Warsaw, 29 March 2019

PRESIDENT
ENERGY REGULATORY OFFICE

DRG.DRG-2.745.1.2019.JDo1

DECISION

Pursuant to Article 27(4) of Commission Regulation (EU) 2017/460 of 16 March 2017 establishing a network code on harmonised transmission tariff structures for gas (OJ L 72, 17.3.2017, p. 29) and Articles 104 and 108(1) of the Act of 14 June 1960 - Code of Administrative Procedure (Journal of Laws of 2018, item 2096, as amended), in connection with Article 30(1) and Article 23(2)(11a) of the Energy Law Act of 10 April (Journal of Laws of 2018, item 755, as amended),

after conducting administrative proceedings initiated ex officio

on 18 January 2019, towards

Operator Gazociągów Przesyłowych GAZ-SYSTEM Spółka Akcyjna with its registered office in Warsaw, hereinafter referred to as "the Operator",

completed by the Operator with letters dated 21 January 2019 – ref. no: 2019-11810 PF.3113.1.2019.1, 5 February 2019 ref. no: 2019-19907 PF.3113.5.2018.15 and 27 February 2019 ref. no: 2019-32097 PF.3113.5.2018.26

I hereby decide to:

I. approve 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 2022***, constituting an annex to this Decision,

II. make the Decision immediately enforceable.

STATEMENT OF REASONS

On 16 July 2018 the President of the Energy Regulatory Office (hereinafter: "the President of ERO"), by decision No DRG.DRG-2.7129.5.2018.JDo1, appointed the Operator as the entity responsible for the performance of the following obligations set forth in Commission Regulation (EU) 2017/460 of 16 March 2017 establishing a network code on harmonised transmission tariff structures for gas (OJ L 72 of 17.03.2017 p. 29), hereinafter: "the Tariff Code":

1) conducting consultations referred to in Article 26(1) of the Tariff Code, concerning, among others, the methodology for determining reference prices (also referred to as: "RPM Methodology or "RPM[1]"), including preparation of the consultation paper, its publication and publication of the responses received to such consultations and their summary,

2) providing the Agency for the Cooperation of Energy Regulators (hereinafter referred to as "ACER") with consultation papers after the commencement of the above referenced consultations, pursuant to Article 27(1) of the Tariff Code,

3) carrying out assessments of cost allocation referred to in Article 5 of the Tariff Code and publishing them as part of the aforementioned consultations,

for its own transmission network, among others.

These **consultations** should last at least two months and include the following information:

(a) a description of the proposed reference price methodology and the following elements:

- the indicative information referred to in Article 30(1)(a) of the Tariff Code, including a justification of the applied parameters related to the technical characteristics of the system and relevant information on their respective values and adopted assumptions,

- the values of the proposed capacity-based transmission tariff adjustments referred to in Article 9 of the Tariff Code,

[1] *Reference price methodology*

- the indicative reference prices subject to consultation,

- the results and components of the assessment of the cost allocation referred to in Article 5 of the Tariff Code and details of its components,

- an assessment of the proposed reference price methodology in terms of compliance with Article 7 of the Tariff Code,

- comparison of the proposed reference price methodology with the capacity weighted distance methodology (hereinafter also referred to as the CWD[2]) for indicative reference prices if the proposed reference price methodology differs from the capacity weighted distance methodology,

(b) the indicative information referred to in Article 30(1)(b)(i), (iv) and (v) of the Tariff Code,
(c) the following information on non-transmission tariffs:

- methods of setting the tariffs for the non-transmission services in question,
- the share of allowed or target revenues to be recovered from such tariffs,
- the manner of agreeing on revenues related to the provision of non-transmission services referred to in Article 17(3) of the Tariff Code,
- indicative tariffs for non-transmission services provided to network users,

(d) indicative information referred to in Article 30(2) of the Tariff Code.

The Operator has prepared a relevant consultation paper and from 28 August to 31 October 2018 **it conducted the above mentioned consultations** with respect to its own transmission network. After the consultations, it also published the answers received and their summary.

In the course of the consultations, **three** transmission system **users submitted their positions** on the following issues:

a) negative impact on the development of the gas market of the entry/exit split change (to 50/50) proposed in the consultation paper, as compared to the split used in the calculation of the tariff for 2019 (45/55) and insufficient justification for this change,

b) a proposal to increase the discount applied in the calculation of transmission rates at entries and exits to/from storage facilities, from the currently applied value of 80% to 100% (similarly to the value used in the case of entry from the LNG terminal), taking into account the importance of storage facilities for the safety and stability of the gas transmission system. In the opinion of this user, the discount for UGS should correspond to that for the LNG terminal and take into account the amount of discounts applied in the indicated European Union countries (Austria, Denmark, Spain, Hungary and Sweden),

c) a proposal to introduce preferential transmission rates for bundled capacity reservations at entry/exit point to/from the transmission system on the Polish-Ukrainian border in relation

[2] *Capacity weighted distance* – methodology specified in Article 8 of the Tariff Code

to the rates applied at this point for unbundled products, which would increase the utilisation of currently available capacity at this point and the capacity resulting from its planned expansion, by increasing the competitiveness of this direction of gas transmission to Ukraine in comparison to alternative directions using the transmission infrastructure of other countries.

Pursuant to the provisions of Article 27(3) of the Tariff Code, on 13 December 2018 **ACER published and sent to the Operator the conclusions** of the analysis of the consultation papers, conducted pursuant to paragraph 2 of the above mentioned provision. ACER's conclusions regarding the Operator's own network included comments on the consultation paper and recommendations to the Regulator to be taken into account in the final decision regarding the reference price methodology, that is:

a) specification of the period for which the reference price methodology and parameters are approved or a clear specification of the circumstances that will trigger a new consultation process,
b) specification of the fixed entry/exit split or presentation of adequate justification as to the circumstances which will change it,
c) submission of all relevant information justifying the choice of the reference price methodology, in particular justifying the definition of the system as a meshed system. This information should be supported by an assessment of infrastructure projects (for which a final investment decision has been taken) which can be implemented within the reference price methodology validity term,
d) submission of a consistent comparison with the CWD methodology, including at least the results before and after the application of discounts/adjustments (also for the proposed postage stamp method) and a comparison of rates for homogeneous groups of points based also on their geographical location in the network,
e) submission of a more detailed impact assessment of the proposed reference price methodology on cross-subsidisation,
f) submission of a volume risk assessment in the proposed methodology, which should be included in the final decision of the Regulator and take into account the current configuration of the transmission network and future investments mentioned in the consultation document (for instance, the Baltic Pipe).

In addition, in its opinion, ACER concluded that the consultation paper contained all the information required, with a proviso that it needed to be completed as indicated above. According to ACER, the consultation paper also lacked a logical assessment of the compliance of the reference price methodology with the requirements set out in Article 7 of the Tariff Code and the characteristics of the transmission system with the required level of detail, taking into account the planned investments during the methodology validity term. Nevertheless, based on its own analyses, ACER concluded that:

(a) the ability of network users to predict reference prices is hampered by a lack of transparency about the period for which the proposed methodology will be applied and by the existence of a variable entry/exit split range after 2020,

(b) the proposed reference price methodology is consistent with the principle of cost-reflectivity, since distance is not the main cost driver in the Polish transmission system,

(c) the proposed RPM does not lead to excessive cross-subsidisation,

(d) in the Operator's network there is no situation in which a much larger volume of gas is transported than consumed and therefore the volume risk is not likely to be a problem,

(e) reference prices do not distort cross-border trade.

In the summary of its report, ACER referred to the configuration of the Polish transmission network, which is divided into two entry/exit systems: the national network and the SGT pipeline[3]. According to ACER, the result of this is that gas supplies to the Polish market via the SGT pipeline are more expensive than via other entries to the national network. The difference is determined by two additional rates arising from the tariff for the SGT pipeline:

- gas entering the national network is charged the same rate at entry points resulting from the proposed postage stamp methodology for this system (3.517 PLN/MWh/h)[4],
- gas entering the national network via the SGT pipeline is charged for entry to the SGT pipeline on the border with Belarus (1.3885 PLN/MWh/h) and for exit to Poland (0.4597 PLN/MWh/h). In total, these rates amount to 1.8482 PLN/MWh/h and the entry rate to the national grid should be added to them. The additional fee for gas supply to the Polish market via the SGT pipeline constitutes a surplus of 52% compared to standard entry rate charged when gas is fed directly into the national network.

In consideration thereof, ACER recommended that the regulator should estimate the costs and benefits of a merger of the two entry/exit systems.

In accordance with Article 27(5) of the Tariff Code, the procedure including the final consultation on the reference price methodology referred to in Article 26, issuance of a decision on the consulted issues by the President of ERO pursuant to Article 27(4), calculation of the tariff according to that decision and publication of the tariff, must be completed by **31 May 2019** at the latest. This procedure shall be repeated at least every five years starting on 31 May 2019.

Pursuant to Article 27(4) of the Tariff Code, the President of ERO, within 5 months of the end of the final consultations (that is by 31 March 2019), is obliged to take and publish a reasoned decision regarding the reference price methodology, including the issues specified in Article 26(1) of the Tariff Code, with respect to the transmission network of the Operator. The decision approving the above methodology after its publication will be sent to ACER and the European Commission.

Considering the above, on 18 January 2019 the President of ERO informed the Operator about the **initiation of an ex officio proceedings** on approving the reference price methodology, including the elements specified in Article 26(1) of the Tariff Code, with respect to the Operator's own transmission network.

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[3] Gas pipeline owned by: System Gazociągów Przesyłowych EuRoPol GAZ S.A.

[4] Indicative entry rate resulting from the consultation paper on the Operator's network, assuming a 50/50 entry/exit split. The final version of the RPM for the Operator's network maintains the current entry/exit split of 45/55, resulting in a change in indicative rates in relation to the version reviewed by ACER.

At the same time, the Operator was requested to submit, within 7 days of the delivery of the notification, the following explanations and supplements with respect to the **reference price methodology**:

a) to submit explanations of the Operator regarding the conclusions contained in the ACER analysis[5],

b) to submit the Operator's position on the comments received from transmission system users in the consultations, including the relevant calculations,

c) to provide explanations as to whether the methodology fails to consider the fact that regulated /allowed covers revenue from the provision of ancillary services rendered at the customer's request, revenue from fees for exceeding contracted capacity and the balance of revenue and expenses earned/incurred under the performance of the contract referred to in Article 9h(3)(2) of the Energy Law Act[6], and the performance of activities arising from the decision referred to in Article 9h(9) of that Act, pursuant to Article 10(1), (2) and (3) of the Ordinance of the Minister of Energy of 15 March 2018 on detailed rules for shaping and calculating tariffs and settlements in trade in gaseous fuels (Journal of Laws of 2018, item 640), hereinafter referred to as the "Tariff Ordinance",

d) to provide explanations concerning the date for which the long-term firm and interruptible capacities, taken into account for the calculation of the tariff, are set; in the view of ERO, this date should not be earlier than 10 May of the year in which the application for tariff approval is submitted, as this is the date for the submission of capacity orders for the next gas year as set out in the TNC[7],

e) to provide explanations concerning the non-inclusion of daily capacity in the short-term capacity volumes used to calculate the tariff and missing indication that short-term capacity is the so-called 'annualised capacity', that is, capacity converted with the use of appropriate correction factors and the number of short-term products realised by all users of the system,

f) to provide explanations regarding the costs of the GSA platform[8] and the manner of covering them, including the Operator's position regarding the qualification of the services rendered by this platform as a transmission, non-transmission or non-regulated activity,

g) to submit a description of the regulatory account and the rules for reconciling it during the methodology validity term, pursuant to the provisions of Articles 17, 18, 19 and 20 of the Tariff Code.

By letter of 21 January 2019 the Operator applied for an extension of the 7-day deadline for responding to the aforementioned call before 5 February 2019, justifying its request with the scope

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[5] https://www.acer.europa.eu/en/Gas/Framework%20guidelines_and_network%20codes/Pages/Harmonised-transmission-tariff-structures.aspx

[6] Agreement on entrusting transmission system operator obligations on the gas pipeline belonging to the SGT EuRoPol GAZ S.A.

[7] Transmission Network Code of the Operator, approved by the President of the Energy Regulatory Office.

[8] Gas-System Auctions - an IT platform established in July 2014 in connection with the requirements of NC CAM (Network Code for Capacity Allocation Mechanism).

of data necessary to be prepared. In a letter dated 28 January 2019, the President of ERO approved the Operator's request.

On 5 February 2019, a reply was received in which the Operator indicated/explained that:

a) pursuant to Article 27(5) of the Tariff Code, the consulted reference price methodology referred to the maximum period specified in that provision, that is 5 years, while leaving the final decision in this respect to the President of ERO, whose responsibilities include implementation of the state energy policy (pursuant to Article 23(1) of the Energy Law). The Operator also agreed with ACER's opinion on the need to specify the period for which the reference price methodology will be approved, proposing to shorten this period to 3 years, and noted that "in view of the many capital-intensive investments currently underway by the Company, such as the Baltic Pipe, which will have a significant impact on the development and distribution of gaseous fuel in the domestic transmission system, and whose impact on the method of settlement for services provided is currently difficult to assess, periodic consultations on the tariff calculation methodology should be conducted again in 2022. Therefore, in the consultation paper GAZ-SYSTEM did not present a description of the investments whose development may have an impact on the methodology for calculating transmission tariffs only after 2022. Therefore, in the Company's opinion, the currently consulted methodology should be in force for a period of 3 years, until 31 December 2022",

b) it endorsed ACER's view that the decision approving the reference price methodology should specify a fixed entry/exit split and proposed its value of 50/50, which is transparent, non-discriminatory, does not entail excessive cross-subsidisation and does not adversely affect cross-border trade. At the same time, it clarified that the range of variation of this split from 40/60 to 60/40, as set out in the consultation paper, was intended to enable tariffs to be designed in such a way as to prevent significant increases in reference prices,

c) supplementing the explanations concerning the justification for the choice of the consulted reference price methodology, the Operator indicated that in its opinion it meets all the requirements specified in Article 7 of the Tariff Code, as there are many interconnections in the network and the points are fairly densely and evenly distributed on the topographic map of the transmission system. On the other hand, internal points of the transmission network may be supplied from various geographical directions, both from underground gas storage facilities, gas fields and through interconnections. It also stressed that the comparison of reference prices calculated on the basis of the proposed postage stamp methodology with those resulting from the CWD methodology shows that distance is not a cost driver which significantly affects the level of reference prices, as ACER has also repeatedly emphasised in its analysis.

   As a proof of the meshed transmission system, the Operator presented two schemes of high-methane gas flows: the first on peak day (28 February 2018) and the second for the day with the lowest demand level (1.04.2017), which constitute the Operator's secret,

d) The Operator presented a comparison of the rates calculated in accordance with the proposed reference price methodology and the CWD comparative methodology in 2 variants: the first one - taking into account the discount for storage facilities (80%) and LNG terminal (100%) and the second one - without taking into account the discounts in the calculation of reference prices,

e) as regards the supplementation of explanations concerning cross-subsidisation, the Operator explained that the estimation of the degree of cross-subsidisation between the intra-system and cross-system utilisation of the transmission network is based on the cost allocation assessment referred to in Article 5 of the Tariff Code; since the cost allocation index calculated on the basis of this provision reached less than 10%, no further analysis and justification of this value is required. It also stressed that the methodology under consultation, which foresees setting one level of transmission rates for all entry points and one level of transmission rates for all exit points, does not create price preferences for a specific direction of gas flow (including cross-system utilisation of the transmission network), which was confirmed in the ACER's opinion on the absence of excessive cross-subsidisation,

f) The operator explained that it considers the volume risk to be low due to the fact that all regulated revenue is recovered by fixed rates dependent on contracted capacity,

g) as regards the position concerning the comments of system users made as part of the consultations, the Operator:
   - maintained the validity of adopting an entry-exit split of 50/50 despite the significant increase in transmission system entry rates as compared to the tariff in force in 2019,
   - indicated the possibility of introducing preferential rates at the interconnection point with Ukraine, which may however have a negative impact on the rates applied at other points of the transmission system,
   - welcomed the proposal to increase discounts on connection points with UGS[9] (from 80% to 100%), bearing in mind the important role played by gas storage facilities in the natural gas supply chain and their importance for the security, integrity and stability of the gas system, and stressed at the same time that increasing this discount would entail an increase in rates at other points of the system, as confirmed by appropriate simulations,

h) the Operator noted that the provisions of the Tariff Code refer to the method of determining reference prices; however, they do not refer in principle to the method of determining regulated revenue. Therefore, the consultation paper did not refer to the issue of whether or not to include revenues from individual activities of the operator in it. The level of revenue used as the basis for calculating the indicative transmission rates for 2020 was determined on the basis of revenue used as the basis for calculating the rates for 2019, including a slight increase in costs,

i) the Operator advocated maintaining the method for determining the level of contracted capacity underlying the calculation of transmission rates proposed in the consultation paper, both for long and short-term capacity, indicating that under- or over-recovery of regulated revenue will be reconciled through a regulatory account,

j) the Operator explained that, in accordance with ACER's recommendations, the GSA platform activities were unbundled in terms of organisation and accounting, as additional activities not covered by the gas transmission licence - not regulated. The organisational structure of the GSA platform, the detailed tasks performed by the organisational units and the allocation

[9] Underground gas storage facilities

of staff responsible for their implementation, as well as the rules for unbundling the costs of these activities were established.
According to the Operator, the level of operating costs related to the GSA platform is relatively low compared to the level of fees that the Operator would have to pay for using the services of other platforms and lower than the costs that would be generated by a special purpose vehicle providing such services.
The costs of the GSA platform are covered by the revenues generated from this activity. In the calculation of transmission rates, the Operator includes the costs of services provided by the GSA platform to the Operator. In the Operator's opinion, the activities of the GSA platform do not meet the eligibility criteria for non-transmission services, set forth in their definition and in Article 4 of the Tariff Code.

k) as regards the regulatory account, the Operator pointed to the existence of several possible solutions and declared its readiness to cooperate with the Regulator in this respect; it also stressed that as part of work on amending the tariff ordinance, it proposed that the balance of the regulatory account should be reconciled for the first time when determining the regulated revenue for 2021.

As attachment to the response to the request, the Operator submitted documents concerning the principles of operation of the GSA platform, assumptions for the cost allocation model of the GSA platform and the results of the calculation of transmission rates using the CWD method.

After the analysis of evidence gathered during the proceedings, including the above mentioned information supplemented by the Operator, on 18 February 2019 the Operator was sent another request for explanations and supplementation of documents:

a) to submit a draft RPM methodology, including the elements specified in Article 26(1) of the Tariff Code and taking into account the conclusions of the ACER analysis[10], in a layout consistent with the template attached to the request, with the indication that the draft methodology should contain only data that does not constitute the Operator's confidential information,

b) to submit a description of the Polish natural gas transmission system (separately for high-methane gas - E and low-methane gas - Lw) taking into account the investments planned for implementation in the RPM methodology validity term, as well as other suggestions contained in the ACER's analysis, as an annex to that methodology, including a simplified transmission system diagram,

c) to present the Operator's position on the merger of the entry/exit system owned by the Operator and the system owned by the energy company SGT EuRoPol GAZ S.A. with its registered office in Warsaw, suggested by ACER, taking into account the binding long-term contracts,

d) to submit information on revenue generated and costs incurred in 2017 and 2018,

[10] https://www.acer.europa.eu/en/Gas/Framework%20guidelines_and_network%20codes/Pages/Harmonised-transmission-tariff-structures.aspx

e) to submit an analysis of transmission and non-transmission services provided by the Operator, bearing in mind their definitions contained in Article 3(12) and (15) of the Tariff Code, as well as services provided under non-regulated activities and an appropriate supplementing the draft RPM methodology, including the calculation of rates for non-transmission services provided (among others, odorization, technical emergency services, gas compression), in accordance with the requirements set forth in Article 4(4) of the Tariff Code,

f) to take into account in the RPM the fact that regulated/allowed revenue covers revenue from the provision of services at the additional order of the customer, revenue from fees for exceeding the contracted capacity and the balance of revenue and costs obtained/incurred from the performance of the agreement referred to in Article 9h (3) (2) of the Energy Law Act, as well as from the performance of activities arising from the decision referred to in Article 9h (9) of that Act, pursuant to Article 10 (1), (2) and (3) of the Tariff Ordinance,

g) to provide information on the revenues and costs associated with the operation of the GSA platform in 2016, 2017 and 2018 and the costs of this platform included in the calculation of the tariff for 2018 and 2019,

h) to adopt an entry/exit split of 45/55 for the entire period of application of the RPM (due to the Operator's proposal to shorten the duration of the RPM to 3 years), which should guarantee stable conditions for the operation of the transmission system users and not limit the liquidity of the Polish gas market.

   If the Operator maintains its position on this matter, it has been requested to submit a detailed justification for the proposed entry/exit split (50/50) and:

   - calculation of transmission rates for the years 2020-2022, taking into account the forecasted changes in regulated revenue and contracted capacities used to calculate the tariff,
   - present the effects of the change of the entry/exit split, for all system users and contracted capacities realised in 2018, in a layout in line with Table D3a used in the administrative proceedings on the 2019 tariff,

i) to supplement the justification for the 80% discount applied to entry/exit from/to storage facilities, taking into account their important role in the natural gas supply chain and their impact on security of supply as well as integrity and stability of the gas system operation (as indicated by the Operator in its letter of 5 February 2019), by attaching a calculation confirming the validity of the discount applied,

j) to complete the information on the CWD tariff calculation to enable its verification, fulfilling the ACER recommendation to create clusters of homogeneous points locatedin the vicinity of each other in order to simplify these calculations and complete the postage stamp rate comparison included in the RPM methodology with data for 3 points with maximum contracted capacities for each type of point (tariff group),

k) to supplement the Operator's explanations relating to the network user's request for the introduction of preferential transmission rates at the border point with Ukraine in order to increase the competitiveness of gas exports from Poland by presenting proposals for specific

solutions, based on appropriate calculations and not resulting in an increase in transmission rates at other points of the transmission system,

l) to provide a justification for using the average rate established for all entry points, including storage, production facilities and gas fields, to calculate the revenues from cross-system utilisation of the transmission network, used in the cost allocation assessment referred to in Article 5 of the Tariff Code.

,On 21 February 2019, at the request of the Operator, a meeting was held at the seat of ERO to discuss the issues covered by the call of 18 February 2019. On 27 February 2019, the Operator's response to the aforementioned call was received, to which a draft reference price methodology for the period from 1 January 2020 to 31 December 2022 was attached, in line with the template provided to the Operator with the call. In addition, the Operator:

a) submitted a description of the Polish gas transmission system, including the investments planned until 2022, along with relevant simplified diagrams, explaining at the same time that as a result of the project consisting in rearranging the gas infrastructure, some of the exit points from the national transmission system were sold to Polska Spółka Gazownictwa Sp. z o.o., which contributed to the reduction of the number of exit points managed by the Operator,

b) explained that the effects of the Operator's system and the TGPS merger depend on the continuation of capacity orders (or lack thereof) on the transit gas pipeline through so-called historical contracts, which expire during the validity term of the reference price methodology,

c) explained that the Operator's information on revenues and costs for 2018 broken down by activity will be submitted at a later date due to the lack of financial statements for that period,

d) reaffirmed that, during the validity term of the reference price methodology, it did not intend to provide non-transmission services within the meaning of Article 4 of the Tariff Code because:

- the provision of the gas odorization service was terminated as at 31 December 2018 in connection with the sale of part of the transmission infrastructure to PSG Sp. z o.o. (including natural gas odorization stations),
- the GSA platform services are not covered by the gas transmission licence (non-regulated activity) and this activity has been unbundled in terms of organisation and accounting,
- services provided by gas quality measurement and metrology laboratories, which function as separate organizational units within the Operator's structure, do not constitute non-transmission services within the meaning of Article 4 of the Tariff Code as they may be provided to entities which do not use the transmission network and do not participate in the gas market. Furthermore, the Operator stated that it did not expect to generate revenues from the provision of these services to third entities in 2019 and in the following years, but in case of their occurrence in a given year they will decrease the cost base in the following year,
- gas compression services are provided locally to gas fields at their exit points and are not available at all points in the system, therefore the Operator treats them as activities not covered by the licence (non-regulated), for which revenues and costs have been

separated (of negligible value). In particular, the services are provided in order to optimise gas indigenous production,

e) reiterated that, pursuant to Article 26 of the Tariff Code, periodic consultations on the reference price methodology describe the methodology for calculating transmission rates and do not relate to the method for calculating regulated revenue. The provisions of the Tariff Code do not regulate the method of determining the revenues of the Operator and therefore the consultation paper did not cover the issue of including or not revenues from individual activities of the Operator,
f) provided information on the revenues and costs associated with the operation of the GSA platform,
g) complied with the request and accepted an entry/exit split of 45/55 for the whole period of application of the reference price methodology and provided an adjusted calculation of the indicative reference prices,
h) underlined the rationale for maintaining an 80% discount at entry/exit points to/from gas storage facilities,
i) presented the results of calculations aimed at comparing the rates calculated according to the chosen method of calculation of transmission rates and the comparative method of CWD (for all points of the system), described in Article 8 of the Tariff Code, with and without discounts for the points of connection to UGS and the LNG terminal. It also emphasized that labour-intensive analyses, which - due to the necessity of clustering homogeneous points of the transmission system - require re-establishing distances and connections between cluster of points, are, in its opinion, unjustified. Especially since it will serve only as a comparative method;
   The Operator pointed out that the results obtained by applying the CWD methodology confirm the validity and accuracy of the choice of the postage stamp methodology for the Polish transmission system, due to slight differences in the levels of rates for both methodologies and the number of internal connections and supply options from different directions, which prove the complexity of the meshed transmission system and thus confirm that the distance between individual points is not a cost driver,
j) with regard to presenting specific solutions, based on appropriate calculations and not resulting in an increase of transmission rates on the remaining points of the transmission system, concerning the introduction of preference transmission rates at the border point with Ukraine, the Operator informed that it failed to develop a solution which would not entail a loss of part of the regulated revenue or would not result in an increase of transmission rates on the remaining points of the transmission system,
k) with respect to the rate at the entry to the transmission system adopted for the calculation of revenues from cross-system utilisation of the transmission network, applied in the cost allocation assessment referred to in Article 5 of the Tariff Code, the Operator explained that "for the calculation of cross-system revenues obtained at entry points it has been assumed that gaseous fuel will be fed into the system through all entry points in quantities corresponding to the shares of the forecasted capacities at individual points. This also applies to points where discounts are applied, that is the LNG Terminal and entry points to the system from the UGS".

The Operator has attached the transmission system diagrams to the above explanations.

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In the letter of 22 March 2019, ref. no: DRG.DRG-2.745.1.2019.JDo1, the President of ERO notified the Operator of the completion of the administrative proceedings and of the possibility to consult the evidence gathered in this case within 3 days from the date of receipt of the notification. The Operator did not exercise its right.

In the course of the present proceedings, the President of ERO noted the following:

The Operator holds a licence for the transmission of gaseous fuels within 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).

By decision of 23 June 2006, ref. no: DPE-47-4(2)/6154/2006/BT, as amended by decision of 18 December 2006, ref. no: DPE-47-10(5)/6154/2006/MW, decision of 9 December 2009, ref. no: DPE-47-109(2)/6154/2009/BP, decision of 13 October 2010, ref. no: DPE-4720-3(7)/6154/2010/BT, and decision of 6 December 2018, ref. no: DRG.DRG-1.4720.1.2018.KL, the President of ERO appointed OGP Gaz-System S.A. as the gas transmission system operator on the territory of the Republic of Poland on the networks owned by it for the period ending on 6 December 2068. While by decision with ref. no: DPE-4720-4(8)/2010/6154/BT, the President of ERO appointed OGP Gaz-System S.A. as the gas transmission system operator on the section of the Yamal - Western Europe gas pipeline located on the territory of the Republic of Poland, owned by System Gazociągów Tranzytowych EuRoPol GAZ S.A, for the period until 31 December 2025.

By decision of 22 September 2014, ref. no: DRG-4720-1(13)/2014/6154/KF, the President of ERO granted the Operator the certificate of independence referred to in Article 9h[1] (1) of the Energy Law Act, in connection with the performance of the function of a transmission system operator on its own networks. Furthermore, by the decision of 19 May 2015, ref. no: DRG-4720-2(28)/2014/2015/6154/KF, the President of ERO granted the certificate of meeting the independence criteria to the Operator, in connection with the performance of the function of a transmission system operator in the ISO formula[11] on the transmission network owned by the SGT EuRoPol GAZ S.A.

Pursuant to Article 47(1) of the Energy Law Act, energy companies holding licences set tariffs for gaseous fuels, which are subject to approval by the President of the ERO, and propose their term of validity.

Pursuant to Article 23(2)(11a) of the Energy Law Act, the scope of activity of the President of ERO includes, among others, (...) the performance of duties of the regulatory authority arising from regulations adopted pursuant to Articles 8 and 23 of Regulation 715/2009 (including the Tariff Code).

The Tariff Code entered into force on 6 April 2017, except for the provisions of Chapters VI and VIII, which have been applicable as of 1 October 2017, and Chapters II, III and IV, which shall apply as of 31 May 2019. The Tariff Code is binding in its entirety and directly applicable in all EU Member States.

Pursuant to Article 27(4) of the Tariff Code (Chapter VII applied from the date of its entry into force), the President of ERO is obliged to take and publish a justified decision regarding the reference price methodology, including the elements specified in Article 26(1) of the Tariff Code, with respect to the transmission network of the Operator, within 5 months from the end of the final consultations (i.e.

[11] *Independent System Operator*

by 31 March 2019). This decision, after its publication, will be sent to ACER and the European Commission.

As indicated above, the consultation paper on the reference price methodology for the Operator's own network, in connection with Article 27(3) of the Tariff Code, was the subject of ACER's analysis. This opinion was published by ACER on 13 December 2018. It follows from the opinion that the methodology contains all the elements specified in Article 26(1) and meets the requirements specified in Article 7 of the Tariff Code. This position is also shared by the President of ERO and ACER's findings are accepted. Regardless of the above mentioned position, ACER formulated recommendations for the Regulator to be taken into account in the final decision on the reference price methodology. These recommendations are set out on pages 3 and 4 of this Decision.

The following should therefore be noted when referring to the abovementioned recommendations:

(a) With regard to the clarification of the period for which the reference price methodology and parameters are approved, it should be noted that, in accordance with Article 27(5) of the Tariff Code, the procedure comprising final consultation on the RPM, the decision on the RPM by the national regulatory authority, the calculation of the tariff under that decision and its publication should be repeated at least every five years starting on 31 May 2019.

When determining the validity term of the RPM, a significant scope of investments currently carried out by the Operator and their impact on future tariffs should be borne in mind. Such investments will significantly affect the level of justified costs, return on capital, volume of capacity orders at the entry and exit from the transmission system and will cause a significant change in gas flows in the network. The commissioning of a major part of the transmission system components resulting from these investments is planned for the end of 2022.

Bearing the above in mind, the validity term of this RPM was set at 3 years, that is **from 1 January 2020 to 31 December 2022**.

(b) a fixed entry/exit revenue split of **45/55** is set for the entire validity term of the reference price methodology. The split at this level in the analysed period of the RPM should ensure stable conditions for the operation of transmission system users. While establishing the above, it was taken into account that such a structure was used in the Operator's last tariffs,

c) the reference price methodology set out in the Annex to this Decision shall include a sufficiently detailed description of the transmission system (including simplified schemes) proving its meshed nature. The resulting conclusions confirm the validity of the choice of postage stamp methodology,

d) a comparison of the reference prices resulting from the postage stamp method with the prices calculated using the CWD methodology has been provided in two options: without and with the adjustments of those prices (discounts for UGS and LNG terminal);
It should also be noted that the CWD methodology calculation was performed by the Operator for all points of the transmission system, so in the light of the Tariff Code it does not seem justified to make another comparison of rates also for groups of homogeneous points located in the vicinity of each other,

e) the reference price methodology set out in the Annex to this Decision in point 4.6 includes an assessment of the postage stamp methodology for compliance with the requirements of Article 7 of the Tariff Code, including excessive cross-subsidisation and volume risk.

Referring to the merger of the two exit/entry systems existing in Poland: those owned by the Operator and those owned by SGT EuRoPol GAZ S.A., as suggested by ACER, it should be borne in mind that, as stated in the previous paragraph (a), the Operator is currently carrying out a number of investments which will significantly affect the operation of the transmission system owned by it. Putting into service the major part of the transmission system components resulting from these investments is planned for the end of 2022. It is also important that in the case of the transmission system owned by the SGT EuRoPol GAZ S.A., the transitional period set by the date after which the transmission contracts concluded by the owner before 3 September 2009 (the so-called historical contracts) will expire on 31 December 2022.

In the light of the above, it seems justified that the relevant analyses (in order to ensure the reliability of their results) should be performed after the clarification of the situation concerning, on the one hand, the boundary conditions for the operation of the transmission system of the Operator and, on the other hand, after the clarification of the situation of potential capacity orders currently used under the so-called historical contracts.

Referring to the comments of the transmission system users made in the course of consultations conducted by the Operator, it should be stated that:

- the issue of the entry/exit split adopted by the Operator in the consultation paper (up to 50/50), to which the transmission system user raised objections, was clarified (taken into account) by adopting this split in the reference price methodology at the level from the calculation of the 2019 tariff, that is 45/55 (see point 5.3 of the Annex);
- the issue of discounts at exit points to storage facilities and entry from storage facilities. The range of these discounts is wide and varies greatly from one member state to another. Currently, in accordance with Article 9(1) of the Tariff Code, a discount of at least 50% applies to capacity-based transmission tariffs at entry points from storage facilities and exit points to storage facilities, excluding storage facilities connected to more than one transmission or distribution network, to the extent in which the facility is used to compete with an interconnection point.

  Discounts at the entry point from the LNG terminal in the amount of 100% arose from Article 9(2) of the Tariff Code and were justified due to the introduction of real diversification of natural gas supplies, which in the case of Poland is of key importance for the security of the gas system operation. The high discount reflects the significant role of storage facilities for energy security and their impact on the optimisation of the transmission network. The discounts applied for UGS exceed the level recommended in Article 9(1) of the Tariff Code by 30 percentage points for both entry and exit points.

  Cooperation of storage facilities with the gas transmission system brings benefits to the transmission system (which is reflected in the discount rate), but also involves costs (servicing nominations, inter-operator account, flow optimisation, including maintenance of pressure in pipelines higher in summer than that resulting from the normal operation of the system). The above leads to the conclusion that in the period covered by this Decision, discounts at entry and exit points from storage facilities should be maintained at the levels applied so far - that is 80% (see point 4.2.1 of the Annex);
- The introduction of preferential rates for the interconnection point with Ukraine, proposed by a market participant, requires in-depth analyses and the development of a

mechanism that does not pass on part of the costs resulting from such preferences to other transmission system users and does not infringe the principle of equal treatment of market participants. The information obtained shows that the Operator will carry out further work to optimise rates on cross-border interconnections, taking into account the development of the transmission system and equal treatment of entities.

The Final Reference Price Methodology approved by the President of the ERO for the period from 1 January 2020 to 31 December 2022 is set out in the Annex to this Decision.

With reference to immediate enforceability applied to the decision, it should be noted that pursuant to Article 108 § 1 of the Code of Administrative Procedure, the decision against which the appeal may be lodged may be made immediately enforceable when it is necessary for the protection of human health or life or to protect national economy from serious losses or for other social or exceptionally important interests of the party.

It is argued in the legal doctrine that the basic criterion for giving the decision an order for immediate enforceability is the 'necessity' of the immediate implementation of the decision. The need for immediate action "may arise in a case in which it is impossible at a given time and under the existing circumstances to proceed without exercising the rights or obligations stipulated in the decision, because a delay in their exercise threatens the protected goods referred to in Article 108(1) of the Code of Administrative Procedure. This threat must be of a real nature and not only theoretically probable." (see B. Adamiak, J. Borkowski, Code of Administrative Procedure, Commentary, Warsaw 2009, p. 420). The above view is approved by the jurisprudence (see judgment of the National Administrative Court of 19 February 1998, ref. no V SA 686/97 LEX No 34040, NAC judgment of 28 April 1998, ref. no V SA 677/97 LEX No 59221, NAC judgment of 30 June 2006, ref. no I OSK 116/06 LEX No 266225).

One of the reasons justifying the immediate enforceability of the decision is the protection of the good in the form of "other social interest". The literature indicates that "there is no permanent, constant definition of social interest, and the content of this concept must be determined on a case-by-case basis" (see M. Wyrzykowski, Pojęcie interesu społecznego w prawie administracyjnym, [Social interest in administrative law] Warsaw 1986, p. 209). Therefore, it is an indefinite concept, the content of which is given by the adjudicating authority (Ibidem). It should be noted that social interest is subject to special care and protection of state bodies, which in the process of law application determine and precise it. Social interest should be identified with public interest, collective interest or general interest (see the justification of the Constitutional Tribunal judgment of 12 March 2007, ref. no K.54/05 LEX no 257765, CT judgment of 31 March 2005, ref. no SK 26/02 LEX no 149944, judgment of Administrative Court in Warsaw of 3 August 2004, ref. no V SA 5175/03 Lex Polonica no 370990).

Analysing the rights and obligations arising from this Decision in the context of the premises indicated in Article 108 § 1 of the Code of Administrative Procedure, it should be highlighted that the purpose of the regulation of Article 27(4) of the Tariff Code is to increase the transparency of transmission tariff structures and procedures for their determination through, among others, publication of information on determination of revenues of transmission system operators and determination of such tariffs. These requirements are to enable network users to better understand the tariffs set for transmission and non-transmission services and to understand the changes introduced in these tariffs, the manner in which they are set and the possibility of changing them, as well as to improve the opportunities for competition development. As regards procedures, the Tariff

Code also contains regulations concerning deadlines for consultations and publication of tariffs and other data selected so that transmission network users may use these networks on equal, transparent and non-discriminatory terms. In this context, it is important that in the light of item 5 of the aforementioned provision, the issuance of the first decision by the national regulator after the entry into force of the Tariff Code, in accordance with item 4, the calculation of tariffs on the basis of this decision and the publication of tariffs (...) must be completed by 31 May 2019 at the latest. This is due to the fact that, pursuant to Article 32(a) of the Tariff Code, the publication of the approved tariff must take place no later than 30 days before the annual auction of annual capacity (normally held on the first Monday of July of each year).

This implies that immediate submission of the tariff calculated on the basis of this methodology and its publication by 31 May 2019 is in the interest of transmission system users and that any delay in this respect would be detrimental to the public interest.

The President of ERO, as a public administration body, is obliged to uphold the rule of law, thus implementing the fundamental principle of the rule of law, stipulated in Article 7 of the Constitution of the Republic of Poland and repeated in Article 6 of the Code of Administrative Procedure, according to which public authorities act under the rule of law and within the limits of the law. Therefore, the President of ERO is obliged to undertake all actions aimed at meeting the deadlines enabling transmission network users to exercise their rights guaranteed by the Tariff Code.

Considering the schedule arising under the deadlines set out in the Tariff Code, it should be noted that the Operator is obliged to calculate the 2020 tariff on the basis of the reference price methodology attached as an annex to this Decision and immediately submit an application for its approval to the President of ERO.

Thus, the need to ensure that the rights of transmission system users are exercised, that competition can develop and that the Operator's tasks under the Tariff Code are performed is a prerequisite both necessary and sufficient to make this decision immediately enforceable. It is necessary to undertake immediate action, as referred to above, due to the need to protect the public interest and care for the development of competition.

In consideration thereof, I hereby resolve as stated in the operative part.

INSTRUCTION

1. This decision may be appealed against to the District Court in Warsaw - Competition and Consumer Protection Court (CCPC), through my agency, within two weeks of its delivery (Article 30(2) and (3) of the Energy Law Act in conjunction with Article 479^{46}(1) et seq. of the Energy Law Act in conjunction with Article 479^{46}(1) et seq. of the Code of Civil Procedure - Journal of Laws of 2018, item 155, as amended). The appeal should be sent to the address of the Energy Regulatory Office, Al. Jerozolimskie 181, 02-222 Warsaw.
2. An appeal against a decision should satisfy the requirements prescribed for a pleading and contain a description of the appealed decision and the value of the subject matter of the dispute, statement of objections, concise justification thereof, indication of evidence and a motion for revocation or amendment of the decision in whole or in part (Article 479^{49} of the Code of Civil Procedure).
3. The appeal against the decision of the President of ERO is subject to a fixed fee of PLN 100 (Article 32(3) in connection with Article 3(2)(9) of the Act of 28 July 2005 on court fees in

civil cases - Journal of Laws of 2018, item 300, as amended). The fee shall be paid to the bank account of the District Court in Warsaw, XVII Division of Competition and Consumer Protection. A party may apply for exemption from court fees pursuant to Article 101 et seq. of the Act on court fees in civil cases and for legal assistance to be granted by appointing a lawyer, pursuant to Article 117 of the Code of Civil Procedure.

4. In the course of the time limit for lodging an appeal, a party may waive the right to lodge an appeal with the CCPC against the President of the Energy Regulatory Office (Article 127a § 1 of the Code of Administrative Procedure). As of the date of delivery of the statement on waiving the right to appeal by the party to the public administration authority, the decision becomes final and binding (Article 127a § 2 of the Code of Administrative Procedure).
5. The decision is enforceable before the expiry of the time limit for appeal if it complies with the request of all parties or if all parties have waived the right to appeal (Article 130 § 4 of the Code of Administrative Procedure).
6. Pursuant to Article 27(4) of the Tariff Code, this Decision will be sent for publication in the 'Bulletin of the Energy Regulatory Office - Gaseous Fuels'.

President
Of Energy Regulatory Office

Maciej Bando

Addressees:

1.
Operator Gazociągów Przesyłowych
GAZ-SYSTEM S.A.
ul. Mszczonowska 4, 02-336 Warsaw

2. For our files

Attn:

1. European Commission
Directorate-General for Energy
24-26, rue Jean-André de Mot
B-1049 Bruxelles/Brussel
Belgique /Belgium

2. Agency for the Cooperation of Energy Regulators
Trg republike 3
1000 Ljubljana
Slovenia

Annex to the Decision of the President of ERO
of 29 March 2019
ref. no: DRG.DRG-2.745.1.2019.JDo1

Reference Price Methodology no 1/OGP for own transmission network of Operator Gazociągów Przesyłowych Gaz-System S.A. For the period from 1 January 2020 to 31 December 2022

Warsaw, March 2019

Table of contents:

1. Preliminary information

The reference price methodology (also referred to as the RPM[1]) has been developed for Operator Gazociągów Przesyłowych Gaz-System S.A., hereinafter referred to as "the Operator", to calculate transmission rates. The Operator also performs operator tasks on the transmission network owned by the energy company System Gazociągów Tranzytowych EuRoPol GAZ S.A. with its registered office in Warsaw, pursuant to the decision of the President of the Energy Regulatory Office of 17 November 2010 (ref. no DPE-4720-4(8)/2010/6154/BT). The reference price methodology for this network is included in a separate paper.

Decision of the President of ERO concerning issues referred to in Article 28(1)(a)-(c) of Commission Regulation (EU) 2017/460 of 16 March 2017 establishing a network code on harmonised transmission tariff structures for gas (OJ L 72 of 17.03.2017 p. 29), hereinafter referred to as "the Tariff Code", taking into account the results of consultations held from 31 August to 31 October 2018, concerning, among others, multipliers and seasonal factors for short-term gas transmission services, levels of discounts at entry points from the LNG terminal and discounts used to calculate reserve prices of standard interruptible capacity products is published independently of the decision on the reference price methodology referred to in Article 27 (4) of the Tariff Code, to which this study is attached.

2. Legal disclaimer on the indicative nature of the data and the results of the calculations contained in this paper

Any figures relating to 2020 presented in this paper (e.g. regulated revenue, contracted capacities, reference prices) are indicative and are intended only to illustrate the impact of the adopted RPM on the level of transmission charges. These data do not constitute the basis for calculation of the tariff during the term of validity of the RPM.

In the event of any discrepancies between the Polish and English versions of this paper, the paper drawn up in the Polish language shall prevail.

[1] *Reference price methodology*

3. RPM validity term

In accordance with Article 27(5) of the Tariff Code, the procedure involving final consultation on the RPM, the issuing of a decision on the RPM by the national regulatory authority, the calculation of the tariff on the basis of that decision and its publication should be repeated at least every five years starting on 31 May 2019.

With respect to the validity term of the RPM, the scope of investments currently implemented by the Operator should be taken into account in particular. These investments will have a significant impact on the level of: justified costs, return on capital employed, volume of capacity orders at individual entry and exit points to and from the transmission system and will cause a significant change in gas flows in the network. Putting to use of a major part of the transmission system components resulting from these investments is planned for the end of 2022.

Considering the above, the validity term of this RPM was set at 3 years, that is **from 1 January 2020 to 31 December 2022**.

Based on this methodology and the applicable regulations, the Operator calculates the tariff and submits it together with a justification to the President of the Energy Regulatory Office for approval. The tariff period is the same as the calendar year.

4. Description of the reference price methodology (Article 26(1)(a) of the Tariff Code)

Transmission rates are calculated based on the entry/exit model, applying the so-called postage stamp methodology. Only fixed rates related to contracted capacity (gr/kWh/h/h) for entries and exits to and from the transmission system are calculated, taking into account the discount for storage facilities (80%) and LNG facilities (100%).

The same RPM is applied separately to the transmission system of high-methane natural gas (E) and low methane natural gas (L). The entry/exit split is the same for both systems. These systems are separate balancing areas. The share of revenues from the provision of transmission services in the L gas system is approximately 3%.

Calculated revenue will be divided into entries and exits to and from the transmission system in accordance with the assumed entry/exit split. The transmission rates for entry/exit points is derived by dividing the regulated revenue allocated to particular types of entry/exit points (including discounts applied to the UGS and LNG) by the total contracted capacity.

It is not envisaged to apply commodity-based transmission tariffs, referred to in Article 26(1)(c)(i) and Article 4(3)(a) and (b) of the Tariff Code.

The Operator does not plan to provide non-transmission services and therefore this RPM does not consider the principles of calculating rates for non-transmission services referred to in Article 26(1)(c)(ii) of the Tariff Code.

The fixed payable price approach referred to in Article 26(1)(e) and Article 24(b) of the Tariff Code shall not be applied. The floating payable price approach referred to in Article 24(a) of the Tariff Code shall be applied.

4.1. Indicative information referred to in Article 30(1)(a) used in the postage stamp methodology (Article 26(1)(a)(i) of the Tariff Code)

The only cost driver used in the RPM is contracted capacity.

The amount of contracted capacity constituting the basis for calculation of reference prices for the tariff year n+1 will be the sum of:

- planned capacities contracted under standard annual products (also under long-term contracts) in the scope of firm and interruptible capacities for the gas year in year n,

and

- the level of capacity realised in quarterly, monthly and daily standard products of firm and interruptible capacity realised in calendar year n-1 - preceding year n, in which the tariff application is submitted,

separately for entry and exit points to/from the transmission system:

- within the high-methane and low-methane gas, and for
- entry/exit points to and from storage facilities within the high-methane gas subsystem.

For the calculation of indicative reference prices for 2020 the following values have been adopted:

Entry points	Unit	Indicative forecast for 2020
Capacity at entry points – E gas (excluding UGS)	kWh/h	21 552 732
Capacity at entry points - UGS (E gas)	kWh/h	21 521 889
Capacity at entry points – Lw gas	kWh/h	1 375 942
Capacity at entry points – LNG	kWh/h	6 370 890
Exit points		
Capacity at exit points – E gas (excluding UGS)	kWh/h	48 267 544
Capacity at exit points - UGS (E gas)	kWh/h	12 551 184
Capacity at exit points – Lw gas	kWh/h	1 869 884

4.2. Values of proposed adjustments of transmission tariffs based on capacity, referred to in Article 9 of the Tariff Code (Article 26 (1) (a) (ii) of the Tariff Code)

4.2.1. Discount for UGS

Pursuant to Article 9(1) of the Tariff Code, a discount of **at least 50%** shall apply to transmission tariffs based on capacity at entry points from storage facilities and exit points to storage facilities, excluding storage facilities connected to more than one transmission or distribution network, to the extent in which the facility is used to compete with an interconnection point.

In the calculation of reference prices for both entry and exit points to/from storage facilities, a discount **of 80%** will be applied, which is consistent with the requirements set out in Article 9(1) of the Tariff Code. The adopted discount takes into account the benefits and costs that storage facilities provide for the entire transmission system and is to contribute to the effective utilisation of these facilities. The main benefits from storage facilities include:

- ensuring stability and integrity of the transmission system operation,
- ensuring flexibility in situations of increased demand for gaseous fuel both during the winter season and during daytime peaks,

In addition, its proximity to major demand centres makes it the most reactive source of supply that can be used to meet daily increases in demand for gaseous fuel.

There are no storage facilities in the Polish transmission system that would be connected to more than one transmission or distribution network nor are they used to compete with interconnection points.

4.2.2. Discount for LNG

Pursuant to Article 9(2) of the Tariff Code, a discount may be applied to capacity-based transmission tariffs at the entry points from LNG facilities and at the entry points from and exit points to infrastructure designed to end Member States' isolation, in terms of their gas transmission systems, in order to enhance security of supply.

In the calculation of reference prices for the entry point from the LNG facility, a **100%** discount will be applied, arising mainly from the importance of the facility for the increase of security of gas supply to Poland. The discount at this level has been applied since the commencement of regasification at the LNG Terminal in Świnoujście, that is since June 2016, and stems from its key importance for:

- increasing the security of gas supply to Poland through diversification of supply directions and ensuring access to the global gas market - fully independent from perturbations on the local and regional markets,
- development of competition on the domestic gas market by creating a possibility to obtain gas for the needs of domestic consumers from a new source.

The issue of the discount at the entry point from the LNG facility was the subject of separate consultations held from 31 August to 31 October 2018 pursuant to Article 28 of the Tariff Code and is included in a separate paper published by the President of the Energy Regulatory Office, independently of the decision on the reference price methodology referred to in Article 27(4) of the Tariff Code.

4.3. Indicative reference prices (Article 26(1)(a)(iii) of the Tariff Code)

The following table compares the tariff rates for 2019 with the indicative rates for 2020 calculated on the basis of the RPM.

Natural gas transmission network:	Reference prices/rates [PLN/MWh/h/h]	2019 (valid)	2020 (indicative)	Change [%]
High-methane (E)	Entry points	3.015	3.165	5
	Exit points	1.876	1.970	5
	Entry points from UGS	0.603	0.633	5
	Exit points to UGS	0.375	0.395	5
	Entry point from LNG installation	-	-	-
Low-methane (L)	Entry points	1.807	1.895	5
	Exit points	1.625	1.704	5

The factor affecting the increase in indicative reference prices in 2020 as compared to the tariff rates for 2019 is the Operator's planned increase in revenue adopted for their calculation (5%). This increase results from capital expenditures planned to be incurred by the Operator, mainly on capital-intensive strategic investments, both in the development of the network within the country and in the construction of new interconnections aimed at improving the quality and reliability of gas transmission services.

It should be emphasized that the increase in revenue assumed by the Operator is indicative, as determining revenue is not covered by the provisions of the Tariff Code. Justified regulated revenue will be determined in a separate procedure for approving the tariff for gas transmission services.

4.4. Comparison of the indicative reference prices arising from the application of this methodology with the indicative prices calculated using the capacity weighted distance methodology (CWD) (Article 26(1)(a)(vi) of the Tariff Code)

The table below shows a comparison of reference prices calculated in accordance with the postage stamp methodology and prices calculated in accordance with the CWD methodology for high-methane gas, with discounts for storage facilities (80%) and LNG facilities (100%) applied in both cases.

With discounts	Postage stamp methodology **(45/55)**	CWD **(50/50)**			
		Min	Max	Change (3/2)	Change (4/2)
	[gr/kWh/h/h]	[gr/kWh/h/h]	[gr/kWh/h/h]	[%]	[%]
1	2	3	4	5	6
Eentry	0.3165	0.0362	0.4474	-88.56	41.34
Eentry_LNG	-	-	-	-	-
Eentry_UGS	0.0633	0.0571	0.0933	-9.76	47.42
Eexit	0.1970	0.0186	0.3077	-90.55	56.24
Eexit_UGS	0.0395	0.0338	0.0514	-14.44	30.16

The table below shows a comparison of reference prices calculated in accordance with the postage stamp methodology and prices calculated in accordance with the CWD methodology for high-methane gas, without discounts for storage and LNG facilities.

Without discounts	Postage stamp methodology **(45/55)**	CWD **(50/50)**			
		Min	Max	Change (3/2)	Change (4/2)
	[gr/kWh/h/h]	[gr/kWh/h/h]	[gr/kWh/h/h]	[%]	[%]
1	2	3	4	5	6
Eentry	0.1655	0.0174	0.2151	-89.49	29.92
Eentry_LNG	0.1655	0.2841	0.2841	71.65	71.65
Eentry_UGS	0.1655	0.1373	0.2243	-17.05	35.50
Eexit	0.1645	0.0154	0.2538	-90.66	54.30
Eexit_UGS	0.1645	0.1394	0.2121	-15.24	28.94

Differences for reference prices for high-methane (E) gas calculated in accordance with the CWD methodology in comparison with the postage stamp methodology result from the assumptions of the CWD methodology, which in the calculation of the rate takes into account the distance of the entry and exit point from other points in the transmission system. Points with relatively higher rates are points poorly connected with other points and lying on the outskirts of the transmission system, while points with relatively lower rates are points most frequently located inside the system, with numerous connections with other points, that can be supplied from many sources of gas supply.

The occurrence of larger deviations is characteristic.

The table below presents a comparison of reference prices calculated using the postage stamp methodology and prices calculated using the CWD methodology for low-methane gas (no discounts - there are no storage facilities in the low-methane (Lw) gas system).

Without discounts	Rate - Postage stamp methodology **(45/55)**	CWD **(50/50)**			
		Min	Max	Change (3/2)	Change (4/2)
	[gr/kWh/h/h]	[gr/kWh/h/h]	[gr/kWh/h/h]	[%]	[%]
1	2	3	4	5	6
Lentry	0.1895	0.0690	0.3454	-63.60	82.29
Lexit	0.1704	0.0171	0.2533	-89.94	48.62

4.5. Results and components of the assessment of the cost allocation referred to in Article 5 and details of these components (Article 26(1)(a)(iv) of the Tariff Code)

Pursuant to Article 5(1) of the Tariff Code, the regulatory authority or the transmission system operator, depending on the decision of the national regulatory authority, shall perform an assessment of the allocation of costs concerning revenues from transmission services to be recovered in the form of capacity-based transmission tariffs and shall publish them in the final consultation referred to in Article 26 of the Tariff Code.

The table below presents an assessment of cost allocation for the transmission system of high-methane gas, as there is no interconnection point in the low-methane gas system. This assessment was based on the cost driver of the expected contracted capacity.

COST ALLOCATION ASSESSMENT	Unit	Including UGS[2] With an average Een rate
Revenue	PLN thousand	1 593 352
ENTRY rate (with discount for LNG and UGS)	PLN /MWh/h/h	3.165
UGS ENTRY rate	PLN /MWh/h/h	0.633
LNG ENTRY rate	PLN /MWh/h/h	-
EXIT rate (with discount for UGS)	PLN /MWh/h/h	1.970
Intra-system capacities (EN+EX)	kWh/h	105 969 675
Cross-system capacities (EN+EX)	kWh/h	4 294 564
Cross-system revenue EN	PLN thousand	31 138
Cross-system revenue EX	PLN thousand	37 059
Total Cross-system revenue	PLN thousand	68 196
Intra-system revenue	PLN thousand	1 525 156
Cross-system coefficient	PLN /kWh/h	15.880
Intra-system coefficient	PLN /kWh/h	14.392
INDEX	%	9.83%

Pursuant to the provisions of Article 5(6) of the Tariff Code, where the value of the index presented in the above table does not exceed 10%, no justification of this value is required in the regulatory authority's decision referred to in Article 27(4). The value of the index confirms that there is no excessive cross-subsidisation between the intra- and cross-system utilisation of the transmission network.

[2] assessment of cost allocation for rates excluding discounts/adjustments gives a result close to 0.

4.6. Evaluation of the reference price methodology as regards compliance with the requirements of Article 7 of the Tariff Code (Article 26(1)(a)(v) of the Tariff Code)

Pursuant to Article 7 of the Tariff Code, the reference price methodology must comply with Article 13 of Regulation (EC) No 715/2009 and with the following requirements.

This method should:

(a) enable network users to reproduce the calculation of the reference prices and provide their accurate forecast;

(b) take into account actual costs incurred in connection with providing transmission services, including the complexity of the transmission network;

(c) ensure non-discrimination and prevent undue cross-subsidisation, among others, by taking into account cost allocation assessments as set out in Article 5;

(d) ensure that significant volume risk associated in particular with transmission via given entry-exit system is not assigned to final customers within that entry-exit system;

(e) ensure that the reference prices received do not distort cross-border trade.

This reference price methodology shall meet all the above requirements.

4.6.1 The tariff models for high-methane and low-methane[3] gas published on the website enable network users to reproduce the reference price calculations and their forecast. The accuracy of this forecast is limited by the accuracy of estimates of revenue developments and capacity orders. Under this methodology, the final regulated revenue shall be determined annually in the tariff approval proceedings.

4.6.2 The methodology takes into account the actual costs incurred in providing transmission services. Based on actual costs of transmission services provision, disclosed in the audited financial statements, forecasts of justified costs for tariff calculation are made.
As the Polish transmission system is meshed, determining the method of allocation of actual costs to points of the transmission system is very difficult, hence the methodology of the so-called postage stamp, according to which the costs allocated to a given point of the transmission system are proportional to the projected ordered capacity, was applied. Due to the fact that the users, thanks to the multiplicity of entries (including UGS, production and intersystem connections), use the transmission system to the same extent, this approach is justified. The transmission system diagram is presented on page 14.
In this system, distance is not a significant cost driver, which was confirmed by comparing the results obtained using the postage stamp methodology with the CWD methodology, presented in item 4.4.
In addition, it should be stressed that this methodology is simple and transparent, thanks to which the transmission system users can easily reproduce the calculation of reference prices and estimate their changes in the future.

4.6.3 The methodology ensures non-discriminatory treatment of transmission system users as the same transmission rates are applied to all users of gas transmission services at entry points and the same at exit points. Discounts/adjustments are applied to entry/exit points from

[3] http://en.gaz-system.pl/strefa-klienta/taryfa/konsultacje-nc-tar/

storage facilities and entry points from LNG facilities in accordance with the provisions of the Tariff Code.

The result of the cost allocation assessment referred to in Article 5 of the Tariff Code, presented in item 4.5 (9.83%), confirms that there is no excessive cross-subsidisation between cross- and intra-system users. In addition, the comparison of rates resulting from the postage stamp methodology with the CWD methodology presented in Section 4.4 indicates that there is no excessive subsidisation between individual network users. It should be noted that due to the meshed transmission system (59 entry points for high-methane (E) gas and 8 entry points for L gas; 855 exit points for E gas and 79 exit points for L gas), the results of this comparison are approximate as it is then almost impossible to accurately allocate costs to a given point.

4.6.4 Due to the limited use of the system for cross-border transmission (transit) and the exclusive application of fixed rates based on capacity, there is no risk of increased costs being allocated to final customers due to lack of capacity orders by users of cross-system services.

4.6.5 Reference prices do not distort cross-border trade, as there is no discrimination of transmission system users and cross-subsidisation.

5. Indicative information referred to in Article 30(1)(b)(i), (iv) and (v) of the Tariff Code (Article 26(1)(b) of the Tariff Code)

5.1. Allowed revenue of the transmission system operator (Article 30(1)(b)(i) of the Tariff Code)

Regulated revenue approved by the President of the Energy Regulatory Office is the sum of forecasted justified operating costs related to regulated activity for a given tariff year and return on capital employed.

Regulated revenue is determined for a period of 12 months in administrative proceedings on the approval of the tariff.

Pursuant to Article 10 (1), (2) and (3) of the Ordinance of the Minister of Energy of 15 March 2018 on detailed rules of shaping and calculating tariffs and settlements in the gaseous fuel trade (Journal of Laws of 2018, item 640), regulated revenue is covered by revenue earned from:

a) transmission rates,
b) fees for exceeding contracted capacity in the year preceding the year in which the tariff is submitted for approval,
c) fees for services performed at the additional demand of the customer (the quality testing of gaseous fuels supplied, interruption or resumption of the supply of gaseous fuels) achieved during the year preceding the year in which the tariff was submitted for approval,
d) revenues under the performance of the contract referred to in Article 9h (3) (2) of the Energy Law Act, as well as from the performance of activities arising from the decision referred to in Article 9h (9) of the Energy Law (balance of revenues and costs).

Pursuant to Article 10 (4) (2) of the Ordinance, the revenues from the auction premium do not decrease the regulated revenue.

In addition, in connection with the statement made by the Operator during the proceedings concerning the approval of this reference price methodology, the aforementioned regulated revenue will also be decreased by revenues earned from the provision of services by the GSA

platform and possible revenues from the provision of services by gas quality measurement laboratories and calibration of gas meters for third parties.

Pursuant to Article 7(10) of the Energy Law Act, costs arising from expenditures on connection of entities applying for connection to the gas network, to the extent that they have been covered by revenues from grid connection fees, do not constitute a basis for determining the tariff rates for the transmission of gas fuels.

Due to the fact that the Tariff Code does not include detailed rules for determining regulated revenue, this issue will not be explained in more detail in this paper.

5.2. Revenues from transmission services (Article 30 (1) (b) (iv) of the Tariff Code)

Revenue covered by transmission rates, including:	PLN thousand	**1 644 101**
Rates based on capacities	PLN thousand	1 644 101
Rates based on volume	PLN thousand	-
High-methane (E) gas network, including:	PLN thousand	**1 593 352**
Entry points	PLN thousand	717 018
Exit points	PLN thousand	876 334
Low-methane (Lw) gas network, including:	PLN thousand	**50 749**
Entry points	PLN thousand	22 837
Exit points	PLN thousand	27 912

5.3. Entry/exit split (Article 30 (1) (b) (v)(2) of the Tariff Code)

During the period of application of this reference price methodology, the revenue split of 45/55 between entry and exit points will be applied.

5.4. Split between intra- and cross-system revenues (Article 30 (1) (b) (v)(3) of the Tariff Code)

	Unit	E gas	Lw gas
Revenue covered by transmission rates	PLN thousand	1 593 352	50 749
Intra-system revenue	PLN thousand	1 525 156	50 749
Cross-system revenue	PLN thousand	68 196	-
Intra-system revenue	%	96%	100%
Cross-system revenue	%	4%	0%

6. Non-transmission services and tariffs (Article 26 (1) (c) (ii) of the Tariff Code)

According to information as at the date of preparation of this paper, the Operator does not provide non-transmission services.

7. Indicative information referred to in Article 30(2) of the Tariff Code (Article 26(1)(d) of the Tariff Code)

The Operator's website[4] contains simplified tariff models which allow to calculate indicative reference prices of standard capacity products proposed for the 2020 tariff year and to estimate them for the following year, with any selection of parameters concerning the revenue entry/exit split or appropriate adjustments (discounts for UGS and LNG), in accordance with the algorithm presented below:

Natural gas transmission network	Unit	2019		2020	
		E	L	E	L
Calculation revenue	PLN thousand	1 517 414	48 397	1 593 352	50 749
Revenue share at entries	%	45	45	45	45
Revenue split EN/EX	%	45:55	45:55	45:55	45:55
Discount at entries from UGS	%	80	80	80	80
Discount at exits to UGS	%	80	80	80	80
Discount at entries from LNG installation	%	100	100	100	100
Capacity at entries	kWh/h	21 552 732	1 375 942	21 552 732	1 375 942
Capacity at entries from UGS	kWh/h	21 521 889	none	21 521 889	none
Capacity at entries from LNG installation	kWh/h	6 370 890	none	6 370 890	none
Capacity at exits	kWh/h	48 267 544	1 869 884	48 267 544	1 869 884
Capacity at exits to UGS	kWh/h	12 551 184	none	12 551 184	none
Rate at entries	PLN/MWh/h/h	3,015	1,807	3,165	1,895
Rate at entries from UGS[5]	PLN/MWh/h/h	0,603	none	0,633	none
Rate at entries from LNG	PLN/MWh/h/h	-	none	-	none
Rate at exits	PLN/MWh/h/h	1,876	1,625	1,970	1,704
Rate at exits to UGS[5]	PLN/MWh/h/h	0,375	none	0,395	none

8. Description of the gas transmission system of the Operator Gazociągów Przesyłowych GAZ-SYSTEM S.A.

The transmission system included in the Operator's assets consists of a part related to the transport of high-methane gas (group E) and low-methane gas (group L, subgroup Lw).

Diameter of gas pipelines [mm[	E gas [km]	Lw gas [km]
Up to DN 200	1 726.62	373.20
DN 250 - 400	3 254.70	282.21
DN 500 - 800	4 886.20	56.30
DN 1000	163.89	0.00
TOTAL	**10 031.40**	**711.71**

[4] http://en.gaz-system.pl/strefa-klienta/taryfa/konsultacje-nc-tar/

[5] Rates obtained by applying a discount of 80% to the rate at entries and exits. The calculation of entry/exit rates takes into account 20% of capacity at entries/exits from storage installations, which results from the mathematical equation.

High-methane gas transmission system (group E) - status as at 31 December 2018

8.1.1. The high-methane gas system forms a main system comprising:

8.1.1.1. East main line on the route Jarosław-Wronów-Rembelszczyzna,

8.1.1.2. Southern main line on the route Jarosław-Pogórska Wola-Tworzeń-Odolanów,

8.1.1.3. The north-western main line on the route Lwówek-Szczecin-Terminal LNG-Gdańsk,

8.1.1.4. Central Poland gas supply system on the route Hołowczyce-Rembelszczyzna-Gustorzyn-Odolanów,

8.1.1.5. Gas supply system for northern Poland on the Gustorzyn-Gdańsk route,

8.1.1.6. Transmission system in Lower Silesia.

Gas flows in the system vary depending on the demand for gas, the operation of connected facilities (gas storage facilities, LNG terminal) and gas import.

8.1.2. The Operator's transmission system is supplied with high-methane gas at 59 entry points:

8.1.2.1 Entries to the national transmission system (import of gas):

8.1.2.1.1. Kondratki with a technical transmission capacity of 42.68 GWh/h,

8.1.2.1.3. Drozdowicze with a technical transmission capacity of 5.65 GWh/h,

8.1.2.1.4. Wysokoje with a technical transmission capacity of 7.04 GWh/h,

8.1.2.1.5. Mallnow with a technical transmission capacity of 7.70 GWh/h,

8.1.2.1.6. GCP GAZ-SYSTEM/ONTRAS with a technical transmission capacity of 2.03 GWh/h,

8.1.2.1.7. Tietierowka with a technical transmission capacity of 0.30 GWh/h,

8.1.2.1.8. Cieszyn with a technical transmission capacity of 1.17 GWh/h,

8.1.2.1.9. Branice with a technical transmission capacity of 0.002 GWh/h,

8.1.2.1.10. LNG Terminal with a technical transmission capacity of 6.58 GWh/h,

8.1.2.2. Entries from high-methane natural gas fields, located in SE Poland (41 mines),

8.1.2.3. Entries from the nitrogen removal plants (Odolanów and Grodzisk Wielkopolski),

8.1.2.4. Entries from underground gas storage facilities (7 storage facilities),

8.1.3. 15 compressor stations with the installed capacity of 138.4 MW operate in the transmission system.

8.1.4. The transmission system is connected with other systems and large industrial customers at 855 exit points.

8.1.5. The annual volume of transmitted natural gas amounted to approx. 218.7 TWh (excluding the UGS approx. 193.7 TWh).

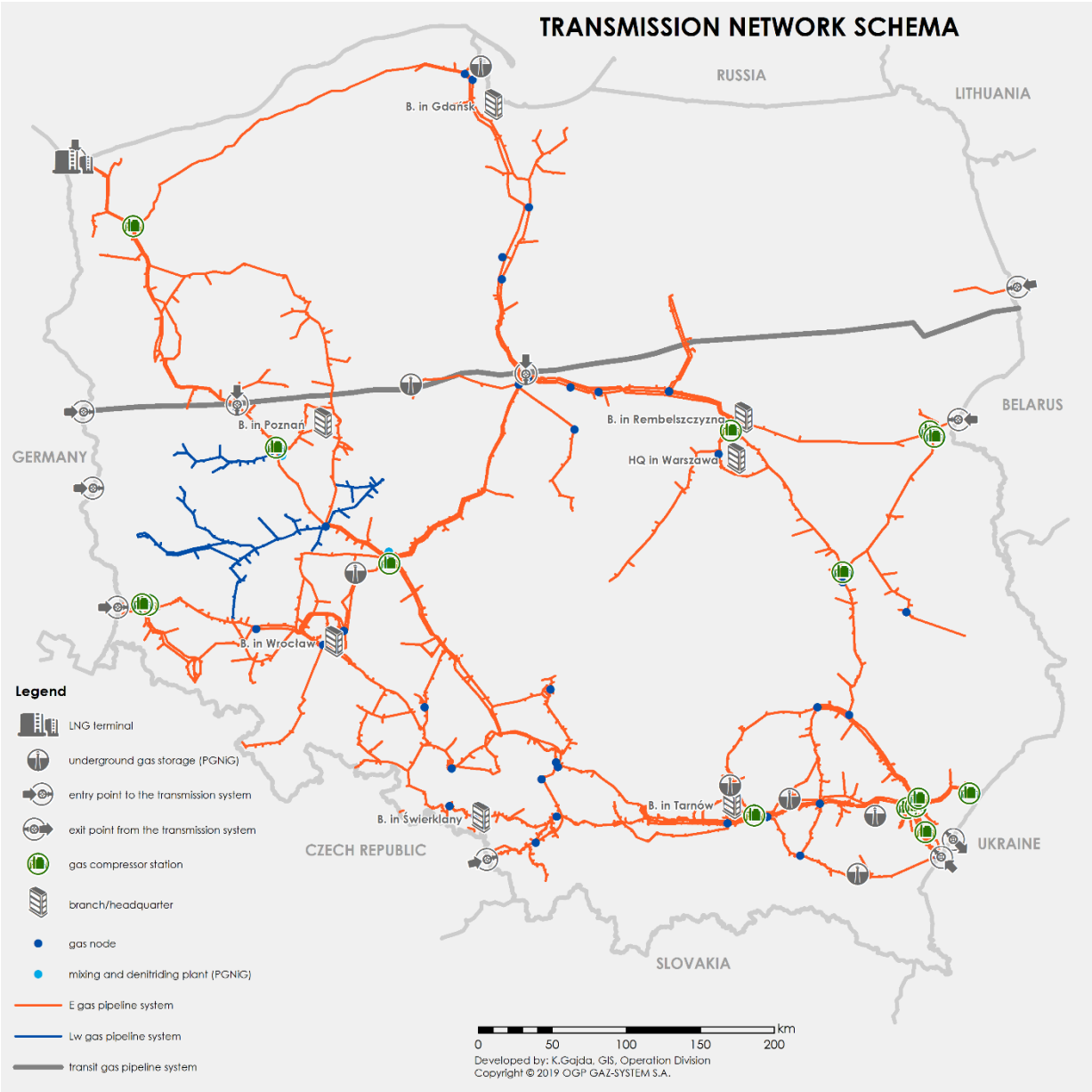
8.1.6. 7 underground gas storage facilities with a total working volume of 3.07 BCM (34.19 TWh) cooperate with the transmission system:

8.1.6.1. 2 UGS developed in salt caverns with working volume of 824.8 MMCM (9.19 TWh),

8.1.6.2. 5 UGS developed in partly depleted natural gas fields with working volume of 2,250 MMCM (25 TWh).

8.1.7. A stable increase in the volume of transmitted gas is expected.

Scheme no 1. Map of the high-methane gas transmission system (group E).



8.1.8. Development of the Operator's infrastructure

Until 2022, the priority will be to diversify the directions and sources of natural gas supplies by building new cross-border connections with Denmark, Slovakia and Lithuania, increasing the regasification capacity of the LNG terminal and building the so-called North-South corridor. The European Commission has placed these projects on the list of PCI projects, emphasizing their particular significance for the growth of security and diversification of natural gas supplies in

Europe and for the development of an integrated and competitive market. The implementation of these projects will entail significant changes in the natural gas flows in the transmission system of the Operator as a result of the construction of cross-border interconnections and the expansion of the LNG terminal.

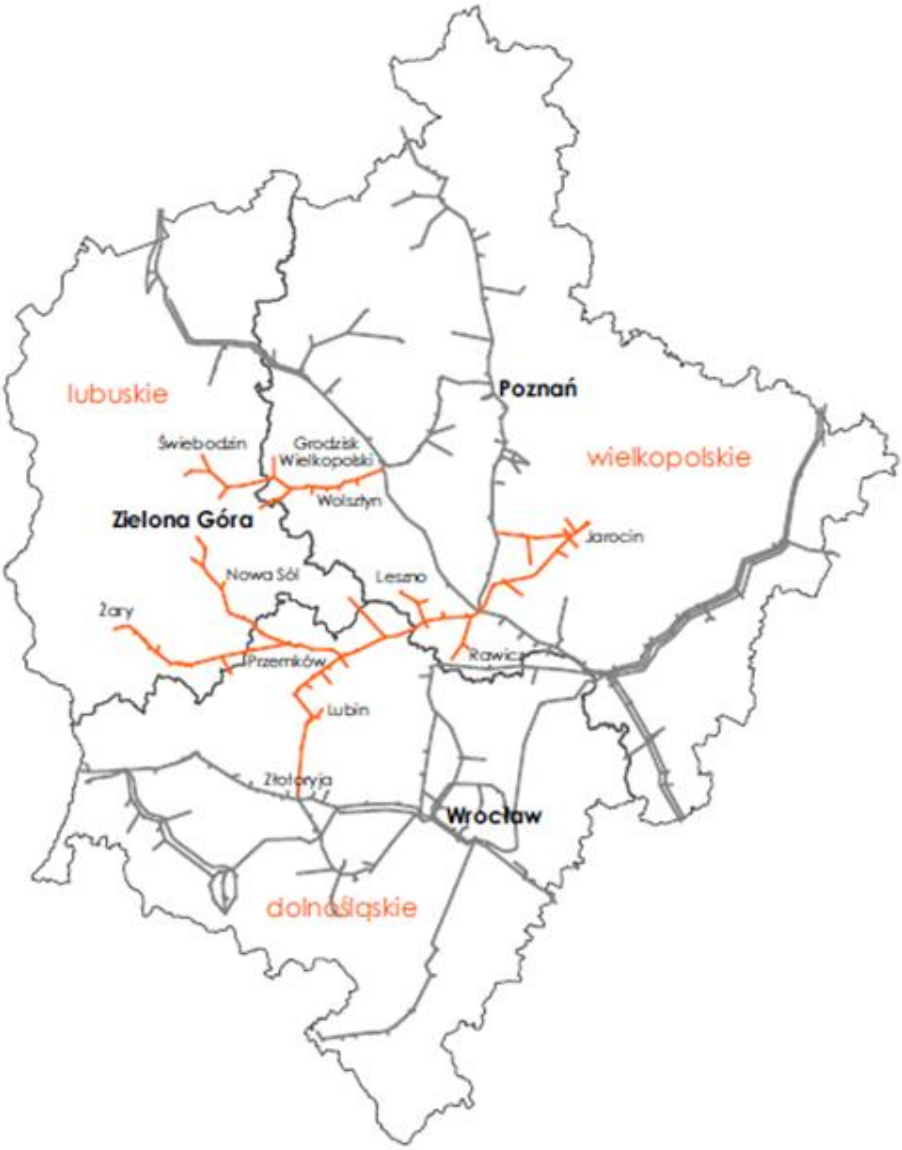
The map of the Operator's investments until 2022 is presented in Scheme 3.

8.2. Transmission system of low-methane gas (group L, subgroup Lw) - status as at 31 December 2018

The low-methane gas transmission system (group L, subgroup Lw) is a local island gas subsystem in western Poland in the Lubuskie, Wielkopolskie and Dolnośląskie Voivodships. The only sources and regulators in this system are the natural gas mines, e.g.: Lubuskie, Wielkopolskie and Dolnośląskie Voivodships: Kościan_Brońsko, Białcz, Radlin, Kaleje (Mchy), Roszków and the natural gas mixing plant in Grodzisk Wielkopolski (connected to the nitrogen removal plant, which is an object related to the gas production sector) - a total of 8 entry points. The transmission system of Lw low-methane gas is not directly connected with the transmission system of high-methane gas.

In the Lw gas system, gas is delivered to 79 exit points and has a low stable growth rate.

Scheme no 2. Map of the low-methane gas transmission system (Lw).



Scheme no 3. Map of the Operator's investments until 2022

	Investments planned by 2022	DN	Lenght [km]
1	**Offshore gas pipeline** DN=900, L= up to 275 km	900	up to 275
2	**Pipeline connecting the offshore pipeline with the national transmission system** DN=1000, L=do 85km	1000	do 85
3	**Goleniów Gas Compressor Station** Power = 25 MW	N/A	N/A
4	**Goleniów-Lwówek Pipeline** DN=1000, L=191 km	1000	191
5	**Odolanów Gas Compressor Station** Power = 30 MW	N/A	N/A
6	**Gustorzyn Gas Compressor Station** Power = 20 MW	N/A	N/A
7	**Lwówek – Odolanów Pipeline** (stage I Lwówek – Krobia) DN=1000, L=113,5 km	1000	113,5
8	**Zdzieszowice – Wrocław Pipeline** (Brzeg – Zębice – Kiełczów) DN=1000, L=49 km	1000	49
9	**Zdzieszowice – Wrocław Pipeline** (Zdzieszowice – Brzeg) DN=1000, L=84 km	1000	84
10	**Zdzieszowice – Kędzierzyn Koźle Pipeline** DN=1000, L=17,4 km	1000	17,4
11	**Kędzierzyn Gas Compressor Station** moc = 23 MW	N/A	N/A
12	**Tworóg – Kędzierzyn Koźle Pipeline** DN=1000, L=43,4 km	1000	43,4
13	**Tworóg – Tworzeń Pipeline** DN=1000, L=56 km	1000	56
14	**Pogórska Wola – Tworzeń Pipeline** DN=1000, L=168 km	1000	168
15	**Strachocina – Pogórska Wola Pipeline** DN=1000, L=97,5 km	1000	97,5
16	**Strachocina Gas Node**	N/A	N/A
17	**Hermanowice – Strachocina Pipeline** DN=700, L=72 km	700	72
18	**Poland – Slovakia Pipeline** DN=1000, L=59 km	1000	59
19	**Poland – Lithuania Pipeline** (Rudka Skroda - National Border - Lithuania) DN=700, L=185 km	700	185
20	**Poland – Lithuania Pipeline** (Hołowczyce - Rudka Skroda) DN=700, L=153 km	700	153
21	**Hołowczyce II Gas Compressor Station** 8,4 Mpa	N/A	N/A
22	**Szczecin – Gdańsk Pipeline** (Goleniów Płoty) DN=700, L=41 km	700	41
23	**Szczecin – Gdańsk Pipeline** (stage VI Reszki – Wiczlino) DN=700, L=8 km	700	8
24	**Gas pipeline connection with the Elektrocieplownia Żerań (PGNiG TERMIKA S.A.)** DN=500, L=10 km	500	10
25	**Tworzeń reduction and metering station (near Sławków)** (stage I)	N/A	N/A
26	**Skoczów – Komorowice – Oświęcim Pipeline** (stage III) DN=500, L=53 km	500	53

N/A - not applicable

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