EuRoPol GAZ s.a.

CONSULTATION DOCUMENT

COMPATIBLE WITH REQUIREMENTS ARISING FROM ART. 26 OF THE COMMISSION
REGULATION (EU) 2017/460 OF 16 MARCH 2017 ESTABLISHING A NETWORK CODE
ON HARMONISED TRANSMISSION TARIFF STRUCTURES FOR GAS
(HEREINAFTER REFERRED TO AS 'TAR NC')

August 2018

[A] ART. 26(1)(A): PROPOSED REFERENCE PRICE METHODOLOGY

[1] Information on the parameters used in the proposed RPM related to technical characteristics of the transmission system [Art. 26(1)(a)(i), Art. 30.(1)(a)]

Article 26(1)(a)

[A] Description of the proposed reference price methodology (RPM)

The Transit Gas Pipeline System (SGT), owned by EuRoPol GAZ s.a. (EuRoPol GAZ or the Company), is the Polish length of the Yamal-West Europe transit gas pipeline. According to a decision of the President of the National Energy Regulatory Office (URE), the GAZ-SYSTEM S.A. (GAZ-SYSTEM) fulfils functions of the Transmission System Operator (TSO) on the SGT.

The transmission services rendered with the SGT, both by the EuRoPol GAZ and by the GAZ-SYSTEM, are settled out according to the tariff approved by the President of the URE on request of the EuRoPol GAZ. The EuRoPol GAZ incurs all costs of the SGT's functioning.

Operation costs of the regulated activity planned for the tariff year (as a principle, the tariff period corresponds to a calendar year), increased by an adequate amount of return on equity engaged for this activity and reduced by expected revenue from the reverse services rendered by the GAZ-SYSTEM on the SGT (in the direction reverse to the basic gas transmission direction) constitute the indicative cost basis for calculation of the reference prices (the basis for calculation of the reference prices). All data and assumptions used by the EuRoPol GAZ for calculation of the reference prices are subject to the final assessment and approval by the President of the URE (the tariff approval decision).

It is assumed that the whole indicative revenue of the EuRoPol GAZ will be recovered in the form of the capacity-based transmission tariffs (charges). The proposed RPM is a method of setting the reference price basing on the capacity-weighted distance. The cost driver (cost carrier), referred to in Art. 5 of the TAR NC, is the product of:
a) Expected capacity contracted at a given entry or exit point,
b) Distance between the corresponding points. In order to determine these distances the points are combined in pairs (pursuant to Art.8(1)(c) of the TAR NC). In the gas flow scenario assumed for the RPM (from East to West), there are the following pairs of points:

  Entry Kondratki – Exit Interconnection Point (PWP);

  Entry Kondratki – Exit Mallnow.

The PWP is a interconnection point, made of two points that have a physical location (see [1F]). The weighted average distance Entry Kondratki-Exit PWP is calculated by means of the formula shown in Art. 8(2)(a)(i), i.e. as an average distance weighted with contracted capacities, assigned to individual points of a physical location. Such an approach simplifies the calculation of the reference price for the PWP.

The only deviation from the standard CWD method described in Art. 8 of the TAR NC is the adjustment of the proportion of revenue breakdown into entry and exit (E/E) – this ratio in the indicative tariff amounts to 51.5/48.5 rather than 50/50. This adjustment results from additional assumptions used for the cost allocation and aimed at:

- Ensuring that the customers at both entry points (Entry Kondratki i Entry Mallnow) are treated equally, by making the reference prices at these points equal (the same reference price for entry to the SGT);
- Ensuring that for each customer for a given kind of a service (product), the sum of charges for entry and exit for a unit of contracted capacity, converted into a unit of distance between the pair of points specified in the gas flow scenario used in the RPM, was the same.

The calculational procedure for the reference prices within the proposed RPM, using the formulas presented in Art. 8 of the TAR NC is as follows:

1. The input data that characterise the physical entry or exit points are as follows:

Data	Entry Kondratki	Physical exit points that make the Exit PWP		Exit Mallnow
		Exit Włocławek	Exit Lwówek	
Predicted contracted capacity (MWh/year)	345 711 726	17 850 000	12 390 000	315 471 726
Distance from the Kondratki Entry point (km)	x	367.40	581.60	683.90

2. The weighted average distance for the Kondratki entry point (AD_{En}) was calculated according to the formula presented in Art.8(2)(a)(i)

AD_{En}	Entry Kondratki
km	663.89

3. Average weighted distance for the exit points (AD_{Ex}) – calculated according to the formula presented in Art.8(2)(a)(ii)

AD_{Ex}	Exit PWP	Exit Mallnow
km	455.16	683.90

4. Weight of the costs for the Kondratki entry point ($W_{c,En}$) – calculated according to the formula presented in Art.8(2)(b)

Weight of the costs $W_{c,En}$	Entry Kondratki
	1.000

5. Weight of the costs for the exit points ($W_{c,Ex}$) – calculated according to the formula presented in Art.8(2)(b)

Weight of the costs $W_{c,Ex}$	Exit PWP	Exit Mallnow
	0.060	0.940

6. Breakdown of the revenue into entry and exit – according to Art.8(2)(c)

Breakdown of the revenue into entry and exit ($R_{\sum En}$ / $R_{\sum Ex}$)	Entry	Exit	Total
Ratio (%)	51.51%	48,49%	100%
Amount (PLN x 1000)	480 015	451 929	931 944

7. Breakdown of the revenue into individual entry or exit points - calculated according to the formulas presented in
   Art.8(2)(d)

Revenue breakdown (R_{En}; R_{Ex})	Kondratki	PWP	Mallnow	Total
PLN x 1000	480 015	13 901	438 027	931 944

8. Calculation of the reference prices for each entry or exit point – according to the formulas presented in Art.8(2)(e)

Reference price for entry or exit (T_{En}; T_{Ex})	Kondratki	PWP	Mallnow
PLN/MWh/day	1.3885	0.4597	1.3885

[B] Justification of the parameters used that are related to the technical characteristics of the system

The technical characteristics of the SGT (see the network structure presented in point [1F]) justifies application of the CWD as the method for determination of the reference price. In case of such a network structure, use of distances between appropriate entry/exit points as a cost driver applicable for costs allocation is fully justified. The proposed RPM uses real distances measured along the pipeline route.

The indicative data based on predicted contracted capacities arise from the assumption that the primary gas flow direction in the SGT will be transport from East to West. It is assumed that services of reverse transport (the reverse) would be rendered in the opposite direction (Entry Mallnow – Exit PWP) to a relatively small extent – the share of the indicative revenue from these services in the total annual amount of the EuRoPol GAZ's regulated revenue is only 1.3%. This fact justifies use of the specific gas flow scenario for calculation of the reference prices (see point [1A]).

Articles
26(1)(a)(i)
30(1)(a)(i-v)

Articles 26(1)(a)(i) 30(1)(a)(i)	**[C] Technical capacity at entry and exit points** Not applicable. Technical capacity is not a parameter used in the proposed methodology of the reference price determination.
Articles 26(1)(a)(i) 30(1)(a)(ii)	**[D] Forecasted contracted capacity at entry and exit points** The forecasted contracted capacities (long-term continuous capacities) at individual entry and exit points have been taken into account in the calculation of the indicative reference prices (transmission charge rates) which are the subject of this consultation are as follows:

Entry/exit points	Forecasted contracted capacity	Unit
Entry points *including:*	345 711 726	MWh/year
Kondratki Entry	345 711 726	MWh/ year
Exit points *including:*	345 711 726	MWh/ year
PWP Exit	30 240 000	MWh/ year
Mallnow Exit	315 471 726	MWh/ year

Articles 26(1)(a)(i) 30(1)(a)(iii)	**[E] The quantity and the direction of the gas flow for entry and exit points** The EuRoPol GAZ s.a.'s tariff is capacity-based. Value of the flow of gas being transported in the entry and exit points is not the parameter used in the RPM. However, in order to combine corresponding entry and exit points into pairs (according to Art. 8 (1)(c) of the TAR NC), to determine distances between these points as a cost driver, it is assumed in the scenario that gas flows from East to West (the primary gas flow direction in the SGT).

Articles 26(1)(a)(i) 30(1)(a)(iv)	**[F] Structural representation of the transmission network with an appropriate level of detail**
	
	The SGT is a high-pressure gas pipeline, built for transit (inter-system) gas transport. The system features a linear nature (single pipeline). There are only three following entry/exit points in the system:
	    1. Kondratki (Entry) – a interconnector point (IP) on the interface between the Byelorussian and SGT systems;
	    2. PWP (Exit) – a interconnector point IP) on the interface between the SGT and the National Transmission Network, owned by the GAZ-SYSTEM. The PWP consists of two interconnector points located in Włocławek and Lwówek;
	    3. Mallnow (Entry/Exit) - a interconnector point (IP) on the interface between the SGT and the German transmission system.
	All points on the SGT are interconnector ones (IP).
	
	The scheme of the transit gas pipeline system is available at:
	http://en.gaz-system.pl/strefa-klienta/sgt-gazociag-jamalski/mapa-sgt/

Articles 26(1)(a)(i) 30(1)(a)(v)	**[G] Additional technical information about the transmission network, such as: the length and the diameter of pipelines and the power of compressor stations** Length and diameter of the gas pipeline contained in the SGT:

Gas pipelines diameter DN	Length [km]
	Methane-rich gas
DN 1400	683.90

Number and power of compressor stations:

Gas type	Number of system compressor stations [each]	Installed power [MWh/h]
Methane-rich gas	5	400

[2] The value of the proposed adjustments for capacity-based transmission tariffs pursuant to Article 9 [Art. 26(1)(a)(ii)] [a	

Articles 26(1)(a)(ii) 9(1)	**[A]** Proposed discount(s) at entry points from and exit points to storage facilities
	Not applicable

Articles 26(1)(a)(ii) 9(2)	**[B]** Proposed discount(s) at entry points from LNG facilities
	Not applicable

Articles 26(1)(a)(ii) 9(2)	**[C]** Proposed discount(s) at entry points from and exit points to infrastructure developed with the purpose of ending the isolation of Member States
	Not applicable

[3] Indicative reference prices subject to consultation [Art. 26(1)(a)(iii)]

Article 26(1)(a)(iii)	**[A]** Indicative reference prices at each entry and at each exit point
	Entry Kondratki [PLN/MWh/day] 1.3885
	Exit PWP [PLN/MWh/day] 0.4597
	Entry/Exit Mallnow [PLN/MWh/day] 1.3885

[4] Cost allocation assessment [Art. 26(1)(a)(iv), Art.5]

Articles 26(1)(a)(iv) 5	**[A]** Results of the cost allocation assessment
	Cost allocation assessment
	All entry or exit points on the SGT are interconnector ones (IP). Therefore the $Comp_{cap}$ cost allocation index, used to compare the indices: the intersystemic capacity index $Ratio_{crosscap}$ and the intrasystemic capacity index $Ratio_{intracap}$, is not calculated.
	[B] Components of the cost allocation assessment
	Due to the nature of the transit gas pipeline system - no intra-system entry and exit points - the cost allocation assessment was not carried out.
	[C] Details of components of the cost allocation assessment
	Due to the nature of the transit gas pipeline system - no intra-system entry and exit points - the cost allocation assessment was not carried out.

	[5] Assessment of the proposed reference price methodology in accordance to Art.7 and Art. 13 of the Regulation (EC) No 715/2009 [Art. 26(1)(a)(v)]

Articles 26(1)(a)(v) 7 13 [Reg. (EC) No 715/2009]	**[A]** The RPM should: enable network users to reproduce the calculation of reference prices and their accurate forecast [Art. 7(a)]
	The indicative reference prices presented in this publication document have been calculated using the method which in principle is compatible with the CWD, by means of the formulas referred to in Art. 8 of the TAR NC. The description of the proposed RPM, the indicative input data for calculation and the calculation procedure is presented above in [1A].

	[B] The RPM shall take into account the actual costs incurred for the provision of transmission services considering the level of complexity of the transmission network [Art. 7(b)]
	The proposed RPM is based on indicative costs of provisioning transmission services referring to the tariff period covered by this consultation and it takes into account the transmission network's complexity level (please see the method description in [1A]).
	[C] The RPM shall ensure non-discrimination and shall prevent undue cross-subsidisation including by taking into account the cost allocation assessments set out in Article 5.
	The proposed RPM uses the CWD methodology (it determines the reference prices basing on capacity-weighted distances). The only deviation from the standard CWD method as stated in Art. 8 of the TAR NC, is an adjustment of the revenue breakdown ratio to the entry and exit - in the indicative tariff the ratio is 51.5/48.5 rather than 50/50. This adjustment results from additional assumptions used for the cost allocation and aimed at:
	- Ensuring an equal treatment of customers at both entry points (Kondratki and Mallnow), by using the same reference prices at these points; - Ensuring that for each customer for a given type of service (product), the sum of charges for entry and exit per unit of contracted capacity, converted into a unit of distance between the pairs of points determined in the gas flow scenario used in the RPM, is the same. The aforementioned adjustments arise from the system's characteristics (structure) (it is a linear transit gas pipeline). Moreover, these adjustments allow for elimination of cross-subsidisation.
	[D] The RPM shall ensure that significant volume risk related particularly to transports across an entry-exit system is not assigned to final customers within that entry-exit system
	All Entry/Exit points within the SGT are interconnector ones (IP). No final customers are connected to the SGT.
	[E] The RPM shall ensure that the resulting reference prices do not distort cross-border trade
	The proposed RPM, including use of the same reference prices at both the Kondratki entry point and the Mallnow entry/exit point, has been used for calculation of the EuRoPol GAZ s.a.'s tariffs since 2014. Therefore it does not introduce any significant changes to inter-system settlements. The change of the level of reference prices for various tariff periods results only from changing purchase costs of materials rather than from a change in the methodology of costs allocation for individual entry/exit points.

[6] Comparison with the CWD methodology (Art. 8) Accompanied by the indicative reference prices subject to consultation set out in Art.26(1)(a)(iii)

Articles 26(1)(a)(vi) 8	**[A] Where the proposed reference price methodology is other than the capacity weighted distance reference price methodology detailed in Article 8, a comparison between both methodologies should be performed**

The proposed RPM uses the CWD methodology (it determines the reference prices basing on capacity-weighted distances). The only deviation from the standard CWD method as stated in Art. 8 of the TAR CN is an adjustment of the revenue breakdown ratio into entry and exit (E/E) – in the indicative tariff the ratio is 51.5/48.5 rather than 50/50. The table below present the differences between the RPM and CWD for individual values.

1. The difference in the breakdown of indicative revenue into entry/exit points [according to Art.8(2)(c)]

Revenue split	Proposed RPM		CWD according to TAR NC	
	Entry	Exit	Entry	Exit
Ratio (%)	51.51%	48.49%	50.00%	50.00%
Amount (PLN x 1000)	480 015	451 929	465 972	465 972
Difference RPM - CWD (PLN x 1000)			14 043	-14 043

2. Differences in allocation of indicative revenue to individual entry/exit points [according to Art.8(2)(d)]

Method	Kondratki	PWP	Mallnow	Total
Proposed RPM	480 015	13 901	438 027	931 944
CWD according to TAR NC	465 972	27 945	438 027	931 944
Difference RPM - CWD	14 043	-14 043	0	0

[B] Comparison of indicative reference prices at each entry point and at each exit point of the proposed RPM and the CWD detailed in Article 8

Comparison of the indicative reference prices according to RPM and CWD (PLN/MWh/day):

Method	Kondratki	PWP	Mallnow
Proposed RPM	1.3885	0.4597	1.3885
CWD according to TAR NC	1.3479	0.9241	1.3885
Difference RPM - CWD	0.0406	-0.4644	0.0000

Articles 26(1)(a)(vi) 8

[B] ALLOWED OR TARGET REVENUE OF THE TSO [ART. 26(1)(B)]

[7] Indicative information set out in Article 30(1)(b)(i), (iv), (v)

[A] Allowed or target revenue, or both, of the transmission system operator

Articles 26(1)(b) 30(1)(b)(i)

The indicative revenue of EuRoPol GAZ for the tariff period which is the subject of this consultation amounts to PLN 943.84 million (regulated revenue).

Articles 26(1)(b) 30(1)(b)(iv)	**[B] Transmission services revenue**
	The indicative revenue from transmission services amounts to PLN 943.84 million (this is equal to the amount of the EuRoPol GAZ 's regulated revenue) including:
	a) PLN 931.94 million is the indicative revenue from the long-term continuous transmission services (equal to the basis of the reference prices calculation);
	b) PLN 11.90 million is the indicative revenue from the reverse transmission services rendered on the SGT (in the direction opposite to the primary gas flow direction).

Articles 26(1)(b) 30(1)(b)(v)(1)	**[C] Capacity-commodity split of the transmission services revenue.**
	Breakdown between the revenue from capacity-based transmission tariffs and the revenue from commodity-based transmission tariff
	The table below presents the indicative revenue breakdown into capacities and volume.

Type of charge for transmission services	Regulated revenue
	[%]
Capacity-based transmission tariffs	100
Volume-based transmission tariffs	0

Articles 26(1)(b) 30(1)(b)(v)(2)	**[D] Entry-exit split of the transmission services revenue.**
	Breakdown between the revenue from capacity-based transmission tariffs at all entry points and the revenue from capacity-based transmission tariffs at all exit points
	The table below presents the split of the regulated revenue recovered in the form of constant charges at entry and exit points for methane-rich natural gas.

Gas type	Capacity-based revenue at all entry points	Capacity-based revenue at all exit points
	[%]	[%]
Methane-rich gas	51.5	48.5

Articles 26(1)(b) 30(1)(b)(v)(3)	**[E] Intra-system/cross-border split of the transmission services revenue.**
	Breakdown between the revenue from domestic network users at both entry points and exit points and the revenue from cross-border network users at both entry points and exit points calculated as set out in Article 5.
	All entry/exit points on the SGT are interconnector ones (IP).

Gas type	Regulated revenue obtained at interconnectors	Regulated revenue obtained at intraconnectors
	[%]	[%]
Methane-rich gas	100	0

[C] INFORMATION ON COMMODITY BASED AND NON-TRANSMISSION TARIFFS [ART. 26(1)(C)]

[8] Flow based charge. Information on commodity-based transmission tariffs referred to in Article 4(3)

Articles 26(1)(c)(i)(1) 4(3)(a)	**[A] The manner in which they are set**
	Not applicable.

Articles 26(1)(c)(i)(2) 4(3)(a)	**[B] The share of the allowed or target revenue forecasted to be recovered from such tariffs**
	Not applicable.
Articles 26(1)(c)(i)(3) 4(3)(a)	**[C] The indicative flow-based charge**
	Not applicable.

[9] Complementary revenue recovery charge: Information on commodity-based transmission tariffs referred to in Article 4 (3)

Articles 26(1)(c)(i)(1) 4(3)(b)	**[A] The manner in which they are set**
	Not applicable.
Articles 26(1)(c)(i)(2) 4(3)(b)	**[B] The share of the allowed or target revenue forecasted to be recovered from such tariffs**
	Not applicable.
Articles 26(1)(c)(i)(3) 4(3)(b)	**[C] The indicative complementary revenue recovery charge**
	Not applicable.

[10] Information on non-transmission services provided to network users

Articles 26(1)(c)(ii)(1) 4(1)	**[A] Non-transmission service tariff methodologies**
	Not applicable.
Article 26(1)(c)(ii)(2)	**[B] Share of the allowed or target revenue forecasted to be recovered from such tariffs**
	Not applicable.
Articles 26(1)(c)(ii)(3) 17(3)	**[C] The manner in which the associated non-transmission services revenue is reconciled as referred to in Article 17(3)**
	Not applicable.
Article 26(1)(c)(ii)(4)	**[D] Indicative non-transmission tariffs for non-transmission services to network users**
	Not applicable.

[D] COMPARED TARIFFS AND TARIFF MODEL [ART. 26(1)(D)]

[11] The indicative information set out in Article 30(2)

The comparison of the tariffs is based on reference prices. Upon publishing of this document no information is available neither on multipliers and seasonal ratios nor on the manner of calculating discounts for standard products referring to intermittent capacity. The above-mentioned information is the subject of separate consultation being performed by the NRA (the Energy Regulatory Office) and it will be published after it is approved, on the website of the GAZ-SYSTEM S.A. Transit Gas Pipelines Operator.

| Articles 26(1)(d) 30(2)(a)(i) | **[A] Comparison between transmission tariffs applicable for:** |

[A] Comparison between transmission tariffs applicable for:
- **The current tariff period;**
- **The tariff period which the indicative reference prices being the subject of this consultation document pertain to.**

Explain the difference between the levels of transmission tariffs

The table below presents differences in reference prices levels between the current tariff and the indicative one calculated according to the proposed Reference Price Methodology (RPM).

Tariff period	Kondratki Entry	PWP Exit	Mallnow Entry/Exit
	[PLN/MWh/day]	[PLN/MWh/day]	[PLN/MWh/day]
Current tariff period	1.2270	0.4062	1.2270
Tariff period being consulted	1.3885	0.4597	1.3885
Difference	0.1615	0.0535	0.1615
	13 %	13 %	13 %

The tariff that is currently in force was made effective as of January 1, 2017. The increase of the indicative reference prices comparing to that tariff results from a costs increase including mainly an increase in the gas purchase price for the needs of the transmission.

Articles 26(1)(d) 30(2)(a)(ii)

[B] Comparison between transmission tariffs applicable for:
- **The tariff period which the indicative reference prices being the subject of this consultation document pertain to;**
- **Each tariff period of the remaining part of the regulatory period.**

Not applicable. The tariff year is equal to the regulatory period.

Articles 26(1)(d) 30(2)(b)

[C]   A simplified tariff model, updated regularly, enabling network users to calculate the transmission tariffs applicable for the prevailing tariff period and to estimate their possible evolution beyond such tariff period

The simplified tariff model in the form of an Excel file (please see the link below) allows for performing a simulation of the reference prices determined according to the proposed RPM. Upon publishing of this document no information is available neither on multipliers and seasonal ratios nor on the manner of calculating discounts for standard products referring to intermittent capacity. The above-mentioned information is the subject of separate consultation being performed by the NRA (the Energy Regulatory Office).

The simplified tariff model will be properly updated, not later than on the date of publishing the above-mentioned information on the website of the GAZ-SYSTEM S.A. Transit Gas Pipelines Operator

Link to the file that contains the simplified tariff model (indicative reference prices):
http://en.gaz-system.pl/customer-zone/transit-yamal-pipeline/tgps-tariff/tar-nc-consultation/

Articles 26(1)(d) 30(2)(b)

[D] Explanation of how to use the simplified tariff model

The simplified tariff model is used for simulation of reference prices levels (rates of tariff charges for the SGT's entry and exit for annual continuous products). The starting point are settings that correspond to the indicative data (i.e. the ones that are the subject of this consultation). A change in the indicative reference prices can be simulated by a simulation of changes concerning:
- Level of regulated revenue;
- Breakdown of this revenue between the entry and exit points;
- Utilisation of technical capacities of the SGT.
The above-mentioned variables are simulated by means of dedicated sliders. In order to return to the input (indicative) data click the "Return to Indicative Data" pushbutton.

	[E] FIXED PAYABLE PRICE UNDER PRICE CAP REGIME [ART. 26(1)(E)]
[12]	**Where the fixed payable price referred to in Art.24(b) is offered under a price cap regime for existing capacity**

Article 26(1)(e)(i)	**[A] Provide proposed index**
	Not applicable

Article 26(1)(e)(ii)	**[B] Provide proposed calculation for the risk premium**
	Not applicable

Article 26(1)(e)(ii)	**[C] How is the revenue derived from the risk premium used?**
	Not applicable

Article 26(1)(e)(iii)	**[D] At which IPs is such an approach is proposed?**
	Not applicable

Article 26(1)(e)(iii)	**[E] For which tariff period(s) is such approach proposed?**
	Not applicable

Article 26(1)(e)(iv)	**[F] The process of offering capacity at an IPs where both fixed and floating payable price approaches referred to in Article 24 are proposed**
	Not applicable