

CONSULTATION DOCUMENT pursuant to Article 28 of the Commission Regulation (EU) 2017/460 of 17 March 2017 establishing a network code on harmonized transmission tariff structures for gas

Warsaw, 13 October 2020

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1. Legal basis¹

On 6 April 2017, the Tariff Code² entered into force and it has been applied since that date, with the exception of the provisions of Chapters VI and VIII, which have been applied since 1 October 2017 and Chapters II, III and IV, which have been applied since 31 May 2019.

The purpose of the Tariff Code is to harmonize the transmission tariff structures of the Member States' operators and to determine certain tools enabling the comparison of transmission tariffs applied in the EU, while maintaining flexibility of the selection of the reference price methodology elements, allowing adjustment to the maturity level of a given market and the level of transmission network complexity.

Pursuant to Article 23 item 2 section 11a of the Energy Law Act of 10 April 1997 (Journal of Laws of 2020 item 833, as amended), the scope of activity of the President of ERO includes, among others, (...) performance of the regulatory authority's obligations arising from ordinances adopted under Article 8 and Article 23 of Regulation 715/2009³ (including the Tariff Code).

The following, 3rd consultation with the regulatory authorities of all directly connected EU Member States and with relevant stakeholders, results from the President of ERO obligations set out in Article 28 of the Tariff Code, refers to:

- a) the level of multipliers,
- b) the level of seasonal factors and their calculations specified in Article 15 of the Tariff Code,
- c) the levels of discounts at entry points from the LNG terminal and discounts applied to calculate the reserve prices for standard capacity products for interruptible capacity set out in Article 9 item 2 and Article 16 of the Tariff Code,

for the transmission network of Operator Gazociągów Przesyłowych GAZ-SYSTEM S.A., hereinafter referred to as "the Operator" or "the TSO", and the transmission network owned by the energy company SGT EuRoPol GAZ S.A., hereinafter referred to as "EuRoPol GAZ", for which the Operator performs the function of a gas transmission system operator, based on the decision of the President of ERO of 17 November 2010 ref. no. DPE-4720-4(8)/2010/6154/BT.

Second consultation in a above scope was carried out from 14 October till 14 December 2019.

Once the consultations had been completed, pursuant to Article 41(6)(a) of Directive 2009/73/EC, on 6 March 2020 the President of ERO issued and published a reasoned decision (the Communiqué)⁴ relating to the aspects referred to in Article 28 sections a)-c) of the Tariff Code. The Communiqué was included in a calculation of 2021 tariffs for the Operator and EuRoPol GAZ, respectively. Pursuant to Article 28 paragraph 2 of the Tariff Code the subsequent consultations shall be conducted every tariff period. According to the definition set out in Article

¹ In case of any inconsistencies between the Polish and English version of the hereby document, the Polish version shall prevail.

² Commission Regulation (EU) 2017/460 of 16 March 2017 establishing a network code on harmonized transmission tariff structures for gas (OJ L 72 of 17.03.2017, p. 29).

³ Commission Regulation (EC) 715/2009 of the European Parliament and of the Council of 13 July 2009 on conditions for access to the natural gas transmission networks and repealing Regulation (EC) No. 1775/2005 (OJ L 211 of 14.08.2009, p. 36).

⁴ https://www.ure.gov.pl/pl/biznes/taryfy-zalozenia/-2019/8439,Konsultacje-w-zakresie-rabatow-mnoznikow-i-wspolczynnikow-sezonowych-do-taryf-na.html

3(23) of the Tariff Code, tariff period means the time period during which a particular level of reference price is applicable, which minimum duration is one year and maximum duration is the duration of the regulatory period. As tariffs for gaseous fuel transmission services are approved for a period of 12 months, this consultation shall be held each year.

This consultation pertains to the last year of the validity of *the Reference price methodology No.* 1/OGP for the own transmission network of Gas Transmission Operator Gaz-System S.A. for the period: from 1 January 2020 to 31 December 2022⁵, hereinafter referred to as "MWCR OGP" and the Reference Price Methodology No 1/SGT for the transmission network owned by the energy company System Gazociągów Tranzytowych EuRoPol GAZ S.A. with its registered office in Warsaw for the period from 1 January 2020 to 31 December 2022⁶.

2. Implementation

2.1. Deadlines

This document has been developed and published under the consultation carried out by the President of ERO for 2022 gas transmission tariffs, with respect to (1) the transmission network owned by the TSO and (2) the transmission network owned by EuRoPol GAZ.

During the consultation process spanning from **14 October to 14 December 2020**, stakeholders may send their comments to a dedicated e-mail address: **konsultacje.nctar@ure.gov.pl**, using the enclosed template.

Comments, opinions and proposals that will be submitted should include reasoning. Avoiding general statements, comments and reservations is recommended to enable better understanding of these proposals.

Data submitted to the President of ERO containing company's sensitive commercial information that must not be revealed to third parties should be marked.

Once the consultation has been completed, the President of ERO, pursuant to Article 28 items 2 and 3 of the Tariff Code, shall take a decision relating to the aspects referred to in Article 28 item 1 of the Tariff Code with respect to the transmission network of the TSO and the network owned by EuRoPol GAZ, considering the positions of the regulatory authorities of directly connected Member States.

The decision shall be published in the form of the President of ERO communiqué by the end of March 2021.

2.2. Important factors of the consultation

Pursuant to Article 28(3) of the Tariff Code, when taking a decision on the consulted aspects, the President of ERO takes into account the responses received under the consultation, and the following aspects:

a) with regard to multipliers:

⁵ https://www.ure.gov.pl/pl/biznes/taryfy-zalozenia/wyznaczanie-cen-referen/8186,Kodeks-sieci-dotyczacy-zharmonizowanych-struktur-taryf-przesylowych-dla-gazu.html

⁶ https://www.ure.gov.pl/pl/biznes/taryfy-zalozenia/wyznaczanie-cen-referen/8186,Kodeks-sieci-dotyczacy-zharmonizowanych-struktur-taryf-przesylowych-dla-gazu.html

- the balance between facilitation of short-term gas trading, and providing long-term signals for efficient investment in the transmission system,
- 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,
- situations of physical and contractual congestion,
- the impact on cross-border flows,

b) with regard to seasonal factors:

- impact on facilitating the economic and efficient utilisation of the infrastructure,
- the need to improve the cost-reflectivity of reserve prices.

Both the Operator and EuRoPol GAZ will take into account the decision of the President of ERO on the consulted aspects in the calculation of tariffs for gas transmission services submitted for approval. These provisions will apply to settlements with users of the transmission system as soon as the decisions approving the 2022 tariffs for gaseous fuels become effective.

3. Polish natural gas transmission system

The Polish natural gas transmission system consists of the transmission system owned by the TSO and the transmission system owned by EuRoPol GAZ.

The TSO holds a licence for the transmission of gaseous fuels in the territory of the Republic of Poland, granted by the decision of the President of ERO of 30 June 2004, ref. no.: PPG/95/6154/W/2/2004/MS (as amended), whereas EuRoPol GAZ holds a licence granted by the decision of the President of ERO of 18 July 2008 ref. no.: PPG/102/3863/W/2/2008/BP.

By the decision of 23 June 2006, ref. no.: DPE-47-4(2)/6154/2006/BT (as amended), the President of ERO designated the TSO as the operator of the gas transmission system in the territory of the Republic of Poland for the period up to 6 December 2068. Then, by the decision of 17 November 2010, ref. no.: DPE-4720-4(8)/2010/6154/BT, the President of ERO, ex officio, designated the TSO as the operator of the gas transmission system for the section of the Yamal-Western Europe gas pipeline, located in the territory of the Republic of Poland, which owner is EuRoPol GAZ, for the period up to 31 December 2025.

The current way of functioning of the part of the transmission system owned by EuRoPol GAZ is affected by acquired rights related to the so-called historical contracts. This issue is regulated by the Act of 26 July 2013 amending the Energy Law Act and certain other acts (Journal of Laws of 2013 item 984) – hereinafter referred to as "the Amending Act".

Pursuant to Article 22 item 1 of the amending Act, energy enterprises, which were owners of the transmission network as at 3 September 2009, maintained the right to execute contracts on providing gaseous fuels transmission services, concluded before that date, until they expire, with no option to be extended. The need for such rules arose from the necessity to protect acquired rights resulting from concluded contracts. This solution has been accepted in the TSO certification process by the European Commission.

As a result, during the transitional period (that is during the period when historical gas transmission contracts remain valid), both the Operator and EuRoPol GAZ, pursuant to Article 47

item 1 of the Energy Law Act, according to the licences held, calculate separate tariffs with respect to own transmission networks and submit them to the President of ERO for approval. In connection with the above, also the consultation referred to in Article 28 item 1 sections a)-c) of the Tariff Code, during the transitional period, is conducted in the scope of TSO and EuRoPol GAZ tariffs.

Tariffs for gas transmission services for 2021 for the above mentioned enterprises have been approved, taking into account *the Communiqué of the President of ERO No. 14/2020 of 6 March 2020 concerning multipliers, seasonal factors and discounts, referred to in article 28(1)(a) to (c) of the Tariff Code, to be taken into account in the tariffs calculation for gaseous fuels transmission services for the period from 1 January 2021 to 31 December 2021.* However, the results of this consultation, will be included in tariffs for 2022 and in a publication done by the Operator pursuant to article 29 of the Tariff Code, that is no later than 30 days before the annual capacity auction, which will take place in July 2021.

4. Consultations regarding the TSO tariff

4.1. Multipliers referred to in Article 28 item 1 section a) of the Tariff Code

In Article 13 item 1 of the Tariff Code, the permissible values of multipliers for the following capacity products have been specified:

- quarterly and monthly standard capacity products not less than 1 and not more than 1,5;
- daily and within-day standard capacity products not less than 1 and not more than 3 (in duly justified cases, the level of multiplier may be less than 1, but higher than 0, or higher than 3).

The proposed multiplier values for standard capacity products are shown in Table 1.

Gas transmission service	Within-day	Daily Monthly		Quarterly	
Multiplier	2,20	2,20	1,45	1,27	

The above multipliers fall within the allowable ranges specified in the Tariff Code and will be applied both at interconnection points with EU Member States, interconnection points with third countries⁷ and at internal points of the gas transmission system (for E-gas⁸ and L-gas⁹).

4.2. Justification of the proposed level of multipliers

The calculated multiplier values are intended to incentivize gas system users to book long-term capacity products that contribute to generating the right signals with respect to directions of transmission system development. At the same time, they are to provide market participants with the possibility of using the transmission system in a flexible way, by adjusting the booked capacity over the year with products of shorter duration. The level of multipliers is also intended to reflect a possible risk of lost profits from sales of products shorter than one year in tariffs for short-term capacity products.

⁷ Referred to in Article 2 paragraph 1 of the Tariff Code, i.e. with Belarus and Ukraine.

 $^{^8}$ E – high methane natural gas – E group.

 $^{^9}$ L – low methane natural gas – L group, subgroup Lw.

Adopting too low level of multipliers would result in a decreased tariff for short-term standard capacity products, and this could alter the structure of the capacity contracts portfolio towards the increased share of short-term products and decreased share of yearly and multi-yearly capacity products. Reducing the tariff of short-term contracts could increase the financial risk of the Operator's functioning.

Considering the need to ensure a balance between facilitating short-term gas trading on the one hand, and ensuring long-term signals for efficient investment in the transmission system on the other, as well as levels of correction factors¹⁰ used in the 2021 tariff (*see* Table 4), it was decided to accept the value of multipliers from the higher half of the recommended ranges, referred to in Article 13 item 1 of the Tariff Code (as in Table 1).

4.3. Seasonal factors referred to in Article 28 item 1 section b) of the Tariff Code

Pursuant to Article 15(1) of the Tariff Code seasonal factors will also be applied in calculation of reserve prices of short-term capacity products. The application of seasonal factors aims at fostering efficient use of the transmission system by allowing higher reserve prices in periods with high utilisation rates and lower reserve prices in low-utilisation periods of this system. The differentiation of reserve prices should incentivise transmission system users to shift gas flows away from high system utilisation rates, thus contributing to curbing investment expenses for its development.

The methodology of seasonal factors calculation was set out in Article 15 of the Tariff Code and is based on the forecasted flows. The consulted seasonal factors calculation has been performed drew on forecasted gas volumes delivered to exit points of E-gas and L-gas transmission systems (excluding gas volumes sent to exit points to UGS), estimated based on average flows values over the period 2017-2019. The adoption of tree-year average flows aimed at levelling off the seasonal factors values thereby curbing the influence of data from the year that could not be representative. Detailed calculations are presented in annexes 1-3. In case of quarterly capacity products, the option referred to in Article 15 item 5 section a) subsection (i) of the Tariff Code was adopted (arithmetic mean of individual seasonal factors applied over a period of three months).

Month \ Product type	Within-day	Daily	Monthly	Quarterly
January	1,19	1,19	1,19	
February	1,12	1,12	1,12	1,14
March	1,11	1,11	1,11	
April	0,97	0,97	0,97	
Мау	0,90	0,90	0,90	0,90
June	0,83	0,83	0,83	

Proposed levels of seasonal factors for types of capacity products are shown in Table 2.

Table 2	Sasconal	factors r	ronocod	for the s	vear 2022.
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¹⁰ The concept of the "correction factors" has been applied in the TSO tariffs and originated from the Regulation of the Minister of Energy of 15 March 2018 on detailed terms for structuring and calculation of tariffs and billing in trade in gaseous fuels (Journal of Laws of 2018, Item 640, as amended), hereinafter referred to as "Tariff Regulation". Referring this concept to the conceptual framework of the Tariff Code, it should be noted that in practice they are the product of the relevant multipliers and seasonal factors specified in the Tariff Code.

July	0,85	0,85	0,85	
August	0,86	0,86	0,86	0,86
September	0,86	0,86	0,86	
October	1,00	1,00	1,00	
November	1,08	1,08	1,08	1,07
December	1,14	1,14	1,14	

Table 3 shows the calculated levels of "correction factors", which are the product of the abovementioned multipliers for each capacity product type (Table 1) and seasonal factors (Table 2) defined in the Tariff Code.

Month \ Product type	Within-day	Daily	Monthly	Quarterly
January	2,62	2,62	1,73	
February	2,46	2,46	1,62	1,45
March	2,44	2,44	1,61	
April	2,13	2,13	1,41	
Мау	1,98	1,98	1,31	1,14
June	1,83	1,83	1,20]
July	1,87	1,87	1,23	
August	1,89	1,89	1,25	1,09
September	1,89	1,89	1,25	
October	2,20	2,20	1,45	
November	2,38	2,38	1,57	1,36
December	2,51	2,51	1,65]
Average	2,18	2,18	1,44	1,26

 Table 3. Calculated "correction factors" for standard capacity products for 2022.

The arithmetic average of the products of the relevant seasonal factor (Table 2) and the multiplier (Table 1), calculated in accordance with Article 13 item 2 of the Tariff Code, falls within the permissible ranges specified in Article 13 item 1 of the Tariff Code.

The adopted multipliers and seasonal factors ensure that a balance between the use of short and long-term capacity products by the transmission system users, which positively affects transmission tariffs for all entities using the Polish transmission system and also gives signals for effective investment in this system, will be maintained. The level of seasonal factors (as in Table 2) was adopted taking into account the need to ensure the economic and efficient use of transmission infrastructure throughout the year and to better reflect costs by transmission tariffs, also bearing in mind the current levels of correction factors adopted in the tariff for 2021 *(see* Table 4).

The assumption behind the adopted multiplier values and seasonal factors is to incentivize longterm capacity contracts. This is due to the specificity of the transmission system operator's activity, where the transmission of gaseous fuel intensifies during the so-called heating season, while the costs of transmission, network maintenance are borne by the Operator throughout the year. This means that the financial liquidity of the Operator should be secured throughout the year.

For the purposes of comparison, the table 4 presents values of correction factors included in the 2021 tariff.

Month \ Product type	Within-day	Daily	Monthly	Quarterly
January	2,60	2,60	1,71	
February	2,55	2,55	1,68	1,49
March	2,60	2,60	1,71	
April	2,00	2,00	1,32	
Мау	1,89	1,89	1,25	1,10
June	1,83	1,83	1,20	
July	1,85	1,85	1,22	
August	1,91	1,91	1,26	1,08
September	1,85	1,85	1,22	
October	2,13	2,13	1,41	
November	2,38	2,38	1,57	1,36
December	2,55	2,55	1,68]
Average	2,18	2,18	1,44	1,26

Table 4. Correction factors for standard capacity products from the tariff for 2021¹¹.

A change to the currently applied approach in terms of short-term services, in the last year of the MWCR OGP validity, would be unfavourable from the point of view of agreements concluded by the Operator regarding the financing of strategic investments. It should be noted that the Polish transmission network is being developed substantially in order to ensure the diversification and security of gas supply.

4.4. Application of multipliers and seasonal factors

The calculated multipliers and seasonal factors will be used at interconnection points with EU Member States, interconnection points with third countries and at internal points of the gas transmission system (for E-gas and L-gas), including entry/exit points to/from underground gas storage, for settlement of services provided on short-term basis.

The charge for short-term gas transmission service will be calculated according to the following formula, except as provided for in paragraph 4.7.4. and 4.7.5:

¹¹ According to the Communiqué of the President of ERO no 14/2020; https://www.ure.gov.pl/pl/biznes/taryfyzalozenia/mnozniki-wspolczynniki-1/8439,Mnozniki-wspolczynniki-sezonowe-i-rabaty-na-2021-r-art-28-NC-TAR.html

where:

Op - the charge for a short-term gas transmission service (quarterly, monthly, daily or within-day),

Mn - multiplier,

Ws - seasonal factor,

Ss - transmission tariff, respectively for entry/exit [gr¹²/kWh/h per h],

Mu - contracted capacity [kWh/h],

T - number of hours in which the short-term service was provided [h].

Multipliers and seasonal factors shall not change in the case of secondary trading of capacity products, which consists in reselling the product in a shorter period than the primary product.

4.5. The level of discounts at the entry point to the transmission system from LNG installations - Article 28 item 1 section c) and Article 9 item 2 of the Tariff Code

Pursuant to Article 9 item 2 of the Tariff Code at entry points from LNG installations (...) a discount can be applied to capacity-based transmission tariffs in order to increase security of supply. Analysing the provisions of Article 9 item 2 of the Tariff Code in the context of the Polish natural

gas market, it should be noted that this market is a part of the group of medium-sized markets with a high degree of dependence on supplies from one direction. Domestic production of natural gas in 2019 amounted to around 20%¹³ of the national balance of natural gas supplies. Despite the development of interconnections on the western and southern borders, the main source of gas from abroad until 2017 was the eastern direction. High level of dependence of the Polish market on gas supplies from one direction had a significant impact on the level of gas prices. Therefore, the LNG Terminal as an alternative source of supplies is to support the processes of competition development on the gas market. The launch of the LNG Terminal in Świnoujście created the conditions for entities operating on the global LNG market to enter the Polish gas market. Increased competition on the part of gas suppliers is aimed at improving the negotiating position of gas trading companies in Poland.

In connection with the above, in the case of the entry point to the transmission system from the LNG terminal in Świnoujście, from the start of regasification, that is since June 2016, a discount of 100% has been applied. This solution was introduced mainly for the sake of key importance of the LNG terminal for:

- increasing the security of gas supplies to Poland through the diversification of directions of supplies and ensuring access to the global gas market - fully independent of perturbations on the local and regional market,
- competition development on the domestic gas market through the possibility of obtaining gas by domestic suppliers from a new source.

Pursuant to the provisions of Article 9 item 2 of the Tariff Code, allowing to apply a discount in relation to capacity-based tariffs at entry points from the LNG installations to enhance the security

¹² 1 gr = 0,01 PLN \approx 0, 022 EUR.

¹³ The President of ERO Activity Report 2019, p. 185.

of gas supplies, maintaining a discount of 100% is also planned in the last year of the MWCR OGP validity, *i.e.* in the 2022 tariff.

Data on the LNG terminal use is presented in Table 5. It shows that the use of the LNG terminal is systematically growing.

8	0					
Sustan antwo nainta	E-gas –	2017 r.	E-gas -	- 2018 r.	E-gas –	E-gas - 2019 r. [TWh] [%] 557,6 100,0% 22,0 3,9 18,0 3,2 430,3 77,2 49,7 8,9
System entry points	[TWh]	[%]	[TWh]	[%]	[TWh]	[%]
Total, out of this:	560,6	100,0	557,1	100,0	557,6	100,0%
production and nitrogen removal plants	23,7	4,3	23,1	4,1	22,0	3,9
underground gas storage facilities	23,7	4,3	25,0	4,5	18,0	3,2
non-EU supplies (not including LNG)	450,8	80,9	443,2	79,6	430,3	77,2
EU supplies	42,5	7,6	34,8	6,2	49,7	8,9
LNG terminal	18,4	3,3	29,5	5,3	35,9	6,4
others (entries from distribution systems)	1,5	0,3	1,5	0,3	1,7	0,3

Table 5. The source structure of gas entering the transmission system in 2017, 2018 and 2019¹⁴.

4.6. The level of discounts at entry/exit points from/to underground gas storage facilities

This matter is not the subject of consultation referred to in Article 28 of the Tariff Code. It will be consulted in 2021 in the scope of consultation referred to in Article 26 of the Tariff Code, pertaining to reference price setting methodology for next period.

4.7. The level of discounts used to calculate the reserve prices for standard capacity products for interruptible capacity in 2022 - Article 28 item 1 section c) and Article 16 of the Tariff Code

4.7.1. Options provided for in the Tariff Code.

Article 16 of the Tariff Code allows to adopt one of two approaches for the calculation of reserve prices for standard capacity products for interruptible capacity¹⁵. Both of them provide for the discounting of interruptible services. The difference between the options consists in the moment of granting the discount and the methodology of its determination. In Article 16 items 1-3, the methodology based on the *ex-ante* discount was described in detail, whereas rules for granting an *ex-post* discount were set out in item 4.

First option (*ex-ante*) results in the calculation of reserve prices for standard capacity products for interruptible capacity by multiplying the reserve prices of standard capacity products for firm capacity by the difference between 100% and an *ex-ante* discount. This methodology uses the reserve price for standard capacity products for interruptible capacity (including an *ex-ante* discount) in the transmission system user's billing, regardless of the actual interruption occurrence at a given point. However, in the *ex-post* methodology, the reserve price for standard capacity products for interruptible capacity products for the same as the price of the

¹⁴ Commercial flows including SGT as stated in the President of ERO Activity Report 2017, 2018 and 2019 (https://www.ure.gov.pl/pl/urzad/informacje-ogolne/publikacje/sprawozdania-z-dzialaln/2916,Sprawozdania-zdzialalnosci-Prezesa-URE.html)

¹⁵ Interruptible capacity may be interrupted by the TSO up to 100% of booked interruptible capacity.

relevant firm capacity product and a network user is compensated only when the actual interruption occurred¹⁶. In accordance with Article 16(4) of the Tariff Code, the ex-post discount may only be applied at interconnection points where there was no interruption of capacity due to physical congestion in the preceding gas year.

4.7.2. Level of proposed ex-ante discounts for calculation of reserve prices for standard capacity products for interruptible capacity in 2022 – Article 28 paragraph 1 letter c) and Article 16 of the Tariff Code.

Taking account of the scope of planned development works in the transmission system, the increased demand for transmission capacity, including the one resulting from the projected development of the power industry gas consumption, the TSO recommended that in the tariff for 2022, as in the 2021 tariff, the *ex-ante* discount, referred to in Article 16 item 1 – 3 of the Tariff Code, to be applied.

The assessment of the probability of interruption for respective types of transmission system points was carried out with the usage of the TSO technical staff's expertise, due to the occurrence of only one interruption of standard capacity products for interruptible conditionally firm capacity during analysed period. The probability of transmission service interruption was estimated based on data concerning capacity bookings in the period from 1 January 2019 to 30 June 2020. The adjustment factor A is proposed at level 1.

It is therefore proposed for interconnection points with EU countries and with third countries, as well as for internal entry/exit points, the use of *ex-ante* methodology in settlements of standard capacity products for interruptible capacity, as referred to in Article 16 paragraph 1-3 the Tariff Code.

The following level of *ex-ante* discount is proposed for 2022:

- 6% for annual, quarterly, monthly, daily and within-day standard interruptible capacity products for E-gas offered at interconnection points with EU countries¹⁷ and with third countries,
- **2%** for annual, quarterly, monthly, daily and within-day standard interruptible capacity products for E-gas and L-gas offered at internal entry/exit points.

The probability of standard capacity products for interruptible capacity interruption and *ex-ante* discounts are presented in annex no. 4.

The reserve prices for standard capacity products for interruptible capacity shall be calculated by multiplying the reserve prices for the respective standard capacity products for firm capacity by the difference between 100 % and the level of an *ex-ante* discount.

An *ex-ante* discount is calculated in accordance with the methodology set out in Article 16 paragraph 2-3 of the Tariff Code, using the following formula:

Diex-ante = Pro × A × 100 %

where:

¹⁶ This approach was applied in 2020 tariff (TSO's publication pursuant to Article 29 of the Tariff Code for 2020 tariff: 2020 r. https://www.gaz-system.pl/fileadmin/pliki/taryfa/pl/2019/Publikacja_informacji_art_29_2020.pdf)

¹⁷ Including the PWP interconnection point.

Di_{ex-ante} - the level of an *ex-ante* discount,

- Pro the probability of interruption which is set or approved in accordance with Article 41(6)(a) of Directive 2009/73/EC pursuant to Article 28, and which refers to the type of standard capacity product for interruptible capacity,
- A the adjustment factor which is set or approved in accordance with Article 41(6)(a) of Directive 2009/73/EC pursuant to Article 28, applied to reflect the estimated economic value of the type of standard capacity product for interruptible capacity, calculated for each, some or all interconnection points, which shall be no less than 1.

The Pro factor is calculated for given entry/exit points of transmission system per type of standard capacity product for interruptible capacity offered in accordance with the following formula on the basis of forecasted information related to the components of this formula:

$$Pro = \frac{N \times D_{int.}}{D} \times \frac{CAP_{av.int.}}{CAP}$$

where:

- N the expectation of the number of interruptions over D,
- $D_{\text{int.}}$ the average duration of the expected interruptions expressed in hours,
- D the total duration of the respective type of standard capacity product for interruptible capacity expressed in hours,
- CAP_{av. int.} the expected average amount of interrupted capacity for each interruption where such amount is related to the respective type of standard capacity product for interruptible capacity,
- CAP the total amount of interruptible capacity for the respective type of standard capacity product for interruptible capacity.

4.7.3. Interruptible conditionally firm capacity.

The concept of interruptible conditionally firm capacity has been introduced in point 7.4 of the binding IRiESP¹⁸. It was therefore necessary to determine settlement rules for this product, what in the case of the 2021 tariff was set out in point 9.7. In practice, this product is billed as an interruptible transmission services or as virtual backhaul capacity.

Interruptible conditionally firm services are provided at a limited number of physical exit and physical entry points indicated on the TSO's website.

According to the information provided by the Operator, these services are currently offered only at the border with Ukraine – at the virtual interconnection point GCP GAZ-SYSTEM/UA TSO – exit (from 1 July 2020), for which the condition for the transmission service firmness is the supply of gas at the entry point into Poland.

Thus, where the Operator points to specific entry or exit points that determine the firmness of the service (i.e. the user is aware of the points at which the supply of gas ensures the firmness of the service), the probability of interruptible conditionally firm capacity interruption should be

¹⁸ The Transmission Network Code for TSO's own transmission network, approved by the President of URE decision of 26 March 2019 r. ref. no.: DRR.WRG.4322.1.2019.AK1.

assessed as lower than that of other interruptible services. The user has the possibility to take measures to prevent interruption when this is of paramount importance to him. Consequently, it is appropriate to adopt a discount for interruptible conditionally firm services at the level of 50% of the discount for interruptible services provided at points of a given type (referred to in Annex 4).

4.7.4. Application of ex-ante discount for settlements of short-term interruptible and short-term interruptible conditionally firm transmission services

The charge for short-term interruptible and short-term interruptible conditionally firm gas transmission service will be calculated according to the following formula, except as provided for in paragraph 4.7.5.:

where:

- Op the charge for a short-term interruptible and short-term interruptible conditionally firm gas transmission service (quarterly, monthly, daily or within-day),
- Di_{ex-ante} the level of an *ex-ante* discount,

Mn - multiplier,

Ws - seasonal factor,

Ss - transmission tariff, respectively for entry/exit [gr/kWh/h per h],

Mu - contracted capacity [kWh/h],

T - number of hours in which the short-term service was provided [h].

4.7.5. Virtual backhaul capacity.

Virtual backhaul transmission service has been defined in § 2 point 24 of Tariff Regulation as a service rendered by an energy enterprise dealing with gaseous fuels transmission, whereby gaseous fuels are contractually transported in the opposite direction to their physical flow in physical entry points to transmission network or physical exit points from this network.

In case of virtual backhaul transmission service, pursuant to § 14 of Tariff Regulation, a 0,2 factor is applied to reserve prices, which means granting a 80% discount on that prices. Due to the above for settlements of these services an *ex-ante* discount, referred to in point 4.7.2. and 4.7.3, will not be applied.

For calculation of the reserve price for short-term virtual backhaul transmission service the multipliers and seasonal factors, referred to in points 4.1. and 4.3. of this document, will be applied.

The charge for short-term virtual backhaul transmission service will be calculated according to the following formula:

where:

Op - the charge for a short-term virtual backhaul gas transmission service (quarterly, monthly, daily or within-day),

Mn - multiplier,

Ws - seasonal factor,

Ss - transmission tariff, respectively for entry/exit [gr/kWh/h per h],

Mu - contracted capacity [kWh/h],

T - number of hours in which the short-term service was provided [h].

5. Consultations regarding the EuRoPol GAZ tariff

5.1. Multipliers referred to in Article 28 item 1 section a) of the Tariff Code

In 2022 tariff it is assumed to apply multipliers for short-term products presented in Table 6, that are the same as multipliers included in 2021 tariff¹⁹.

It should be emphasized that end users or gas storage facilities are not connected to the EuRoPol GAZ's transmission network. In terms of capacity covered by the so-called historical contract, settlements with customers are conducted by EuRoPol GAZ, whereas the remaining capacity, including virtual backhaul, is managed by the Operator.

Table 6. Multipliers for short-term standard capacity products for the EuRoPol GAZ'stransmission network proposed for 2022.

Gas transmission service	Within-day	Daily	Monthly	Quarterly
Multiplier	1,95	1,95	1,30	1,10

The above multipliers fall within the permissible ranges specified in Article 13 item 1 of the Tariff Code.

The applied solution, as in the case of the TSO tariff, will ensure a balance between allowing shortterm gas trading on the one hand and long-term signals for efficient investing in the transmission system on the other.

5.2. Seasonal factors referred to in Article 28 item 1 section b) and Article 15 of the Tariff Code

In connection with the provisions of Article 13 item 2 of the Tariff Code, it is not foreseen to apply seasonal factors referred to in Article 15 of the Tariff Code.

This approach stems from the relatively stable level of gas flow in the EuRoPol GAZ's network recorded in individual months of the gas year.

5.3. Application of multipliers

Proposed multipliers will be applied at all entry and exit points to/from the gas transmission system owned by EuRoPol GAZ for settlement of services provided on short-term basis.

¹⁹ Appeal proceedings are currently pending against the decision of the President of the ERO approving the tariff for 2021. But pursuant to Article 47 paragraph 2c point 2 of the Energy Law in the event of the expiry of the period for which the tariff has been approved, this tariff (including multipliers and rules of interruptible services settlements) shall apply until the of entry into force of the new tariff, provided that the appeal proceedings against the decision of the President of the URE, approving the new tariff, is pending.

The charge for short-term gas transmission service will be calculated according to the following formula:

$$Op^{20} = Mn * Ss * Mu * T$$

where:

- Op the charge for a short-term gas transmission service (quarterly, monthly, daily or within-day),
- Mn multiplier,
- Ss transmission tariff, respectively for entry/exit [PLN/MWh/h per h or PLN/MWh/day per day],
- Mu contracted capacity [MWh/h or MWh/day],
- T number of hours or days in which the short-term service was provided [h or day].

5.4. The level of discounts used to calculate the reserve prices for standard capacity products for interruptible capacity - Article 28 item 1 section c) and Article 16 of the Tariff Code

For the transmission network owned by EuRoPol GAZ it is assumed that the methodology based on applying an *ex-post* discount will be continued, likewise in the current tariff. Considering the data from previous years, which indicate that there was no interruption of interruptible capacity products, such an approach is reasoned. Pursuant to Article 16 item 4 of the Tariff Code, this compensation will therefore be equal to three times the reserve price (rate) for daily standard capacity product for firm capacity.

5.5. Virtual backhaul capacity

In case of virtual backhaul transmission service, pursuant to § 14 of Tariff Regulation, a 0,2 factor is applied to reserve prices (a 80% discount).

For calculation of the reserve price for short-term virtual backhaul transmission service the multipliers, referred to in point 5.1. of this document, are applied.

Annexes:

- Annex no. 1. Calculation of seasonal factors for daily and within-day gas transmission services for 2022 for the TSO's network (Article 15 of the Tariff Code).
- Annex no. 2. Calculation of seasonal factors for monthly gas transmission services for 2022 for the TSO's network (Article 15 of the Tariff Code).
- Annex no. 3. Calculation of seasonal factors for quarterly gas transmission services for 2022 (Article 15 of the Tariff Code).
- Annex no. 4. *Ex-ante* discounts for 2022 for types of transmission system points, with interruptible capacity products breakdown.

²⁰ In case of virtual backhaul capacity, referred to in point 5.5., an additional factor of 0,2 is applied.

Annex no. 1. Calculation of seasonal factors for daily and within-day gas transmission services for 2022 for the TSO's network (Article 15 of the Tariff Code).

	Accepted value	Min	Max
Multiplier	2,2	1	3
Power	0,5	0	2

Month	Exit gas volume - 2017-2019 average (E i L gas type, not including UGS) [MWh]	Gas usage rate	Seasonal factor	Multiplier * seasonal factor	Correction factor in tariff no. 14 (for 2021)	Correction factor change
January	23 606 406	11,89%	1,19	2,62	2,60	0,8%
February	20 601 732	10,38%	1,12	2,46	2,55	-3,4%
March	20 336 642	10,25%	1,11	2,44	2,60	-5,9%
April	15 489 894	7,80%	0,97	2,13	2,00	6,6%
May	13 263 918	6,68%	0,90	1,98	1,89	4,7%
June	11 371 645	5,73%	0,83	1,83	1,83	0,0%
July	11 954 792	6,02%	0,85	1,87	1,85	1,2%
August	12 097 501	6,09%	0,86	1,89	1,91	-1,1%
September	12 354 500	6,22%	0,86	1,89	1,85	2,4%
October	16 597 346	8,36%	1,00	2,20	2,13	3,1%
November	19 238 253	9,69%	1,08	2,38	2,38	0,0%
December	21 587 516	10,88%	1,14	2,51	2,55	-1,7%
Total	198 500 145	100,00%	0,99	2,18	2,18	0,00
				Mean		

* The arithmetic mean of the product of the multiplier and the relevant seasonal factors should be within the same range as the respective multiplier <min, max>.

** A value of seasonal factor has been rounded up or down to 2 decimal places.

Annex no. 2. Calculation of seasonal factors for monthly gas transmission services for 2022 for the TSO's network (Article 15 of the Tariff Code).

	Accepted value	Min	Max
Multiplier	1,45	1	1,5
Power	0,5	0	2

Month	Number of days	Exit gas volume - 2017-2019 average (E i L gas type, not including UGS) [MWh]	Gas usage rate	Seasonal factor	Multiplier * seasonal factor	Correction factor in tariff no. 14 (for 2021)	Correction factor change
January	31	23 606 406	11,89%	1,19	1,73	1,71	0,8%
February	28	20 601 732	10,38%	1,12	1,62	1,68	-3,4%
March	31	20 336 642	10,25%	1,11	1,61	1,71	-5,9%
April	30	15 489 894	7,80%	0,97	1,41	1,32	6,6%
May	31	13 263 918	6,68%	0,90	1,31	1,25	4,7%
June	30	11 371 645	5,73%	0,83	1,20	1,20	0,0%
July	31	11 954 792	6,02%	0,85	1,23	1,22	1,2%
August	31	12 097 501	6,09%	0,86	1,25	1,26	-1,1%
September	30	12 354 500	6,22%	0,86	1,25	1,22	2,4%
October	31	16 597 346	8,36%	1,00	1,45	1,41	3,1%
November	30	19 238 253	9,69%	1,08	1,57	1,57	0,0%
December	31	21 587 516	10,88%	1,14	1,65	1,68	-1,7%
Total	365	198 500 145	100,00%	0,99	1,44	1,44	0,00
		•			Mean		

* The arithmetic mean of the product of the multiplier and the relevant seasonal factors should be within the same range as the respective multiplier <min, max>.

** A value of seasonal factor has been rounded up or down to 2 decimal places.

Annex no. 3. Calculation of seasonal factors for quarterly gas transmission services for 2022 (Article 15 of the Tariff Code).

	Accepted value	Min	Max
Multiplier	1,27	1	1,5

Month	Number of days	Exit gas volume - 2017-2019 average (E i L gas type, not including UGS) [MWh]	Seasonal factor	Multiplier * seasonal factor	Correction factor in tariff no. 14 (for 2021)	Correction factor change	
January	31	23 606 406					
February	28	20 601 732	1,14	1,45	1,49	-2,6%	
March	31	20 336 642					
April	30	15 489 894					
May	31	13 263 918	0,90	1,14	1,10	3,4%	
June	30	11 371 645					
July	31	11 954 792					
August	31	12 097 501	0,86	1,09	1,08	1,2%	
September	30	12 354 500					
October	31	16 597 346					
November	30	19 238 253	1,07	1,36	1,36	0,0%	
December	31	21 587 516					
Total	365	198 500 145	0,99	1,26	1,26	0,00	
<u> </u>							

* The arithmetic mean of the product of the multiplier and the relevant seasonal factors should be within the same range as the respective multiplier <min, max>.

** A value of seasonal factor has been rounded up or down to 2 decimal places.

Annex no. 4. Ex-ante discounts for 2022 for types of transmission system points, with interruptible capacity products breakdown. ¹⁾ .	

	Gas	System point		Ex-ante discount for interruptible capacity product:					
No.	type			Yearly	Quarterly	Monthly	Daily	Within-day	
1.	E	Interconnection points with EU countries	Entry/exit	6%	6%	6%	6%	6%	
2.	E	PWP	Entry/exit	6%	6%	6%	6%	6%	
3.	E	Interconnection points with third countries	Entry/exit	6%	6%	6%	6%	6%	
4.	E	Internal points	Entry/exit	2%	2%	2%	2%	2%	
5.	L	Internal points	Entry/exit	2%	2%	2%	2%	2%	

1) except as provided for in paragraph 4.7.3.