRONMENT

NC TAR requires the national regulatory authority or the transmission system operator to perform the steps referred to in Article 5 (1), Article 26 (1), Article 27 (1), Article 29, and Article 30 NC TAR.

ERO has assessed this allocation of competences in the context of the applicable Czech legislative framework and concluded that, for the reasons set out in the following, ERO will be the entity responsible for the required steps.

Being a Commission Regulation, the NC TAR is a directly applicable part of the Czech legal system. Furthermore, in relation to ERO, the issue covered by the NC TAR is provided for in Act No 265/1991 on the competences of the authorities of the Czech Republic in pricing, as amended (the Price Act), and the Energy Act. Within the Czech legal system, the basis for meeting the requirements of the Regulation must mainly include Section 2c of Act No 265/1991. The price regulation competence has been vested in ERO by the law, and ERO vesting this competence in itself through its decision in administrative proceedings is not only redundant but even impermissible from the perspective of Czech constitutional principles.

And so, if the required outcome of the above decision is that the activities under the NC TAR, which are to be the subject matter of the decision, are carried out by ERO (as Act No 265/1991 taken together with the Energy Act requires already now) to the full extent and exclusively, then the following is true: the non-issuance of the decision imposing an obligation on the transmission system operator to perform certain activities means that ERO shall perform these activities (by the operation of law). In the present case, the rules contained in all of the above three pieces of legislation in fact complement each other with a view to fulfilling the meaning and purpose of the NC TAR.

4 DISCLAIMER

ERO is presenting a consultation document that has been prepared in compliance with the applicable legislation and based on its own information sources and on information provided by the transmission system operator, i.e. NET4GAS, s.r.o.

All calculation models presented for public consultation are based on data, information and assumptions available as at the day of launching the consultation under Article 26 NC TAR.

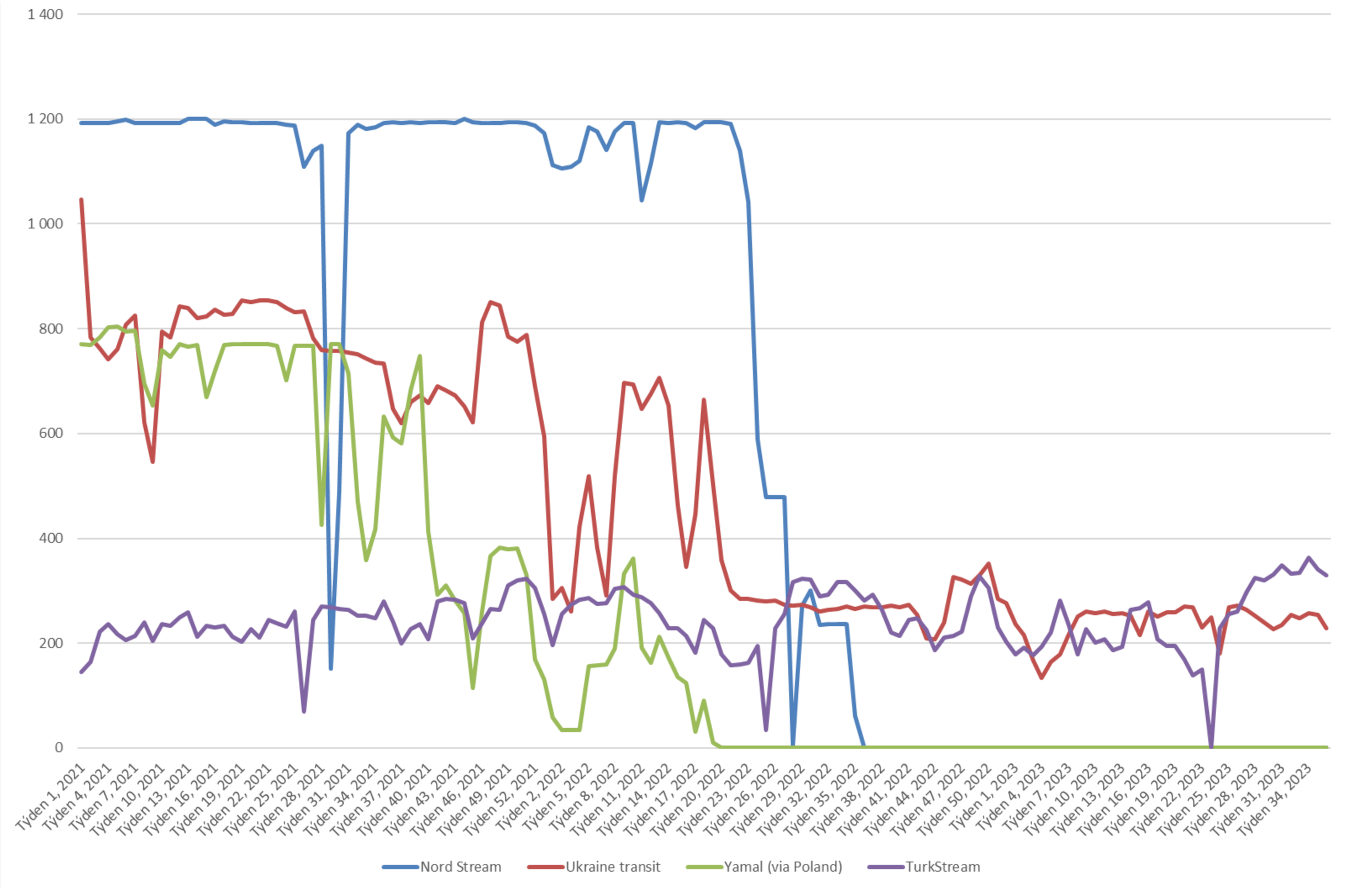
The consultation document is intended exclusively for the purposes set out in NC TAR.

5 GAS MARKET TRANSFORMATION

With the breakout of Russia's war in Ukraine, the European energy policy has stepped into a new era, among other things also facing the consequences of the rupture of Russia's energy links with Europe. The new reality, which has materialised in a number of disruptions in both physical gas flows and market supply, has resulted in a package of legislative counter-measures as part of REPowerEU with a view to providing European customers with secure, reliable, and affordable energy.

Gas supply by Gazprom to Europe was interrupted on several supply routes in 2022, which caused turbulences in commodity markets. The most significant disruptions in the gas flow included the termination of gas transport through the Yamal Europe gas pipelines, the alleged technical constraints on Nord Stream 1 followed by four leakages from Nord Stream 1 and 2, and also the reduced flow via the Sokhranivka entry point across Ukraine. Reduced gas supply from Russia to the EU continued in 2023.

Chart 1 Natural gas import volume from Russia to the European Union (EU) and the United Kingdom (UK) from 2021 to 2023, by exporting route (in million cubic metres)[3]



Gazprom's supplies were stopped or substantially reduced to several European customers in Austria, Bulgaria, Czech Republic, Denmark, Finland, France, Germany, Greece, Italy, Poland, the Netherlands, and Slovakia. The gas flows via Czech exit interconnection points, which are crucial from the perspective of gas transit, have dropped significantly since July 2022.

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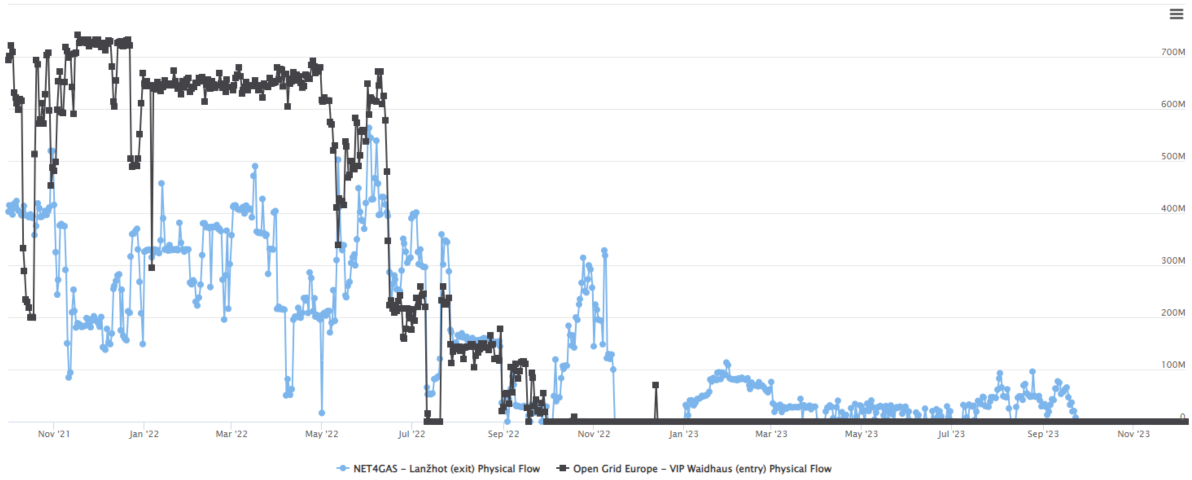
3 Statista; Statista Research Department (September 2023); Online; Available at https://www.statista.com/statistics/1331770/eu-gas-imports-from-russia-by-route/

Chart 2 **NET4GAS Lanžhot and Waidhaus (VIP exit points): Daily physical flows in kWh/d from 1 October 2021 to 6 December 2023[4]**



The changes in gas flows in European transmission networks have also impacted on the transmission capacity market.

"The capacity market has also faced structural changes since 2022: the use of short-term booking capacity products has increased as a reaction to ongoing rerouting flows from North-West Europe eastwards. This raises a need to adjust gas transportation mechanisms when higher spreads emerge between European gas hubs, and bottlenecks occur, as well as mitigate remaining contractual congestions across the EU."[5]

European climate commitments have given gas a transitory role in energy transition towards climate neutrality and hydrogen economy. The legal and regulatory requirements, such as the EU taxonomy package, caused the evolution of booked capacity and the expiration of legacy capacity contracts to result in a lower predictability of future transit flow still before the Russian aggression in Ukraine. Chart 3 shows the evolution of legacy and short-term capacity contracts.

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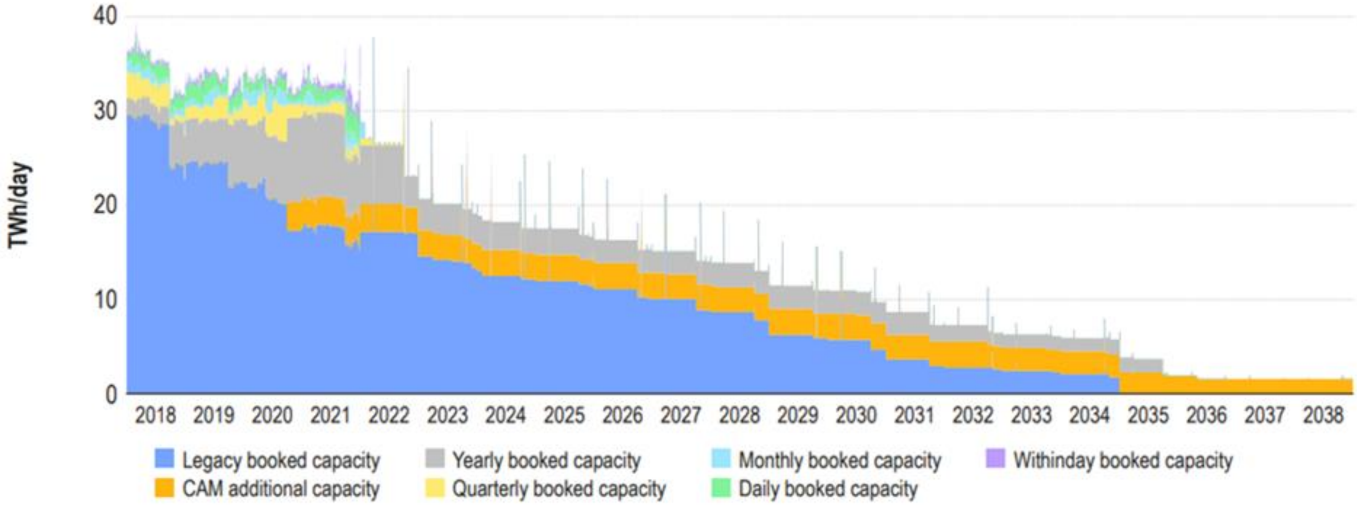
4 Entsog transparency platform; transparency.entosg.eu; Online; Available at https://transparency.entsog.eu/#/points/data?from=2021-10-01&points=cz-tso-0001itp-00051exit%2Cde-tso-0009itp-00538entry.

5 European Parliament, a study requested by the ITRE Committee, The Revision of the Third Energy Package for Gas, November 2022 https://www.europarl.europa.eu/RegData/etudes/STUD/2022/734009/IPOL_STU(2022)734009_EN.pdf p. 59-60

Chart 3 Evolution of booked capacity in the EU and expiration of legacy capacity contracts at CAM relevant points[6]



An ACER analysis notes the following: "The significance and structure of long-term gas supply contracts going forward is an important issue being reconsidered. Despite the fact that long-term contracts have declined in recent years and will likely continue to do so, such historical contracts still account for 80% of EU gas demand (around 40% of long-term contracts are signed with Gazprom)."[6] The large proportion of Gazprom's long-term capacity contracts has opened new uncertainties and system risks for capacity providers (TSO). The reduced volume of commodity supply and Gazprom's breaches of forward contracts for gas supply to Europe can also disrupt the working of the capacity markets and cast doubt on the current design of national regulatory frameworks, primarily in countries affected by the disruption in the corridor for gas transport from the east.

REPowerEU placed emphasis on the security of European energy supply before the 2022 winter season and promoted the importance of underground gas storage facilities. It can be noted that the benefits of storage facilities were highlighted in connection with gas supply security in periods when gas flows via entry points do not cover demand in the relevant locality. The implementation of legislative measures, such as the discounts on tariffs related to transmission from/to UGS facilities, primarily motivated market participants to achieve the targets of expeditious UGS filling; however, secondarily, it shifted the allocation of the relevant costs to other points in the network. ERO was monitoring the European levels of discounts on tariffs for transmission to and from UGS facilities and on 10 May 2022 published its Price Decision 2/2022 whereby it introduced a 100% discount at those points. This was carried out using the option under Regulation (EU) 2022/1032 amending Regulation (ES) 715/2009 and in accordance with Article 9 (1) NC TAR envisaging a discount of at least 50% applied to capacity-based transmission tariffs at entry points from and exit points to storage facilities. Before introducing this 100% discount, a discount of 70% was applied in the Czech Republic.

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6 ACER/CEER, Annual Report on the Results of Monitoring the Internal Electricity and Natural Gas Markets in 2021. Gas Wholesale Markets Volume. July 2022

6 DESCRIPTION AND DEVELOPMENT OF THE CZECH TRANSMISSION INFRASTRUCTURE

6.1 Description of the transmission network

The transmission network comprises gas pipelines for international and national gas transmission with a total length of 4,058 km, nominal diameters ranging from DN 80 to DN 1400, and nominal pressures ranging from 4 to 8.5 MPa.

The transmission network is divided into four main branches. The northern branch runs from Lanžhot to Brandov/Hora Svaté Kateřiny, the southern branch runs from Lanžhot to Rozvadov, and the western branch interconnects the northern and southern branches in western Bohemia. In the eastern part of the country, the Moravian branch helps to supply gas to Moravian regions and joins the Polish transmission network. The northern, southern and western branches are interconnected at the key junction points in Malešovice, Hospozín and Přimda.

Upon entering into and exiting from the Czech Republic, gas is ‘delivered and accepted’, that is, gas quantity and quality are metered at the cross-border transfer stations between the Czech Republic and Slovakia at Lanžhot, between the Czech Republic and Germany at Hora Svaté Kateřiny, Olbernhau, Brandov (Saxony), and Waidhaus (Bavaria), and between the Czech Republic and Poland, gas is metered in Cieszyn on the Polish side of the national border.

Gas flows from the long-distance (transit) transmission system into the national transmission system through delivery stations. Through the national part of the transmission network, gas is transported via delivery stations into each of the distribution systems in each of the regions, to customers directly connected to the transmission network, and to storage facilities.

The pressure required in the gas pipelines is maintained by five compressor stations located in the northern branch at Kralice nad Oslavou, Kouřim, and Otvice and in the southern branch at Veselí nad Lužnicí and at Břeclav. All compressor stations, with the exception of the Otvice station, are capable of bidirectional operation. The installed power of the compressors totals 281 MW.

Table 1 Compressor stations in the transmission network and their capacities

Compressor stations	**Otvice**	**Kralice nad Oslavou**	**Kouřim**	**Břeclav**	**Veselí nad Lužnicí**
Number of turbine sets and their power	3 x 8 MW	5 x 6 MW	5 x 6 MW	9 x 6 MW	6 x 6 MW
		2 x 13 MW	2 x 13 MW	1 x 16 MW	
		1 x 12 MW	1 x 12 MW	1 x 15 MW	
Installed power	24 MW	68 MW	68 MW	85 MW	36 MW
Total installed capacity for transmission					**281 MW**

6.2 The GAZELLE pipeline

In 2011, the GAZELLE pipeline, connected with OPAL near Brandov and, via the Rozvadov-Waidhaus cross-border transfer station, with the MEGAL transmission network, was, in ERO’s decision, exempted from the obligation to allow third party access (TPA) under the conditions of the Energy Act and from the obligation of the ownership unbundling of the transmission system operator within the meaning of Section 67 of the Energy Act for the period until 1 January 2035. The European Commission confirmed this in 2011 by its decision to grant an exemption from TPA under Article 36 of Directive 2009/73/EC. Thus, a special status has been granted to GAZELLE and not all gas market participants have access to it. Under normal operating conditions, GAZELLE is used exclusively for transiting gas from OPAL further down to southern Germany and it is not used for the purposes of supplying the Czech Republic. The above decision exempts a direct forward-flow capacity of up to 30 bcm/year in the GAZELLE pipeline from the obligation to allow regulated TPA (Articles 32, 33 and 34 of Directive 2009/73/EC) and from tariff regulation (Article 41 (6), (8) and (10) of Directive 2009/73/EC) for 23 years.

6.3 The transmission network's readiness for hydrogen

In the context of the EU Hydrogen Strategy and the targets of the Green Deal for Europe, The Hydrogen Strategy of the Czech Republic ('the Strategy') covers the period from 2021 to 2050, at the end of which the Czech Republic should achieve climate neutrality. At the initial stage, the Strategy places emphasis on a balance between hydrogen production and consumption to ensure that available resources are used efficiently. The Strategy analyses the various pillars and identifies the priority areas that should be developed, but also the ones the development of which should rather not be recommended. The Strategy accelerates the process of hydrogen technology implementation across sectors of the economy while minimising the costs incurred.

Going forward, the Strategy expects that the Czech Republic will have to import hydrogen from countries with more favourable production of renewable hydrogen thanks to having more sunshine and wind. For hydrogen imports, the infrastructure will have to be prepared, and hydrogen may replace the current gas and oil imports. The Strategy also notes that the Czech Republic can be a major player in hydrogen transport from the south to the north and from the east to the west.

Further to the above we cannot but expect the transmission system operator's key role, which will reflect the changes related to the promotion of the decarbonisation targets in the EU and the Czech Republic's advantageous geographic position for the future transit of low-carbon gases. Over the medium term, the transport of hydrogen/gas mixtures and of hydrogen in separate pipelines can very likely be expected.

As regards hydrogen transport itself, available external studies expect that hydrogen transport through the transmission network is already technically feasible. Preparing the transmission network (its repurposing), and in fact the entire Czech gas system, for the option of hydrogen transport will, however, require a thorough examination of its technical capabilities. The related changes required in the applicable legislation, providing for hydrogen as a separate gaseous fuel in the energy sector, are expected to enter into force in 2024.

December 2022 saw the launch of the process of selecting projects for the new Union PCI list. NET4GAS has nominated two hydrogen infrastructure projects to the list: Central European Hydrogen Corridor, the Czech part (CEHC), and Czech German Hydrogen Interconnector, the Czech part (CGHI).

In November 2023, the European Commission adopted the first Union list of projects of common interest and projects of mutual interest under Regulation (EU) 2022/869, which is expected to enter into force in early 2024. Both of the NET4GAS projects, CGHI as a project of common interest and CEHC as a generic corridor, have been included in the list.

7 DESCRIPTION OF THE PROPOSED REFERENCE PRICE METHODOLOGY

7.1 General pricing assumptions

The changes in the Union's gas market, which have been caused by geopolitical developments and which significantly influence the use of the transmission system in the Czech Republic, have resulted in the following:

- The ratios for allocating network costs (cost allocation ratios) applied until 2023 no longer reflect the current situation in the use of the various assets in the transmission network for intra-system transmission (national) and for cross-system transmission (transit); and

- Regulation via the price cap regime can no longer have the decisive importance in the design of the regulatory framework, which it had in the situation of a dominant role of international transit.

In the case of the provision of the gas transmission service it is not feasible to correctly quantify the risk associated with the historical capacity bookings by the key Russian customer (GPE); the risk has already been felt and with a probability converging to certainty it will continue to be felt in the form of wilful defaults on transmission contracts and a complete loss of payments, thus resulting in unmet costs of the transmission network and shortages of funds. This risk can be suitably diversified only through the participation of other network users.

The use/planning of GPE's unpaid for capacities for pricing in the separate price cap regime for transit would result in a looping problem: the risk premium (in WACC), associated primarily with the credit risk in question, and the corresponding transit fees would have to be set at a level reasonably guaranteeing that costs will actually be recouped. Thus, realistically speaking, the relevant costs can be met only by other network users if GPE does not pay for its capacities. On the other hand, it is also natural that any future revenue generated by GPE actually honouring its obligations as a result of legal steps for recovering the relevant debts are returned to regulated prices.

The capacity weighted distance reference price methodology based on realistic (and paid for) contracted/planned capacities is the best way of responding to the current situation and diversifying risks appropriately. However, it is to be noted that the overall design of the regulatory framework must also reflect the possible future evolution of gas flows, which it is very difficult to predict given the current circumstances.

The Decision under Article 27 (4) NC TAR (*Energy Regulatory Gazette 3/2019* of 27 May 2019) laid the foundations for applying the capacity weighted distance methodology as part of the dual national/transit transmission system and as part of the dual regulatory regime (revenue cap/price cap) matching two independent cost bases. This cost division and divergence from the standard system, predominating in the EU, of a single revenue cap was motivated by the historical development and the dominant transit role of the Czech transmission network. Price Control Principles for the 2021-2025 Regulatory Period in the Electricity and Gas Industries and for the Market Operator's Activities in the Electricity and Gas Industries, and for Mandatory Buyers then followed the Decision under NC TAR only with some parametric changes.

This NC TAR consultation works only with a one-year period of 2025, in particular because of the existing uncertainty concerning the future transit flows across the Czech Republic. This is also the reason why ERO is not introducing the regulatory regime of a single revenue cap; in the case of a low volume of transit flows, such regime might cause national customers to bear a disproportionately large share of the total costs of the transmission network. **ERO proposes to keep in place the dual regime of regulation through revenue cap for intra-system customers and price cap for cross-system customers.** However, compared with the preceding period, the importance of the revenue cap regime vis-à-vis the price cap regime (measured by the ratio of the forecasted capacities and regulated revenue) has been boosted because of the changed situation.

Another benefit of setting the methodology only for 2025 should be the fact that the next NC TAR consultation would unify the period under the EU legislation with the period of the new national regulatory period, and the design of the regulatory framework and the prices set out for the future would be based on the same assumptions and inputs.

7.2 Regulatory regime and setting the revenue for the transmission system operator

The revenue cap regime has been selected as the primary regulatory regime for gas transmission; it is expected to guarantee that the costs of the required critical infrastructure are also recouped in adverse situations of low flows. With the existence of a regulatory account, this regime can allow a reasonable response to the uncertainty associated with, primarily, the future cross-system gas flows, which may jeopardise the operation of and service provision by the transmission network and its operator's financial stability; such stability is prerequisite for complying with the obligation to ensure the safe, reliable and economical operation, maintenance, renewal and development of the transmission network. Furthermore, the uncertainty might also result in the undesirable shutdowns of parts of the network, causing increased associated costs, and in constraining the possibility for resuming their use in the case of changes in gas flows or for the purpose of transporting low emission gases and meeting the decarbonisation objectives.

The price cap regime will be used as the secondary regulatory regime; with a view to maintaining the competitiveness of gas transmission routes and optimising the option to achieve additional revenue, this regime will be applied reasonably and exclusively for cross-system transmission pricing.

The two regimes will form a single regulatory system and will be suitably integrated with a view to the following: in the case of low cross-system gas flows, provide the transmission system operator with an assurance of reasonable revenue to pay the costs of the necessary extent of the critical infrastructure, and, on the other hand, in the case of increased cross-system gas flows a defined portion of revenue regulated below the price cap will be included in the regulatory account.

For the purpose of calculating the transmission tariffs set out in this document, the following are the initial assumptions for the generation of regulated revenue from gas transmission in 2025:

- The regulated revenue is based on the planned investments and depreciation, planned operational expenditures based on a three-year average of historical costs, and WACC applied to the regulated asset base (RAB);
- Using a regulated rate of return (WACC) of 6.51% in the revenue cap regime, applied to the relevant part of the overall network RAB; and
- Using a regulated rate of return (WACC) of 9.35% in the price cap regime, applied to the relevant part of the overall network RAB.

A regulated rate of return, WACC, of 9.35% includes a risk premium of 4.39% reflected in the cost of equity, which is based on simulating an insufficient amount of transit revenue in the case of achieving actually booked cross-border capacities lower than the planned values of capacities used in the CWD model for calculating reference prices (190 GWh/day/year). At the same time, the simulation used a booked capacity of 50 GWh/day/year as the bottom level for which the assumption of its achievement was chosen, and failure to achieve this level is therefore regarded as unlikely. Achieving planned capacities of 190 GWh/day/year completely is subject to the risk of insufficient actual bookings, and this case has been assigned a probability of 25%. The risk of such insufficiently booked capacities is reflected in revenue (in the reference CWD prices calculated without a risk premium in WACC) and the amount of revenue at risk[7] so calculated is regarded as the base for determining a corresponding risk premium included in WACC in the price cap regime.

7.3 Reference model under NC TAR: Using the capacity weighted distance reference price methodology (CWD) with entry-exit split 50/50 and a discount of 50% applied to tariffs for storage facilities

In compliance with the NC TAR requirements, the consultation document contains the calculation of the reference model to allow a comparison with the selected (target) model. The reference model calculation of tariffs is based on the following assumption:

- The building blocks of total revenue from intra-system and cross-system transmission include operational expenditure, depreciation and profit;

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[7] Since the reference prices for cross-system transmission calculated using the CWD methodology (with a risk premium) have been reduced to the level of a competitive price benchmark (see subchapter 7.4), the calculated risk premium and the resulting WACC are not reflected in these prices to the full extent, and the increased part of the price-tagged volume risk (revenue at risk) therefore remains as a charge to the transmission system operator.

- Using the capacity weighted distance reference price methodology (CWD) with entry-exit split 50/50 (Article 8 NC TAR); and
- Applying a 50% discount on tariffs for storage facilities.

Under the above conditions, the inputs into pricing for the period in question are as follows:

Table 2 Inputs into pricing under the conditions

Revenue [CZK million]	**2025**
Total regulated revenue	6,316

Forecasted contracted capacities	
ENTRY [MWh/day/year]	**2025**
VIP Brandov	426,566
VIP Lanžhot	0
VIP Waidhaus	0
Český Těšín	0
UGS facilities (CZ)	135,112
Dolní Bojanovice UGS (CZ-SK)	9,361
TOTAL	**571,039**
Entry cross-border intra-system point	236,566
Entry cross-border cross-system point	190,000

Forecasted contracted capacities	
EXIT [MWh/day/year]	**2025**
VIP Brandov	0
VIP Lanžhot	185,200
VIP Waidhaus	0
Český Těšín	4,800
DSO + DCC	503,620
UGS facilities (CZ)	105,026
Dolní Bojanovice UGS (CZ-SK)	7,853
TOTAL	**806,499**

The following Table 3 lists the indicative reference prices and the related revenue following tariff equalisation within the exit points of distribution system operators, including customers directly connected to the transmission network (equalisation under Article 6 (4) (b) NC TAR):

Table 3 Indicative reference prices and related revenue

Reference prices	
ENTRY [CZK/MWh/day/year]	**2025**
VIP Brandov	6,193.09
VIP Lanžhot	3,960.78
VIP Waidhaus	7,079.42
Český Těšín	0.00
UGS facilities (CZ)	1,785.92
Dolní Bojanovice UGS (CZ-SK)	1,785.92

Reference prices	
EXIT [CZK/MWh/day/year]	**2025**
VIP Brandov	6,626.85
VIP Lanžhot	4,969.71
VIP Waidhaus	3,721.35
Český Těšín	8,489.53
DSO + DCC	4,152.86
UGS facilities (CZ)	3,217.68
Dolní Bojanovice UGS (CZ-SK)	3,217.68

Revenue [CZK million]	**2025**
Revenue at entry points	2,900
Revenue at exit points	3,416
Total revenue	**6,316**
Revenue for intra-system use	4,178
Revenue for cross-system use	2,138

CAA test (Article 5 NC TAR)	**2025**
Cost allocation comparison index	2.3%

The capacity cost allocation comparison index under Article (5) (1) (a) (iv) NC TAR is 2.3% in this variant, and so meets the requirement for its maximum value (10%).

7.4 The target model

The target model relies on the assumptions in subchapter 7.3 outlining the reference model with the 50/50 entry-exit split and applying a 50% discount on tariffs for storage facilities. The only changes compared with the reference model are listed in the following.

Although the use of the reference model with the 50/50 entry-exit split and applying a 50% discount on tariffs for storage facilities satisfies the test of the capacity cost allocation comparison index under Article 5 (1) (a) (iv) NC TAR, the purpose of the procedure that followed was to determine such a revenue split and such adjustments to the reference model, which would help to meet additional objectives reflecting the national specificities.

Another objective in the implementation of NC TAR was seeking a revenue split that would not significantly disrupt the price continuity with the current prices (i.e. between 2025 and 2024), because a major change in the set prices might have adverse impacts on the market and, in particular, on its price proximity with the German market area (THE within NCG). The entry-exit revenue split ensuring the preservation of price continuity is 9.1 to 90.9%.

The target model works with a 100% discount on tariffs for booking transmission capacity to and from storage facilities due to the extraordinary legislative measures adopted in the wake of the energy crisis triggered by the impacts of the war in Ukraine and the set obligatory seasonal targets for gas injection.

The revenue related to the provision of the above discount is allocated to the network exit points of intra-system and cross-system users.

ERO proposes a 100% discount on tariffs for storage facilities under Article 9 NC TAR.

On the whole, the granting of the 100% discount causes the reallocation of revenue totalling CZK 1,197 billion to exit cross-border and exit domestic points of the network, which in the target model is, depending on the forecasted capacities, allocated to intra-system prices at CZK 820 million and to cross-system prices at CZK 377 million.

To maintain the competitiveness of the transit route across the Czech Republic, account was also taken of the impact of the price benchmark with adjacent countries, and the reference prices calculated based on the CWD model for cross-system transmission were reduced accordingly. In 2025, gas transmission is expected mainly along the Brandov-Lanžhot route, which will take 97% of total transit flows. Chart 4 shows that the costs of gas transmission along this route are EUR 1.28/MWh in 2024. The proposal for 2025 will slightly increase the costs of transmission along this route to EUR 1.31/MWh. The price benchmark in the Chart below applies as at the day of issue of this consultation document. The resulting adjustment of the price for cross-system transmission will only be set out in the Decision under Article 27 (4) NC TAR because of the potential ongoing changes in the prices of competing routes.

Chart 4 Transmission tariffs compared with adjacent countries

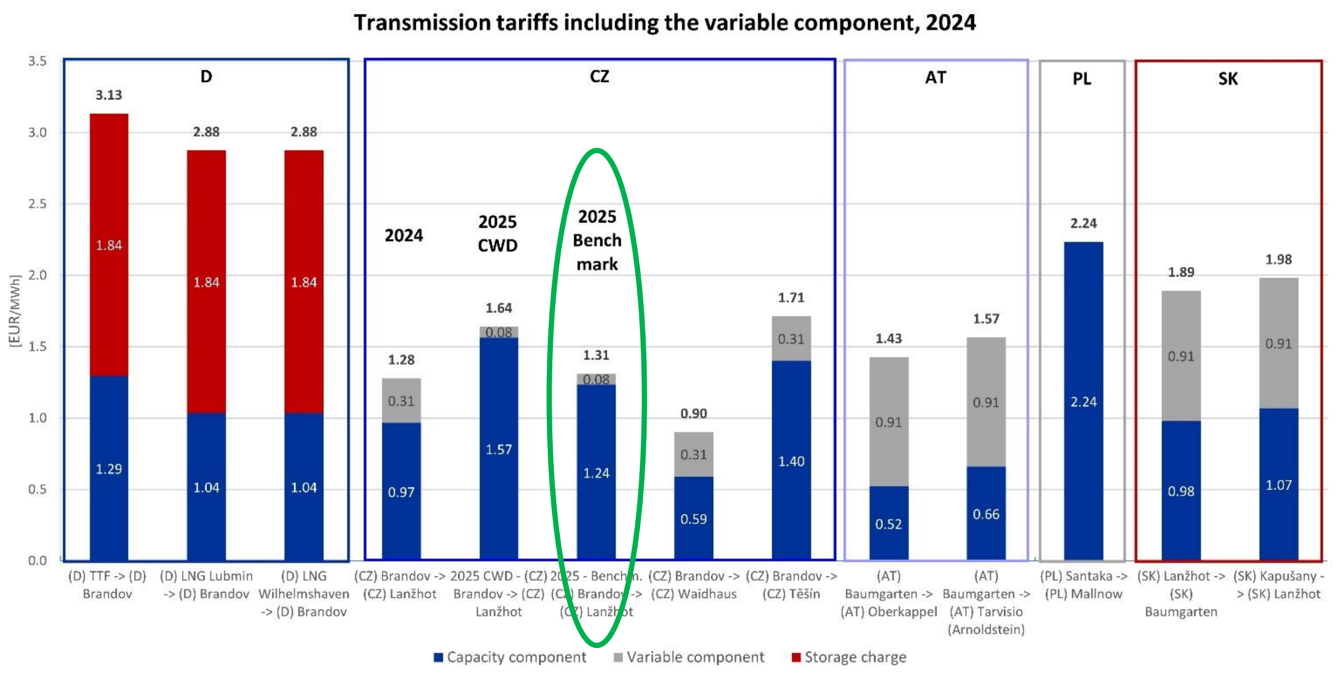


Chart 4 shows the results and indicative reference prices by the target model following the setting of the selected entry-exit split, the equalisation within the exit points of distribution system operators, including the users directly connected to the TSO's network (equalisation under Article 6 (4) (b) NC TAR), the application of the discount on booking transmission capacity to and from storage facilities, and the adjustment of reference prices at exit cross-border points based on benchmarking under Article 6 (4) (a) NC TAR.

Table 4 Results and indicative reference prices of the target model

Reference prices	
ENTRY [CZK/MWh/day/year]	**2025**
VIP Brandov	1,127.14
VIP Lanžhot	720.86
VIP Waidhaus	1,288.45
Český Těšín	0.00
UGS facilities (CZ)	0.00
Dolní Bojanovice UGS (CZ-SK)	0.00

Reference prices		
EXIT [CZK/MWh/day/year]	**2025**	**2025 Benchmark**
VIP Brandov	15,271.72	11,734.35
VIP Lanžhot	11,452.80	8,800.00
VIP Waidhaus	8,575.93	6,589.50
Český Těšín	19,564.30	15,032.65
DSO + DCC	7,937.84	
UGS facilities (CZ)	0.00	
Dolní Bojanovice UGS (CZ-SK)	0.00	

Revenue [CZK million]	**2025**
Revenue at entry points	481
Revenue at exit points, including risk premium	6,212
Total revenue, including risk premium	**6,693**
Revenue for intra-system use	4,264
Revenue for cross-system use, including risk premium	2,429

CAA test (Article 5 NC TAR)	**2025**
Cost allocation comparison index excluding risk premium	4.6%
Cost allocation comparison index including risk premium	12.2%

In this variant, and before applying adjustments to reference prices under Article 6 (4) (a) NC TAR, the capacity cost allocation comparison index under Article 5 (1) (a) (iv) NC TAR is 4.6% for revenue without a risk premium, and so meets the requirement for its maximum value (10%). When revenue from a risk premium is included this index is 12.2%, which exceeds the maximum value set out in NC TAR. ERO regards revenue without including a risk premium as comparable between national and transit transmission since the premium expresses the extra costs induced by the risk of cross-system flows that are unallocable to intra-system customers. Furthermore, the reference prices for booking cross-system transmission capacities are adjusted by a price benchmark under Article 6 (4) (a) NC TAR, which is not reflected in the cost allocation comparison index that also covers a risk premium.

7.5 Regulatory account and its reconciliation

Only the capacity-related portion of revenue is addressed within the regulatory account and its reconciliation. The reconciliation of the differences related to the flow-based charge is outlined in subchapter 10.4.

7.6 Justification of the compliance of the proposed method of implementation with the requirements of Article 7 NC TAR

The principles of pricing chosen for the period under review, i.e. 2025, and described in the preceding parts of this document offer the following advantages:

- The tariffs are cost-reflective;
- The tariffs are based on the available information in the current situation, taking into account the level of uncertainty concerning the future gas flows in Europe with an impact on flows across the Czech Republic;
- There is no cross-subsidisation between intra-system network users and cross-system network users;
- A reasonable price continuity with 2024 is preserved, including tariffs for storage facilities, on which a 100% discount is preserved under Article 9 (1) NC TAR; and
- The prices follow the price benchmark with adjacent transit routes and do not form any barrier to cross-border trade.

7.7 Reasons for dismissing other methodologies

ERO does its best to preserve the continuation of the application of the CWD reference price methodology and therefore does not opt for any alternative methodologies, including e.g. the postage stamp, or for any oversimplifications of the very principles of the CWD methodology.

7.8 Comparison of the proposed methodology (target model) with that described in Article 8 NC TAR

Subchapter 7.4 on the target model outlines its differences from the CWD reference price methodology described in Article 8 NC TAR.

Table 5 Comparison of indicative reference prices in the target model and the methodology described in Article 8 NC TAR

Indicative reference prices			
ENTRY [CZK/MWh/day/year]	**Methodology Article 8 NC TAR**	**Target model**	**Difference**
VIP Brandov	6,193.09	1,127.14	-5,065.95
VIP Lanžhot	3,960.78	720.86	-3,239.92
VIP Waidhaus	7,079.42	1,288.45	-5,790.97
Český Těšín	0.00	0.00	0.00
Dolní Bojanovice UGS (CZ-SK)	1,785.92	0.00	-1,785.92
Storage facilities (CZ)	1,785.92	0.00	-1,785.92
EXIT [CZK/MWh/day/year]	**Methodology Article 8 NC TAR**	**Target model**	**Difference**
VIP Brandov	6,626.85	15,271.72	8,644.86
VIP Lanžhot	4,969.71	11,452.80	6,483.09
VIP Waidhaus	3,721.35	8,575.93	4,854.58
Český Těšín	8,489.53	19,564.30	11,074.77
Dolní Bojanovice UGS (CZ-SK)	3,217.68	0.00	-3,217.68
DSO + DCC	4,152.86	7,937.84	3,784.98
Storage facility (CZ)	3,217.68	0.00	-3,217.68

8 INDICATIVE INFORMATION ABOUT ITEMS REFERRED TO IN ARTICLE 30 (1) (A) NC TAR

The selected parameters such as pressures and other input values applied in the transmission network at its delivery and transfer points meet the requirement for ensuring the safe, economical, and reliable operation of the transmission network. They also help to keep the delivery pressures and volumes specified in interconnection agreements with other transmission system operators, distribution system operators, storage system operators, and directly connected customers. For historical reasons, this configuration meets the requirements for ensuring reliable supply both in the Czech Republic and in neighbouring countries.

For reference price calculation using the CWD methodology, ERO has determined:

- the localities of the entry and exit points of the transmission network (see 8.1),
- the distances between the entry and exit points of the transmission network (see 8.2),
- the forecasted contracted capacities at the entry and exit points (see 8.3), and
- the forecasted flows via the entry and exit points (see 8.4).

The basic parameters and formulas for calculating reference prices using the CWD methodology are described in Article 8 NC TAR.

8.1 Localities of entry and exit points

The exact identification of the physical locality of each entry and exit point of the transmission network is prerequisite for calculating distances between these points. Based on discussion in a working group, ERO has developed a procedure for identifying the physical locality for each of the four types of entry and exit points:

- for virtual interconnection points,
- for interconnection points,
- for delivery points between the transmission network and distribution systems and directly connected customers, and
- for points of storage facilities.

Virtual interconnection points

Under Article 19 NC CAM, virtual interconnection points (VIP) have been established. Capacities will be offered and corresponding tariffs will be set directly at these VIPs.

The Brandov virtual cross-border entry point is composed of the following physical cross-border entry points:

- Hora Svaté Kateřiny – Sayda
- Hora Svaté Kateřiny – Olbernhau II
- BRANDOV – OPAL
- BRANDOV – EUGAL

The Brandov virtual cross-border exit point is composed of the following physical cross-border exit points:

- Hora Svaté Kateřiny
- BRANDOV – STEGAL
- BRANDOV – OPAL
- BRANDOV – EUGAL

Due to the changes in gas flows from the German transmission network to the Czech Republic, GASCADE is planning to discontinue the commercial operation of the Hora Svaté Kateřiny – Olbernhau II cross-border transfer station in 2024. The physical connection between the transmission networks would be preserved for use in case of need. The issue is currently being discussed by the two TSOs.

ERO has determined, for the purposes of calculating distances, the physical locality of the Brandov VIP at the physical point Brandov EUGAL, which is identical with the Brandov OPAL point, the Brandov STEGAL point, and the Hora Svaté Kateřiny point, because most of the forecasted contracted capacity is being planned at these points.

The Waidhaus virtual cross-border point is composed of the Waidhaus entry and exit cross-border point. For the purposes of calculating distances, the physical locality of the Waidhaus VIP has been determined at the Waidhaus point because it is the same point.

For the purposes of calculating distances, the physical locality of the Lanžhot virtual cross-border point is the same as the actual physical locality of this point.

Table 6 Locality of virtual interconnection points

Physical locality of VIPs		Latitude N	Longitude E
VIP Brandov	Physical locality of IP Brandov–OPAL, IP Brandov–STEGAL, and IP EUGAL	50.6435828°	13.3735456°
VIP Waidhaus	Physical locality of IP Waidhaus	49.6542775°	12.5260328°
VIP Lanžhot	Physical locality of IP Lanžhot	48.7171206°	17.0114119°

Interconnection points

For the purposes of calculating distances, the physical locality of the Cieszyn (Český Těšín) interconnection point is the same as the actual physical locality of this point.

Table 7 Locality of interconnection points

Physical locality of interconnection points	Latitude N	Longitude E
Cieszyn (Český Těšín)	49.774454790354°	18.605118759951°

Delivery points between the transmission network and distribution systems and directly connected customers

Because of the large number of delivery stations between the transmission system operator and distribution system operators, ERO has decided that these points will be simplified and their number reduced from several dozen to eight points so that only one virtual point is located in each of the regional zones in which distribution companies have historically operated. As part of the simplification, the physical locality of customers directly connected to the transmission network in a given zone is deemed to coincide with the locality of the virtual point determined by calculation.

The technical capacities of each of the delivery stations are based on the transmission system operator’s documentation and applicable contracts concluded between the transmission system operator and the operator of a given distribution system. Any technical constraints, such as those for adding up technical capacities, have been taken into account.

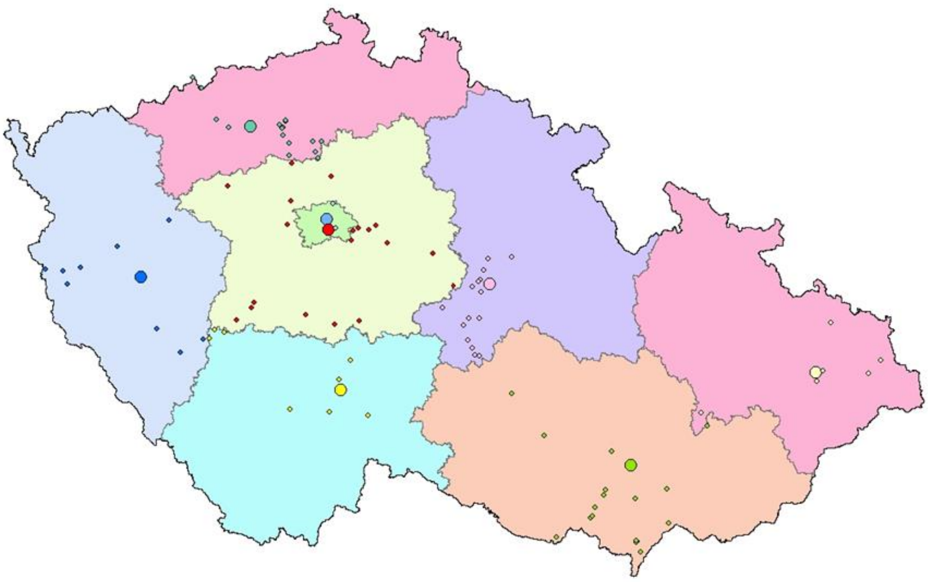
Combining entry and exit points into clusters is allowed under Article 8 (1) (c) NC TAR. The coordinates of the virtual point have been determined by aggregating the coordinates of the delivery stations in each zone separately, weighted by the technical capacity. The resulting coordinates do not change over time, and the level of the tariffs is predictable.

Based on its calculations ERO has set, for the purposes of calculating distances, the resulting physical localities of virtualised delivery points between the transmission network and distribution systems and directly connected customers as follows:

Table 8 Localities of virtual points of DSOs + DCCs

Zone	Locality of the virtual point	
	Latitude N	Longitude E
Pražská plynárenská Distribuce (PPD)	50.0870389°	14.4848375°
EG.D	49.3144286°	14.7444608°
GasNet, NW Bohemia, central zone	50.0072292°	14.5626833°
GasNet, NW Bohemia, western zone	49.6970836°	13.2288914°
GasNet, NW Bohemia, northern zone	50.4607422°	13.8450022°
GasNet, Eastern Bohemia	49.8854014°	15.7057061°
GasNet, Southern Moravia	49.1217308°	16.8554186°
GasNet, Northern Moravia	49.6531936°	18.0720167°

Figure 1 Localities of physical points between the transmission network and distribution systems and directly connected customers in distribution zones, and of virtual points



Points of storage facilities

The localities of the physical points of underground gas storage facilities, whose localities match the eight storage facilities connected to the transmission network, have been aggregated into a single virtual point. ERO decided to create the coordinates of the aggregated virtual point in two steps:

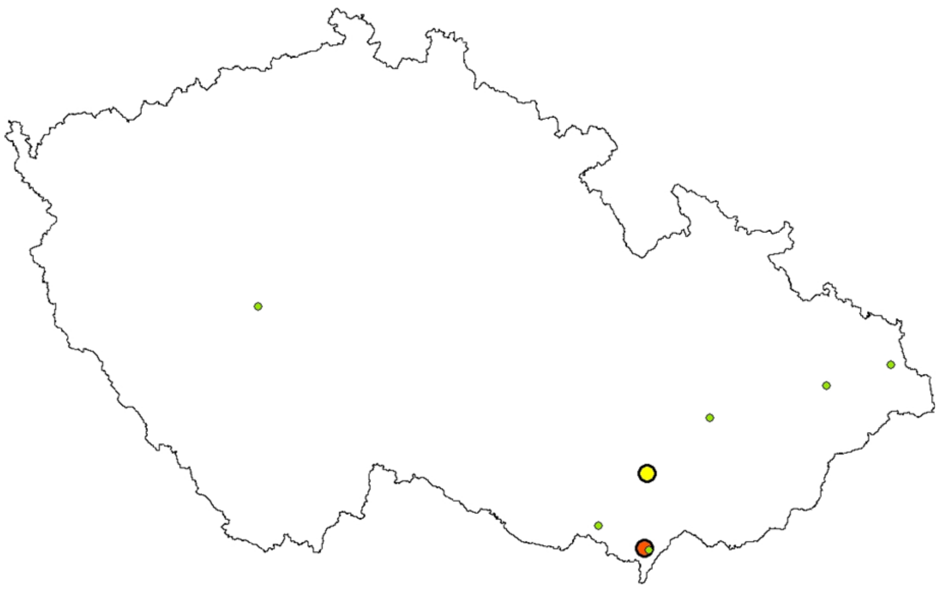
- In the first step, it created the coordinates of the entry point and the exit point based on aggregating the coordinates of the individual localities of the physical points of storage facilities weighted by their maximum daily withdrawal/injection capacity. Since the maximum daily capacities for withdrawal and injection differ, the result is different pairs of coordinates for the virtual entry point of storage facilities and for the virtual exit point of storage facilities.
- In the second step, it used a simple average of these two pairs of coordinates to find the coordinates of a single aggregated virtual point of storage facilities.

The locality of the physical point of the Dolní Bojanovice cross-border UGS facility matches its actual locality in the Czech Republic. Within the transmission service, for the purpose of using it for the Czech market's needs this UGS facility will be aggregated with the virtual point of the storage facility. Within the service of the cross-border use of the storage facility and direct connection to the transmission networks of two TSOs (NET4GAS and eustream, a.s.), where the facility will allow the delivery of gas between the two countries' gas systems, a point competing with IP Lanžhot will be created.

Table 9 Locality of the aggregated virtual point of the storage facility and the Dolní Bojanovice cross-border UGS facility

Locality of the aggregated VIP point and the cross-border UGS facility	Latitude N	Longitude E
Aggregated virtual point of the storage facilities	49.1191736°	16.9028289°
Locality of the Dolní Bojanovice UGS	48.7762939°	16.9381208°

Figure 2 Locality of the physical points of the storage facilities and of the virtual point



8.2 Distance between entry and exit points

The distances between the entry and exit points of the transmission network are one of the basic inputs when applying the CWD methodology. The calculation of distances is closely related to the determination of localities in subchapter 8.1.

Complying with Article 8 (1) (c) NC TAR, the shortest distances of the pipeline routes between an entry point or a cluster of entry points and an exit point or a cluster of exit points were taken into consideration. For calculating the matrix of distances, first of all the possible directions of the gas flow in the network, which are feasible when the technical parameters of the network are taken into account and which are depicted in Figure 3 were determined.

For each entry point *En* and each exit point *Ex*, just one physical locality, which is exactly defined in 8.1, exists. For localities of the points situated right on the route of a pipeline in the transmission network, the calculation of distances is determined as the distance of the pipeline route (the shortest path that is feasible when the technical constraints are taken into account). For localities of virtual points situated outside the pipeline route ERO has determined an algorithm for calculating this distance. The algorithm takes into account:

- the distance, as the crow flies, from the virtual entry point to the delivery station that is the closest to this point,

- the distance along the pipeline to the exit point (or the delivery station that is the closest to the virtual exit point), and
- the distance, as the crow flies, from the delivery station to virtual exit point.

Table 10 lists all the distances.

Table 10 Matrix of distances between entry and exit points of the transmission network

Distances (km)		En1	En2	En3	En4	En5 (S1)	En6 (S2)
		VIP Brandov	VIP Lanžhot	VIP Waidhaus	Český Těšín	UGS	Dolní Bojanovice UGS
Ex1	VIP Brandov	0.0	380.5	170.0	0.0	409.0	378.0
Ex2	VIP Lanžhot	380.5	0.0	400.5	0.0	88.0	9.8
Ex3	VIP Waidhaus	170.0	400.5	0.0	0.0	403.0	378.5
Ex4	Český Těšín	595.0	228.0	596.0	0.0	310.0	218.0
Ex5	PPD aggregation	162.0	270.0	287.0	0.0	273.5	259.5
Ex6	GasNet NW Bohemia, central zone, aggregation	161.0	269.0	286.0	0.0	272.5	258.5
Ex7	EG.D aggregation	240.0	236.5	190.0	0.0	230.0	217.0
Ex8	GasNet NW Bohemia, western zone, aggregation	142.5	447.5	66.5	0.0	378.0	365.0
Ex9	GasNet NW Bohemia, northern zone, aggregation	59.0	340.0	195.5	0.0	344.5	332.5
Ex10	GasNet E Bohemia aggregation	245.5	200.5	473.5	0.0	204.5	192.0
Ex11	GasNet S Moravia aggregation	387.5	83.5	388.5	0.0	4.5	74.5
Ex12	GasNet N Moravia aggregation	535.0	168.0	536.0	0.0	250.0	158.0
Ex13 (S1)	UGS	409.0	88.0	403.0	0.0	0.0	79.0
Ex14 (S2)	Dolní Bojanovice UGS	378.0	9.8	378.5	0.0	78.0	0.0

8.3 Forecasted contracted capacity at entry and exit points

Another cost driver entering the calculation of the resulting tariffs using the reference price methodology under Article 8 NC TAR is the forecasted contracted capacities at entry and exit points. Technical capacities at entry and exit points do not influence the resulting reference price and therefore only the forecasted contracted capacity is used in compliance with Article 4 (1) (a) NC TAR.

Forecasted contracted capacities have been derived based on an expected flow scenario. The capacities for national transmission have been forecasted based on the country's normal off-take and the historical injection and withdrawal curves of storage facilities.

For calculating the yearly values, ERO has developed an algorithm for each of these types of points:

- for virtual interconnection points and for interconnection points,
- for delivery points between the transmission network and distribution systems and directly connected customers,
- for points of storage facilities in the Czech Republic, and
- for the cross-border UGS facility.

The yearly values of forecasted contracted capacity are based on the use of capacities during a given calendar year; they therefore also include the size of the proposed multipliers, take into account the existing contracts, historical situation, and forecasted evolution, and represent the sum of capacities related to national transmission and to international transmission if relevant for a given point.

Virtual interconnection points and interconnection points

Forecasted contracted capacity at entry cross-border points equals the sum of the Czech Republic's expected consumption and the transit capacities in the consulted period. Forecasted contracted capacities at exit cross-border points (190 GWh/day/year) reflect the earlier forecasts of gas transit flows through the Czech transmission network and also the actual, lower than formerly expected, transit flows in 2023.

For 2025 we use the assumption that the existing gas flows across Ukraine will be discontinued and partly replaced with flows across the Czech Republic to supply gas to Slovakia, Hungary, and Austria.

The expected booking of transit capacities is 190 GWh/day/year for 2025; if 90% of these capacities are used the transmission of 62 TWh of gas across the Czech Republic to adjacent countries will be possible.

Table 11 Forecasted contracted capacity at cross-border points

Forecasted contracted capacity at cross-border points [MWh/day/year]	**Entry cross-border points**	**Exit cross-border points**
VIP Brandov	426,566	0
VIP Lanžhot	0	185,200
VIP Waidhaus	0	0
Český Těšín	0	4,800

Delivery points between the transmission network and distribution systems and directly connected customers

The forecasted contracted capacity at delivery points between the transmission network and distribution systems has been determined as the sum of the forecasted contracted capacities in each of the zones for

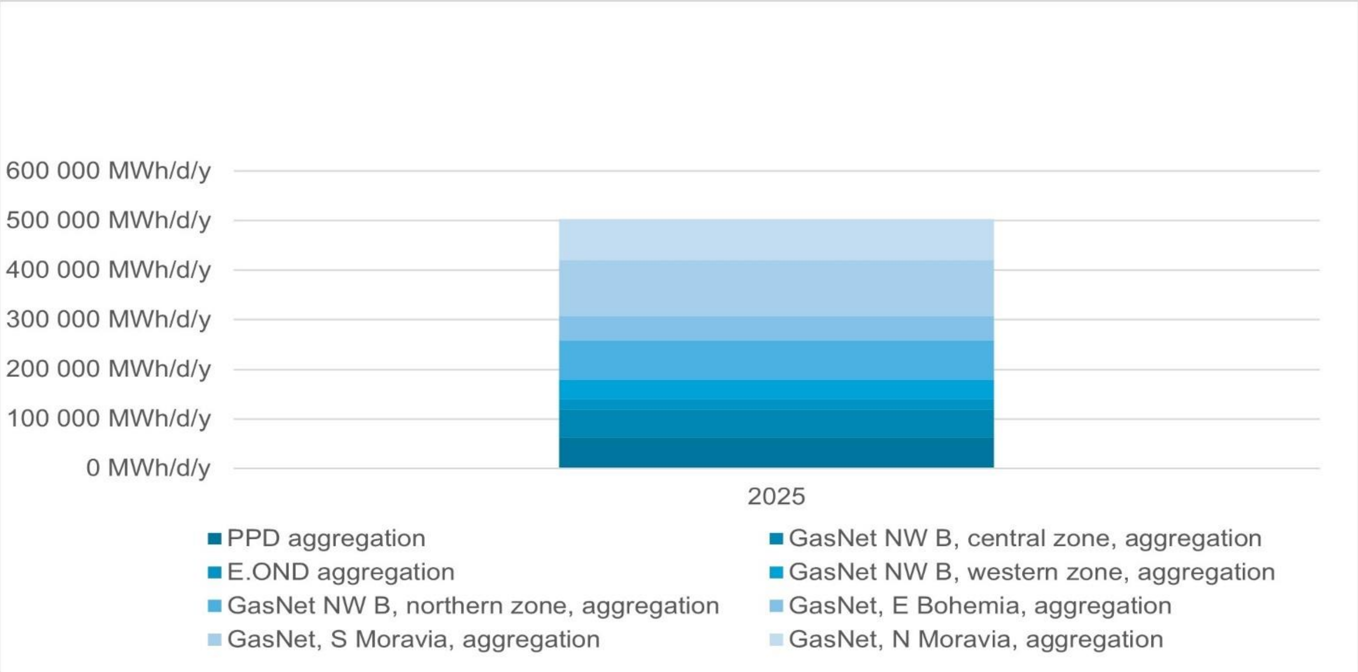
- the forecasted contracted capacities between the transmission network and a distribution system, and
- the forecasted contracted capacities between the transmission network and directly connected customers.

Since directly connected customers are always situated in one of the eight distribution zones in which distribution companies have historically been operating, their forecasted contracted capacities are added to the forecasted contracted capacity of the particular zone. The sum of the forecasted contracted capacities of all eight zones does not change over time and its amount is shown in Table 12 and Chart 5. This value is based on a three-year average of the maximum daily consumption, in cubic metres, of all eight distribution zones entering the matrix of distances used in the calculations under the CWD methodology and on the forecasted contracted capacities of directly connected customers. The forecasted contracted capacities of directly connected customers are based on the values planned for 2024 and will be used as constant values for the effective year of the consulted NC TAR period, i.e. 2025.

Table 12 Forecasted contracted capacity between the transmission network and distribution systems and directly connected customers

Forecasted contracted capacity between the transmission network and distribution systems and directly connected customers [MWh/day/year]	503,620

Chart 5 Forecasted contracted capacity between the transmission network and distribution systems and directly connected customers



Points of storage facilities

The forecasted contracted capacity of the points of storage facilities located in the Czech Republic has been aggregated for all storage facilities and determined with regard to the expected usage of the capacities, including the predominating short-term bookings. It is based on the average of the actual yearly usage of storage capacities for 2020-2022.

The forecasted contracted capacity of the Dolní Bojanovice cross-border UGS facility has been determined with regard to the average usage of the capacities of aggregated storage facilities in the Czech Republic for the last three years (2020-2022), including the predominating short-term bookings with half the weight reflecting the cross-border operation of the storage facility.

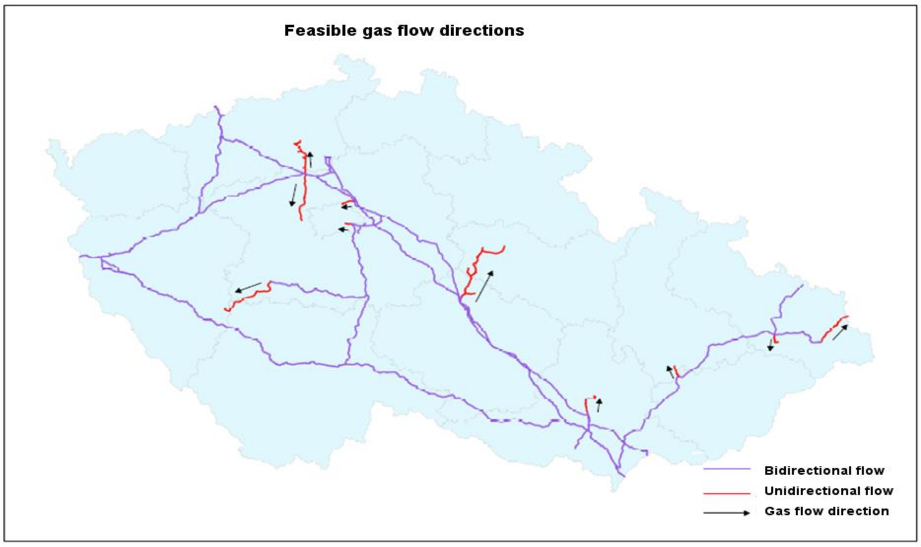
Table 13 Forecasted contracted capacity of the points of storage facilities

Forecasted contracted capacity of storage facilities points [MWh/day/year]	**Entry points**	**Exit points**
Storage facilities (CZ)	135,112	105,026
Dolní Bojanovice UGS (CZ-SK)	9,361	7,853

8.4 Quantity and direction of gas flows for entry and exit points

The quantity and the direction of the gas flow for entry and exit points are the basis for determining commodity-based transmission tariffs. The technically feasible directions of gas flows are depicted in Figure 3. At all entry and exit cross-border points, bidirectional gas flows are feasible, with the exception of the Český Těšín (Cieszyn) point where only exit from the transmission network is possible. Virtual delivery points between the transmission network and distribution systems and directly connected customers enable only exit from the transmission system. The need to install reverse flow at delivery stations between a distribution system and the transmission network due to the growing biomethane production connected to a distribution network in the Czech Republic is not expected until 2025. The aggregated virtual point of storage facilities enables entry and exit into/from the transmission network.

Figure 3 Feasible gas flow directions



Forecasted flows at entry and exit points

The forecasted flows are based on forecasted booked capacities at the various entry and exit points and the expected consumption in the Czech Republic.

The expected flows for the country's consumption and for storage facilities can be based on a stable use of storage facilities and the expected evolution of the demand for gas for the Czech Republic in 2025. It is much more complicated to determine the forecasted flows via exit cross-border points because of their dependence on many external variables (gas-to-gas competition in the EU, geopolitical impacts of the war in Ukraine, weather, etc.).

The resulting forecasted flows at entry points for 2025 are shown in Table 14. It clearly indicates the dominant role of the Brandov VIP, which contributes 100% to gas imports into the Czech Republic. The domestic point representing the country's gas consumption and the Lanžhot cross-border point, via which cross-system gas transmission takes place almost entirely, predominate among the exit points of the transmission network.

Table 14 Forecasted flows at entry and exit points

Forecasted flows at points [TWh]	**Entry point**	**Exit points**
Consumption in the Czech Republic	0.0	77.5
UGS	27.0	27.0
VIP Brandov	139.9	0.0
VIP Lanžhot	0.0	60.6
VIP Waidhaus	0.0	0.0
Český Těšín	0.0	1.8

8.5 The structural representation of the transmission network with an appropriate level of detail

Figure 4 Structure of the transmission network

9 INFORMATION PUBLISHED UNDER ARTICLE 26 (1) (A) (V) NC TAR

Article 7 NC TAR and Article 13 of Regulation 715/2009/EC set out the elementary requirements for tariffs related to access to the transmission network. ERO has concluded that these requirements must be met while taking into account the national specificities.

ERO is convinced that the proposed model takes into account the above specificity and complies with legislative requirements. At the end of the day, it provides for a fair allocation of costs to different network users. The applied methodology takes into account all the key allocation factors as well as distances between the relevant points, and the capacities at those points. It is therefore a comprehensive model that

- minimises the possibility of a dramatic change in tariffs at the affected interconnection points in the case of the absence of long-term transmission capacity bookings,
- promotes the efficient utilisation of the transmission network,
- prevents cross-subsidisation between network users, and
- encourages cross-border trade.

10 THE COMMODITY-BASED TRANSMISSION TARIFFS (FLOW-BASED CHARGE)

10.1 The manner in which the flow-based charge is set

For recouping the costs incurred in the operation of compressor and delivery stations, cost allocation to the commodity component of the price at the exit points of the transmission network has been used in the Czech Republic for a long time. The proposal for 2025 preserves this cost recouping in the commodity component of the price at the exit points of the transmission network.

The flow-based charge includes the following constituents:

- the cost of gas and electricity bought for running compressor and delivery stations,
- the purchase cost of gas to cover losses in the network, and
- taxes and the cost of emission allowances.

The quantity of gas and electricity for running compressor and delivery stations is derived from the energy quantity planned to be transmitted through the network, and the electricity and fuel gas quantity derived from that based on hydraulic simulation. The amount of losses planned for the regulated year is set as a rolling arithmetic average of a five-year series of the reported actual losses in the transmission network.

This component of the price is independent of the other investment and operating costs of gas transmission, which are allocated to the fixed component of the price for booked capacity. In practice, this component is therefore independent of the costs, depreciation, and profit related to the equipment itself.

For exit cross-border points, the price will be calculated as a coefficient multiplied by the market operator's index for a given day of transmission. The resulting daily price in EUR/MWh is translated into CZK/MWh at the daily rate published by the Czech National Bank on the current gas day.

For the exit point to the virtual storage facility and to customers directly connected to the transmission network and for the exit point via the aggregate of the delivery points between the transmission network and a distribution system, the price will be set for the given year in CZK/MWh.

The flow-based charge has been set by applying Article 4 (3) (a) (ii) NC TAR on the basis of forecasted flows.

The entry-exit commodity split has been set at 0/100, in line with the practice in the Czech Republic up to now, whereby the commodity component of the tariff has been set at the exit points only, and has been zero at the entry points.

10.2 The share of the allowed or target revenue forecasted to be recovered from such tariffs

In the Czech Republic, the transmission services revenue is composed of a capacity component and a commodity component. The capacity component of the transmission services revenue is based on the allowed revenue and the target revenue. The commodity component of the transmission services revenue is comprised of commodity-based transmission tariffs. Due to this separation the share of the allowed or target revenue to be recovered from commodity-based tariffs has not been determined.

10.3 The indicative commodity-based transmission tariffs

The indicative level of the flow-based charge is set at exit cross-border points as a coefficient for calculating the quantity of gas and electrical energy for running compressor and delivery stations in the transmission network multiplied by the commodity charge. Table 15 shows the forecasted level of the coefficient.

The indicative level of the flow-based charges at the exit points for intra-system gas transmission is set out in CZK/MWh. Table 16 lists the forecasted levels of the charges. This is an assumption based on the currently prevailing gas and electricity prices and it will be updated during 2024.

Table 15 Indicative flow-based charge at exit cross-border points

Commodity-based tariffs [koef x C_{OTE}*/MWh]	**2025**
For an exit point for cross-system network use; koef	0.0014

* C_{OTE} is the spot gas market index

Table 16 Indicative flow-based charge at the exit points for intra-system gas transmission

Commodity-based tariffs [CZK/MWh]	**2025**
For an exit point for intra-system network use (DSO and DCC)	1.71
For an exit point pro intra-system network use (UGS)	1.71

10.4 Correction of the actual costs and revenue in the case of the flow-based charge

To ensure the cost neutrality of the variable component of the price for the transmission system operator, a mechanism will exist based on the standard yearly correction applied to all points with flow-based charges.

10.5 Cost allocation comparison index for commodity-based transmission tariffs

Under Article 5 (1) (b) (i) NC TAR, for a cost allocation assessment relating to commodity-based transmission tariffs the values of the quantity planned to be transmitted were used. Since commodity-based tariffs have been set at the same level at all exit points and the only cost driver is the transported gas quantity, the cost allocation index is 0%.

11 THE DIFFERENCE IN THE LEVEL OF TRANSMISSION TARIFFS FOR THE PREVAILING TARIFF PERIOD AND THE PERIOD THAT THE CONSULTED PROPOSAL CONCERNS

The difference in the level of the transmission tariffs for the same type of transmission services applicable for the prevailing tariff period and for the tariff period for which the information is published is shown in Table 17.

Table 17 Difference in the level of transmission tariffs

Indicative reference prices			
ENTRY [CZK/MWh/day/year]	**2024**	**2025**	**Difference**
VIP Brandov	1,054.24	1,127.14	7%
Lanžhot	632.35	720.86	14%
VIP Waidhaus	1,124.28	1,288.45	15%
Český Těšín	280.39	0.00	
Dolní Bojanovice UGS (CZ-SK)	0.00	0.00	
Storage facilities (CZ)	0.00	0.00	
EXIT [CZK/MWh/day/year]	**2024**	**2025**	**Difference**
VIP Brandov	7,210.38	11,734.35	63%
Lanžhot	6,714.53	8,800.00	31%
VIP Waidhaus	3,694.01	6,589.50	78%
Český Těšín	10,208.39	15,032.65	47%
Dolní Bojanovice UGS (CZ-SK)	0.00	0.00	
DSO + DCC	7,894.44	7,937.84	1%
Storage facilities (CZ)	0.00	0.00	

Flow-based charge			
EXIT [CZK/MWh]	**2024**	**2025**	**Difference**
Exit cross-border point	0.0058 x C_{OTE}*	0.0014 x C_{OTE}*	-76%
Exit point to storage facilities	1.06	1.71	55%
Exit domestic point	1.48	1.71	11%

* C_{OTE} is the spot gas market index

11.1 The simplified tariff model

The simplified tariff model is published on ERO’s website.

12 FIXED PAYABLE PRICE

The approach of the fixed payable price described in Article 24 (b) NC TAR will not be used in 2025.

13 CONSULTATION UNDER ARTICLE 28 NC TAR

13.1 Setting the level of multipliers

The general principles for setting the level of multipliers

The transmission network has been designed with a capability to transport large gas flows under peak conditions. However, it is utilised only partly under average conditions. Multipliers applied to tariffs for short-term products with a shorter period of validity make it possible to charge more to the network users who contribute to the peak demand than to the network users with a flat profile of transmission requests.

When using these multipliers, it is crucial to strike a balance between the efficient utilisation of the network and revenue recovery. Low values of multipliers incentivise traders to shape the profile of their transmission capacity bookings to their own needs, while high values of multipliers should increase their interest in longer-term bookings (yearly or longer bookings).

Thus, the following aspects had to be taken into account when determining the level of multipliers, in compliance with the NC TAR[8]:

- The balance between facilitating short-term gas trade and providing long-term signals for efficient investment in the transmission network;
- The impact on the transmission services revenue and its recovery;
- The need to avoid cross-subsidisation between network users and to enhance cost-reflectivity of reserve prices;
- The situations of physical and contractual congestion; and
- The impact on cross-border flows.

By their very nature, multipliers therefore determine the level of the price differentiation between capacity products with different durations (yearly, quarterly, monthly, daily, and within-day).

Table 18 Assessment criteria for setting multipliers

Assessment criterion	Low value of the multiplier	High value of the multiplier
The need to avoid cross-subsidisation between network users and to enhance cost-reflectivity of reserve prices	-	+
Preventing situations of physical and contractual congestion	+	+
Facilitate short-term gas trade	+	-
Long-term signals pro efficient investment in the transmission network	-	+
Impact on the transmission services revenue and its recovery	-	+
Impact on cross-border flows	0	0

Arguments in favour of setting a high level of multipliers:

- It promotes transmission capacity bookings on a yearly basis;
- Traders pay for their peak demand for capacity; it is a cost-reflective parameter.

However, the price for booking transmission capacity for less than a year reflects costs only when used for profile-shaping bookings. At the same time, the forecasts for network usage should be taken into account. If it is not possible to determine such forecasts with an acceptable level of probability, the value of the individual multipliers is a tool for achieving cost pass-through into the applied tariff.

From the perspective of long-term signals for efficient investment in the transmission network it is relevant to note that a low value of multipliers renders yearly capacity products relatively unattractive. Traders are not motivated to use these products in the following gas year. Where clear signals for efficient investment are not provided, there is a risk of insufficient investment in the network. Naturally, it is also true that there is a risk of too high investment having no support in demand for transmission capacity.

8 Article 28 (3) (a) NC TAR

Low values of multipliers bring positive benefits for the sale of capacity products on a short-term basis. Transmission capacity bookings will directly correlate with the need to actually use such capacity, such use reflecting the currently prevailing conditions determining demand for gas. The transmission network users therefore have at their disposal a very flexible tool for responding to dynamic changes in the market.

Positive benefits of the low and high levels of multipliers can be identified in the aspect of physical and contractual congestion. Low values of multipliers support capacity sales based on the market situation, triggering an effect in the form of lower sales of unused capacity, which makes this a measure directed towards the prevention of contractual congestion. On the other hand, a high level of multipliers provides a signal for efficient investment in the network, which therefore makes this a measure directed towards the prevention of physical congestion.

In the case of impacts on cross-border gas flows, it is not feasible to identify clear-cut arguments for a low or a high level of multipliers. The impact on the cross-border flow is primarily determined by the price differentials between markets and the expected development of this spread. As mentioned above, a low level of multipliers encourages the sale of transmission capacity in relation to the prevailing market situation, which helps traders to respond dynamically to changes in price spreads, resulting in increased cross-border gas flows. On the other hand, a high level of multipliers promotes long-term capacity products. Once the transmission capacity has been bought, it constitutes sunk costs, and any price differential can be used for recovering these costs, which in turn leads to increased cross-border gas flows.

The above clearly suggests that not only a single correct solution to the problem of setting the level of multipliers exists. The multipliers should always carry information that the choice of a particular capacity product is a compromise between the costs of acquiring such product and its added value, where both of these factors must be related to the price of the yearly capacity product. The costs of transmission capacity are mainly caused by the size of the demand for this capacity. The transmission system operator maintains an extensive network with sufficient capacity to be able to meet requests for transmission in periods of peak demand. From the perspective of determining the size of the network, transmission capacities are therefore available not only in periods of peak consumption but also for the rest of the year. The costs of providing short-term transmission capacity in the periods of high demand therefore do not differ significantly from the costs of offering capacities during the year.

Since a multiplier = 1 cannot be regarded as adequate and matching the situation in the Czech gas market, it is unquestionably very evident that the multiplier must be higher. Its value must create the conditions for striking a balance between the various capacity products so that each of these products enjoys a justified slot in each trader's capacity portfolio (if the value of the multiplier for the quarterly capacity product is higher than for the monthly product, or if the value is the same, the quarterly product will not have any added value). The baseline assumption for setting multipliers is that a quarterly multiplier is lower than a monthly one, which is lower than a daily one, which is lower than a within-day one (the price for within-day transmission capacity booking is set as 1/24 of the daily price for each hour remaining until the end of the gas day).

Consulted levels of multipliers

Table 19 Levels of multipliers set for 2025

Levels of multipliers	
Capacity product	**Multiplier**
Quarterly	1.1
Monthly	1.25
Daily	1.5
Within-day	1.7

The proposed levels of multipliers meet the requirements of Article 13 NC TAR, namely ranging from 1 to 1.5 for quarterly and monthly capacity products and from 1 to 3 for daily and within-day products.

13.2 Setting the levels of seasonal factors and the calculations referred to in Article 15 NC TAR

Seasonal factors for calculating reserve prices for capacity products are not used in the Czech Republic and their introduction in the future is not envisaged. In relation to the earlier consultations on proposals for the rules of gas market functioning in the Czech Republic, no demand for introducing seasonal transmission tariffs was expressed by the users or the transmission system operator. The probable reason is the existence of short-term transmission tariffs, which makes it possible for transmission network users to structure their capacity requirements to a sufficient extent while taking into account the need to cover the costs caused by short-term transmission tariffs. Because of the size of the Czech transmission network, no cases occur where, for example, a winter season sees shortages of available transmission capacity and such circumstance, and the related higher costs, have to be reflected in the structure of transmission tariffs.

13.3 Discounts referred to in Article 9 (2) and Article 16 NC TAR

In the Czech Republic, no LNG facilities or infrastructure developed with the purpose of ending the isolation of EU member states are currently being operated. Article 9 (2) of the NC TAR will therefore not be applied.

In the Czech Republic, the approach of the ex-post discount, whereby network users are compensated after the actual interruptions occurred, has so far been applied for calculating the reserve prices for capacity products for interruptible capacity. ERO determines the size of such compensation in a transparent manner.

Because of the sufficient amount of transmission capacities at all entry and exit cross-border points, ERO does not have any data on the basis of which it could determine the probability of interruptions required for calculating ex-ante discounts at the various entry or exit cross-border points.

Under Article 16 (4) NC TAR, the ex-post discounts will therefore be applied to capacity products for interruptible capacity (compensations for interruptions) for the interrupted portion of capacity; the amount is three times the charge for daily standard firm capacity. In the event of an interruption at a cross-border point, ERO will analyse the probability of interruption and an ex-ante discount under Article 16 (2) NC TAR will be introduced for the following period.

Annex 1 List of Figures

Annex 2 List of Tables

Annex 3 List of Charts

Gas Price Control Unit

Issued on: 18 December 2023

In the case of differences between the two language versions the Czech version shall prevail.

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