

**REPORT ON THE RESULTS
OF THE SECURITY MONITORING
OF NATURAL GAS SUPPLY
DURING 2017**

KYIV, 2018

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Introduction

This document has been prepared in accordance with Article 29 of the Treaty Establishing the Energy Community, Article 7 of the Law of Ukraine “On the natural gas market”, as well as the National Action Plan and the Rules on the security of natural gas supply.

In compiling the Report for 2017 based on the results of monitoring of security of natural gas supply (hereinafter - the Report) the Guidelines of Energy Community Secretariat were taken into account on the preparation of the updated statement on security of energy supply in the member-countries of the Energy Community which were approved during the 19th meeting of the High Level Group of the Energy Community on March 23, 2011, as well as the requirements of Regulation (EC) No. 2017/1938 of the European Parliament and of the Council dated October 25, 2017 on the measures to ensure the security of natural gas supply and repealing Regulation (EC) No 994/2010.

In preparing the Report, JSC “Ukrtransgaz” was guided by the results of the collaboration with the Institute for Energy and Transport of the Joint Research Center (JRC-IET) of European Commission within the project “Improvement of legislation of Ukraine on the security of natural gas supply”, which included the preparation of risk assessment on the security of gas supply, development of hydraulic model of the gas transportation system of Ukraine, as well as update and improvement of the National Action Plan and the Rules on the security of natural gas supply and training on the implementation of the National Action Plan, which took place in November 2017.

Also, the results of the work of the Regional Coordination System for Gas (RCSG) within the framework of the European Network of Transmission System Operators for Gas (ENTSO-G) were taken into account while preparing the Report, one of the tasks of which is to prepare a simulation model for situations with the interruption of natural gas deliveries to certain destinations, which is provided by the new version of the EU Regulation on the rules of security of supply.

The Report covers gas sector, which is settled by the EU Directives and Regulations set out in the Protocol on Ukraine's accession to the Treaty Establishing the Energy Community.

1. The status of measures implementation on the security of natural gas supply.

In 2017 during the most peak thirty-day period with the highest demand for natural gas lasted from January 17 to February 15. During that period the average daily demand for natural gas in Ukraine was at the level of 176.2 million cubic meters, while the average daily demand for natural gas in terms of domestic consumers and utility companies was amounted to 126.6 million cubic meters. The most active demand for a seven-day period was from February 7, 2017 to February 13, 2017. During that period, the average daily demand for natural gas in Ukraine was at the level 188.9 million cubic meters, while the average daily demand for natural gas in terms of domestic consumers and utility companies amounted to 136.3 million cubic meters. The daily description of peak consumption during the reporting period is provided in Table 1.

Table 1

The thirty-day period of peak consumption of natural gas by Ukrainian consumers in 2017

Date	Consumption Ukraine, total	Consumption Utility companies + population	Average daily temperature	Supply from production	Supply from import	Withdrawal from underground gas storages	Maximum available level of daily withdrawal from underground gas storages
	million cubic meters	million cubic meters	°C	million cubic meters	million cubic meters	million cubic meters	million cubic meters
17.01.17	171.6	126.1	-6	56.8	47.8	71.4	110.8
18.01.17	175.6	129.3	-7	57.1	45.7	68.9	110.1
19.01.17	178.8	130.2	-9	56.9	44.2	78.0	109.3
20.01.17	173.1	127.0	-8	57.0	45.7	77.7	108.6
21.01.17	161.3	117.7	-6	57.0	44.9	66.2	107.9
22.01.17	159.8	114.0	-3	57.0	44.6	54.9	107.1
23.01.17	161.0	114.7	-3	57.1	42.6	53.9	106.3
24.01.17	162.2	115.6	-3	56.9	45.1	69.9	105.4
25.01.17	171.8	122.3	-5	56.8	46.6	71.2	104.5
26.01.17	187.9	135.3	-11	57.0	47.2	78.7	103.5
27.01.17	179.7	130.3	-10	56.9	47.4	76.2	102.6
28.01.17	170.0	122.0	-5	57.1	46.8	60.9	101.7
29.01.17	178.0	127.2	-8	57.1	46.7	61.9	100.8
30.01.17	189.3	135.8	-11	57.2	46.7	77.5	99.9
31.01.17	193.4	135.6	-10	57.2	45.4	91.9	99.0
01.02.17	182.3	131.0	-6	56.9	45.2	91.8	98.2
02.02.17	174.3	125.2	-4	56.8	44.2	83.4	97.3
03.02.17	165.1	117.2	-2	56.8	46.9	70.5	96.4
04.02.17	156.8	112.6	-2	56.7	47.9	58.9	95.4
05.02.17	158.3	112.1	-2	56.9	47.8	52.3	94.4
06.02.17	167.4	119.5	-5	56.7	47.8	58.4	93.4

Date	Consumption Ukraine, total	Consumption Utility companies + population	Average daily temperature	Supply from production	Supply from import	Withdrawal from underground gas storages	Maximum available level of daily withdrawal from underground gas storages
	million cubic meters	million cubic meters	°C	million cubic meters	million cubic meters	million cubic meters	million cubic meters
07.02.17	187.8	133.7	-10	56.8	47.8	73.1	92.4
08.02.17	197.7	143.6	-12	56.4	47.7	84.2	91.5
09.02.17	198.1	144.1	-11	56.3	47.7	89.1	90.6
10.02.17	193.0	140.3	-10	56.8	48.1	90.9	89.6
11.02.17	186.0	134.5	-8	57.0	48.4	87.9	88.4
12.02.17	179.3	128.8	-6	57.1	48.3	74.8	87.2
13.02.17	180.6	128.9	-7	57.2	48.3	66.4	86.1
14.02.17	177.3	125.4	-4	57.1	49.5	66.4	85.1
15.02.17	168.3	118.4	-3	57.2	49.4	66.6	84.1

Thus, during the peak level of natural gas consumption by Ukrainian consumers in January-February 2017, the volumes of gas that entered to the gas transmission system of PJSC “UKRTRANSGAZ” fully covered general needs in Ukraine for a certain period of time using sources of production, imports and withdrawal from underground gas storages. The main source of natural gas, which was used to cover peak periods, was the gas withdrawn from underground storage facilities; moreover the highest possible level of withdrawal depended on the volume of active gas in the underground storage facilities. Even in the coldest period the volumes of active gas fully provided the necessary level of withdrawal.

In order to ensure the security and to increase the reliability of natural gas supply provided by JSC “Ukrtransgaz”, the project “**Reconstruction, capital repairs and technical re-equipping of the main gas pipeline Urengoy – Pomary - Uzhgorod**” (hereinafter - the Project).

Information about the Investment Project is shown in Table 2.

Table 2

Reconstruction, capital repairs and technical re-equipping of the main gas pipeline Urengoy – Pomary – Uzhgorod

Investment Project «Reconstruction, capital repairs and technical re-equipping of the main gas pipeline Urengoy – Pomary - Uzhgorod»	
<i>IFI</i>	European Bank for Reconstruction and Development (EBRD) European Investment Bank (EIB)
<i>Stage</i>	Project preparation, in accordance with the requirements of the Cabinet of Ministers of Ukraine from 27.01.2016 No. 70 “On the preparation, implementation, monitoring and completion of projects of economic and social development of Ukraine, supported by international financial institutions” in part

	of the completion of work on the entry into force of the concluded agreements between Ukraine and the EBRD.
<i>Responsible executor</i>	Ministry of Energy and Coal Industry of Ukraine
<i>Beneficiary</i>	Joint Stock Company «Ukrtransgaz»
<i>Expediency of preparation</i>	Order of the Ministry of Economy of Ukraine dated March 18, 2011 No. 241 (as amended by the Decree of the Ministry of Economic Development and Trade of Ukraine dated August 14, 2013 No. 969) "On the expediency of joint preparation with the European Bank for Reconstruction and Development, the European Investment Bank and the International Bank for Reconstruction and Development of the project "Reconstruction, capital repairs and technical re-equipping of the main gas pipeline Urengoy – Pomary – Uzhgorod"
<i>The purpose of the project</i>	Increasing the reliability, transparency, efficiency and commercial attractiveness of existing transport routes, reducing the negative impact on the natural environment, minimizing the risks of supplying natural gas to European consumers through the territory of Ukraine.
<i>Chronology of events</i>	<p>On December 1, 2014 the Financing Agreement was signed between Ukraine and the EIB to grant the loan for implementation of the Project in the amount of up to EUR 150.00 million and the Project Agreement between PJSC "UKRTRANSGAZ" and the EIB on the implementation of the Project. On 31.08.2015 the Financial Agreement was entered into force.</p> <p>On December 15, 2014 the Loan Agreement was signed between Ukraine and the EBRD amounting up to EUR 150.00 million, as well as the Project Agreement between PJSC "UKRTRANSGAZ" and EBRD. The entry into force of such an agreement is carried out following the fulfillment of the prerequisites for the entry into force of the agreement with the EBRD (Section 5.01 of the Agreement).</p> <p>May 29, 2015 the sub-loan agreements for a loan with EBRD and EIB were signed between the Ministry of Finance of Ukraine, the Ministry of Energy and Coal Industry of Ukraine, NEURC, NJSC "Naftogaz of Ukraine" and PJSC "UKRTRANSGAZ".</p> <p>The Law of Ukraine dated 07.12.2017 No. 2246-VIII "On the State Budget of Ukraine for 2018" provides for the attraction of loans from the EIB and the EBRD for the implementation of the Project in the amount of UAH 100 million.</p> <p>In pursuance of the above-mentioned agreements PJSC "UKRTRANSGAZ" the PIU Consultant was involved by means of Grant funds TF 0A 4498 from the EC, administered by the IBRD. On 07.10.2017, the contract with Su-Yapi Engineering and Consulting Inc. was signed on the continuation of providing consultancy services on Procurement and Management of Project (services of the PIU Consultant).</p> <p>The date of termination of the Agreement with the EBRD due to its non-entry into force has been extended until 31.07.2018 to ensure fulfillment of the terms of the Loan Agreement by the Borrower.</p> <p><u>Environmental and social issues.</u></p> <p>The agreements with the EBRD and the EIB also provide for the implementation of a separate complex of environmental and social measures for each bank, in particular those that are the prerequisite for the first drawdown of the facility.</p> <p>PIU Consultant in 2017-2018 with the participation of PJSC "UKRTRANSGAZ" has developed a complete package of environmental and social documents on the Project, in particular environmental and social protection, labor safety, human resources management, land allocation and compensation, interaction with stakeholders (about 20 documents in total) required by the EBRD and the EIB.</p> <p>The latest comments on the results of the audit of environmental and social documents by banks with the involvement of the consulting company AECOM were received in March of this year and accepted for execution by PIU Consultant PJSC "UKRTRANSGAZ". The finalization of documents will be completed by June-July of this year.</p> <p>At the same time, according to AECOM findings, and with the insistence of the EBRD and the EIB, the PJSC "UKRTRANSGAZ" needs to collect additional field hydrological data and data on water biodiversity in areas of pipelines transitions through water obstacles at two sections of "Romny-Grebinka" and "Bar-Gusiatyn" and data on biodiversity at the "Gusyatyn-Bogorodchany" section in the zone of the forest reserve "Dacha Galileia" (about 1.4 km of the total length of the pipeline route).</p> <p>On 05.05.2018, in accordance with the Terms of Reference agreed with the EBRD and the EIB, the Agreement was concluded on conducting the above-mentioned additional studies at the expense of PJSC "UKRTRANSGAZ" own funds. Conduction of these studies is scheduled for May-June 2018 and the preparation of relevant reports in June-July 2018.</p> <p>At present, the weekly telephone and video conference calls are organized with the participation of representatives of the IFI on the progress in the implementation of additional environmental studies.</p>
<i>Main results of the implementation (including the drawdown of the facility)</i>	
<ol style="list-style-type: none"> 1. Provision of uninterrupted and reliable gas transportation. 2. Reducing the fuel and energy resources consumption (fuel gas, oils and negative environmental impacts (reducing CO₂ and NO_x emissions). 	
<i>Problems for the moment</i>	

To date, the Agreement with EBRD has not entered into force. The deadline for the entry into force of the Agreement with the EBRD has been extended until 31.07.2018.

Due to the detention of drawdown of facility, the cost of paying a commitment fee in the amount of 0.25% per annum from the amount of the undrawing amount of the loan (EBRD loan) is increasing, as well as the periode of the possibility of drawdown of facility from the EIB is decreasing (the last date of provision loan - 48 months from the date of signing of the Financial Agreement between Ukraine and the EIB).

In view of the above, we propose the Ministry of Energy and Coal to initiate negotiation with the EBRD in order to accelerate the entry into force of the Loan Agreement between Ukraine and the EBRD dated 15.12.2014.

2. Status of the resources securing for the natural gas market supply.

In 2017, natural gas production in Ukraine amounted upto 20.5 bcm (Figure 1) while natural gas consumption amounted upto 31.9 bcm (Figure 2), thus the gas consumption was covered with 64% due to the own production of natural gas (in 2016 - 61%).

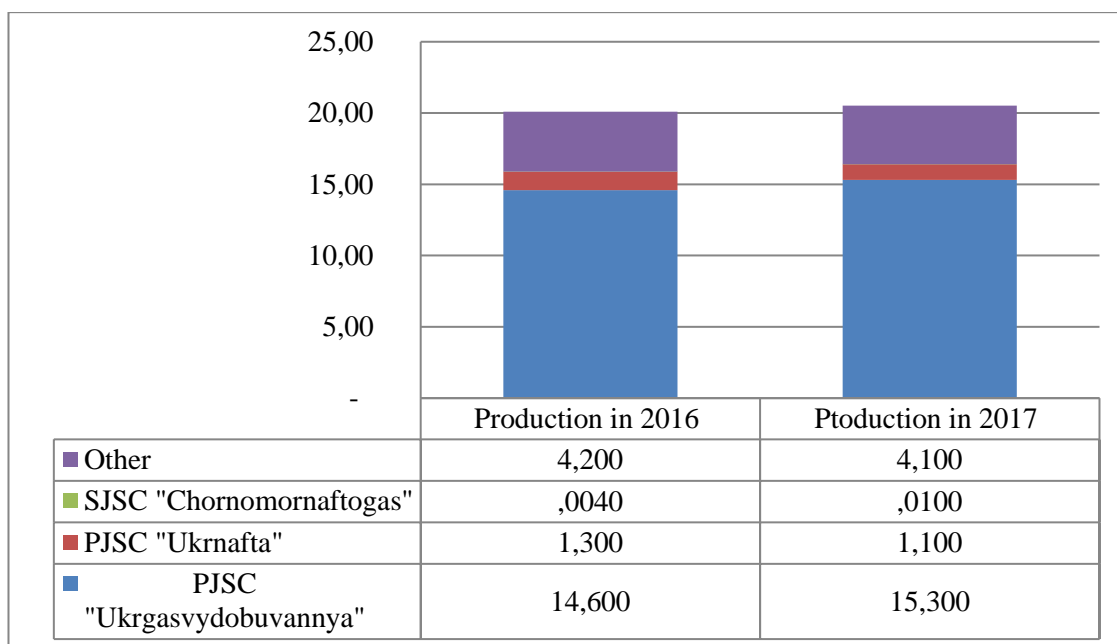


Figure 1: Volumes of natural gas production in 2016 -2017 (billion cubic meters)

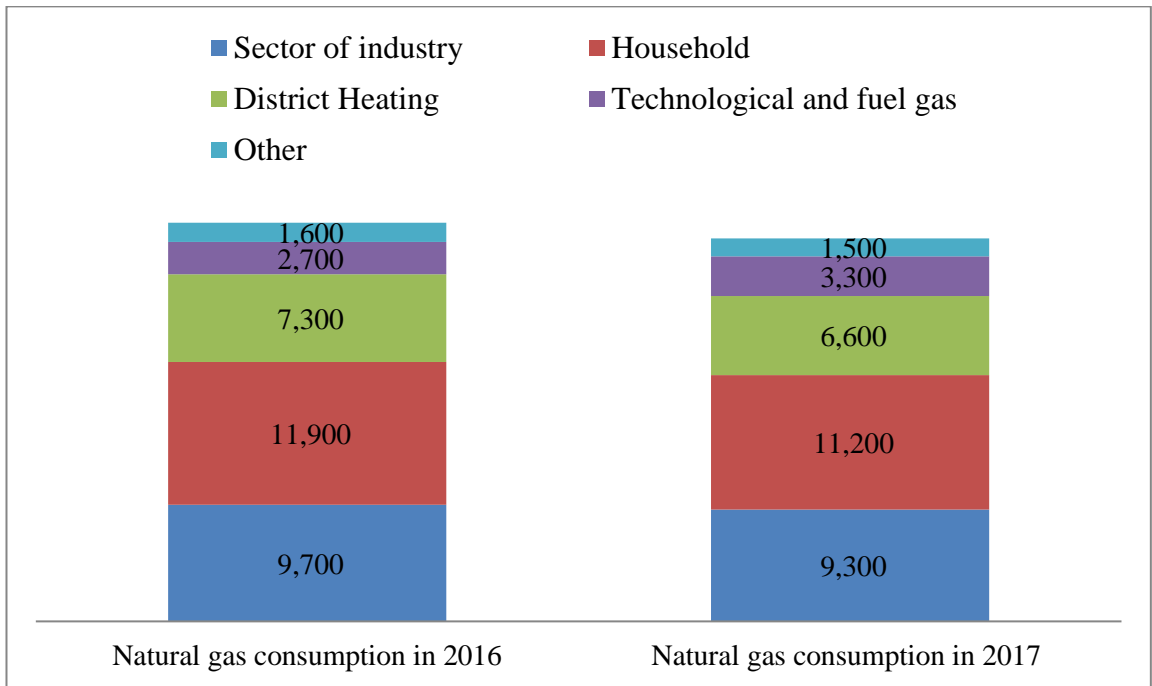


Figure 2: Volumes of natural gas consumption in 2015 -2016 (billion cubic meters)

In 2017 the total volume of natural gas imports was 14.05 billion cubic meters. In general, natural gas supply for the needs of Ukraine had been met at the expense of domestic production and imports and amounted to 34.6 billion cubic meters. Sources of imported natural gas in 2017 are given in Figure 3.

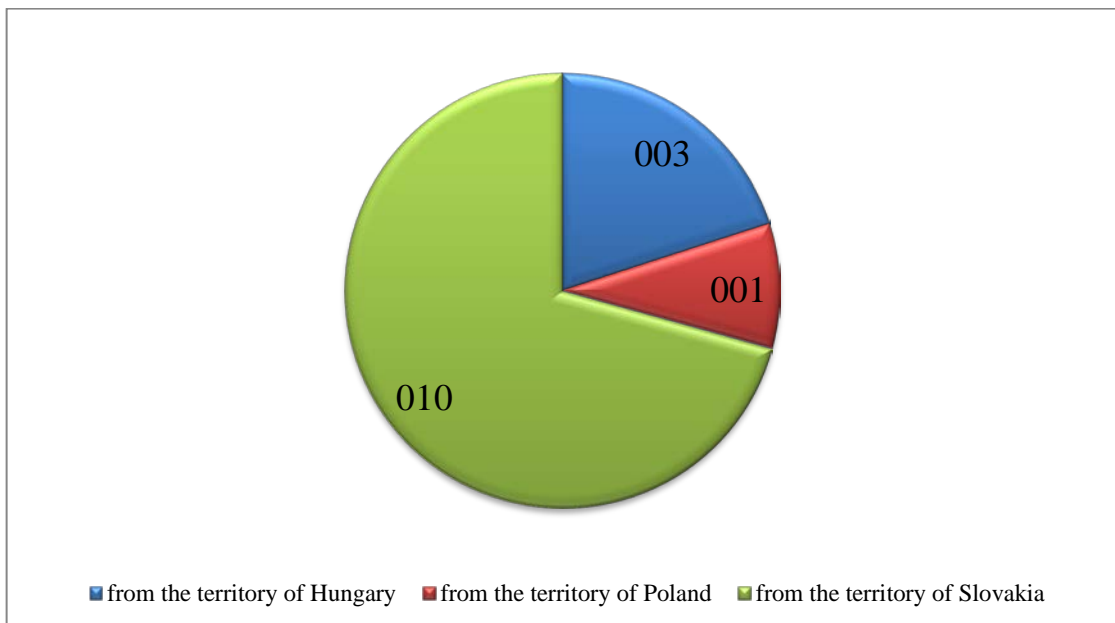


Figure 3: Supplies of imported natural gas according to their sources (billion cubic meters)

Due to the diversification of sources of natural gas supply to Ukraine from European countries in 2017, the amount of imported natural gas for consumers of Ukraine from the territory of the Russian Federation amounted upto 0.0 billion cubic meters of gas (2016 – 0,0 bcm; 2015 – 6,1 bcm; 2014 – 14,4 bcm), from European countries amounted upto 14,1 billion cubic meters of gas (2016 – 11,1 bcm; 2015 – 10,3 bcm; 2014 – 5,0 bcm) which comes up to 100.0% of the total imported natural gas. Thus, starting from December 2015 the main source of natural gas supply to Ukraine is the territory of European countries.

An important part of the gas transmission system functioning is a network of underground gas storage facilities aimed at overlapping of natural gas consumption in peak periods in the autumn and winter. The system of underground gas storage facilities of PJSC “UKRTRANSGAZ” consists of 12 storage facilities (incl. 1 on the temporarily uncontrolled territory of Ukraine) with total active capacity of over 30.95 billion cubic meters (incl. 0.4 billion cubic meters on the temporarily uncontrolled territory of Ukraine).

Table 3 shows the availability of natural gas at UGSF of PJSC “UKRTRANSGAZ” at the beginning and end of the selection seasons of 2015-2016 – 2017-2018.

Table 3: The availability of natural gas at UGSF of PJSC “UKRTRANSGAZ” (bcm)

2014/2015		2015/2016		2016/2017	
At the start of withdrawal season	At the end of withdrawal season	At the start of withdrawal season	At the end of withdrawal season	At the start of withdrawal season	At the end of withdrawal season
17,1	8,4	14,7	8,1	17,0	7,4

Table 4 shows data on the actual maximum daily average gas withdrawal from the UGSF and the average daily gas withdrawal from the UGSF during the season.

Table 4: Volume of level of gas withdrawal from UGSF (mcm)

2015-2016		2016-2017		2017-2018	
Maximum daily withdrawal	Average daily withdrawal	Maximum daily withdrawal	Average daily withdrawal	Maximum daily withdrawal	Average daily withdrawal
137,4	57,6	91,9	41,0	116,3	57,1

In 2017 the average volume of active gas in underground gas storage facilities was 12,3 billion cubic meters.

The volume of gas availability in UGSF system in 2017 is shown in Figure 4.

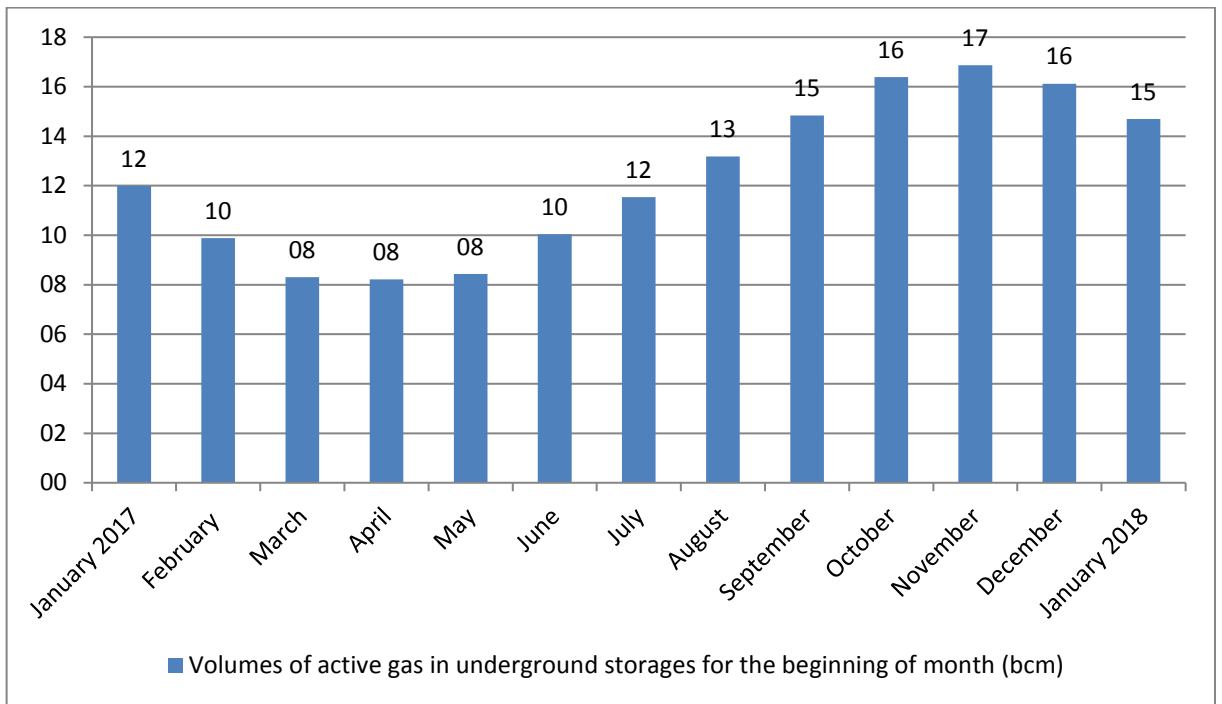


Figure 4: Volumes of gas availability in underground storage facilities at the beginning of the month (bcm)

The average daily level of withdrawal and injection of natural gas from/into UGSF for 2017 is given in Figure 5.

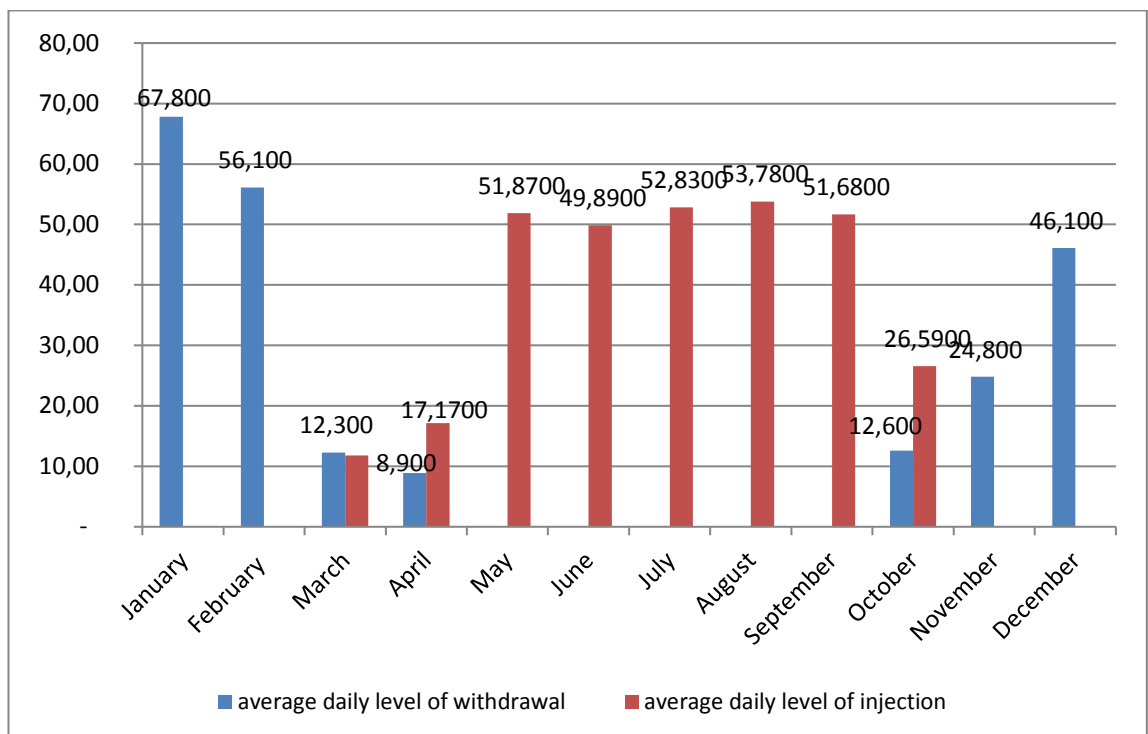


Figure 5: Average daily levels of withdrawal and injection

3. Status of the gas transmission system interconnections between Ukraine and other countries.

The capacity of the GTS at the entry and exit points located at the border of Ukraine is given in Table 5.

Table 5

The capacity of the GTS at the entry and exit points located at the border of Ukraine as of 01.01.2018

No.	Entry / exit point	mcm/day
ENTRY		
1	Sudzha	327.2
2	Pysarivka	147.6
3	Sokhranivka	140.0
4	Serebrianka	39.6
5	Valuiky	77.6
6	Mozyr	18.3
7	Kobryn	88.0
8	Platovo ¹	-
9	Hermanovychi ²	4.3/6.4
10	Beregdarots	17.1
11	Budintse	42.5
12	Oleksiiivka	26.5
13	Kaushany	82.2
14	Lymanske	4.6
15	Prokhorovka ¹	-
EXIT		
1	Uzhhorod ³	281.9
2	Berehovo ³	40.2
3	Drozdovychi ⁴	14.5 (10.5)
4	Orlovka	81.4
5	Tekovo	13.7
6	Ustylug	1.2
7	Oleksiiivka	7.6
8	Grebinky	91.3
9	Lymanske	4.6
10	Ananiiv	30.4
11	Hermanovychi ⁵	-
12	Beregdarots ⁵	-
13	Budintse ⁵	-
14	Prokhorovka ¹	-

1 – as of 01.01.2018 – are located on the temporary uncontrolled territory;

2 – in the period from May 1 to August 31 - 4.3 million cubic meters per day, from September 1 to April 30, 6.4 million cubic meters per day;

3 – in connection with the decrease of capacity by the Slovak operator at the entrance from Ukraine, the capacity at the Berehovo GMS may amount to 57.3 million cubic meters per day (due to a corresponding reduction in GMS Uzhgorod);

4 – in parentheses - the capacity only of MP Komarno – Drozdovychy DN 700 being in operation

5 – capacity at specified points will be determined after agreement with the operators of the adjacent GTS.
The volumes are determined under standard conditions: $P = 0.101325 \text{ MPa} = 1.03323 \text{ kgf / cm}^2$, $t = 20 \text{ }^\circ \text{C}$

4. Measures to ensure the security of new capacities for gas transmission system.

1. In order to diversify gas supplies to Ukraine and to integrate the Ukrainian GTS into the European System of GTS, JSC “Ukrtransgaz” is working on “Construction of Gas Interconnector Ukraine – Poland”.

In the framework of the project implementation, the following events were carried out:

- at the end of 2015 the Parties have completed the development of a joint feasibility study of gas Interconnector construction “Ukraine – Poland”.

- on December 6, 2016 the Rules of Cooperation were agreed for implementation of the project to establish the principles of cooperation between GAZ-SYSTEM S.A. and PJSC “UKRTRANSGAZ” during the design and construction of the pipeline.

- planned Gas Interconnector Poland - Ukraine Project includes: on behalf of Poland – construction of the pipeline DN700 Hermanovychi-Strahotsina (72 km) and the pipeline of DN1000 from Hermanovychi to the Poland-Ukraine border (1.5 km) on the Polish side, including the border compressor station and metering station in Strahotsina; on behalf of Ukraine –construction of the pipeline DN1000 from the Poland-Ukraine border to Bilche-Volytsya on the Ukrainian side (99.3 km) including the control metering station.

- in July 2016, GAZ-SYSTEM S.A. received the corporate approval to proceed to the design stage and started the engineering works in Poland.

- on the Ukrainian side: the positive report of the State expertise on the stage of Feasibility Study “Construction of Gas Interconnector “Drozdovychy - Bilche-Volytsya” was made (Ukrainian part of the Gas Interconnector between the Ukraine and Poland).

- the design documentation for the object “Construction of Gas Interconnector “Drozdovychy - Bilche-Volytsya (stage P)” was developed and the positive report of the State expertise was received.

- the preparatory works on land acquisition are underway.

- during April-June 2018 the non-binding procedure for investigating the market demand for natural gas at the Ukrainian-Polish border was conducted, which will form the basis for the final decision on the project implementation.

2. In September 2016, between the GTS operators of Greece, Bulgaria, Romania and Ukraine "the Memorandum of understanding on a Joint approach and Action Plan to address the natural gas transportation in two directions through the Trans-Balkan Gas Transportation Corridor to ensure the natural gas diversification and security of supply challenges" was signed as part of the Central and South-Eastern European Gas Connectivity (CESEC) initiative. This memorandum provides for the creation by Signatories the technical specifications for physical transportation of natural gas in the direction of South-North which will ensure the operation of this gas transportation

corridor in both directions. In early November 2017 PJSC “UKRTRANSGAZ” offered the phased approach to the implementation of the initiative:

- Phase 1 – 1.5 billion cubic meters per year in the direction of Bulgaria-Ukraine along the Transit-1 pipeline which is currently used for transportation to Bulgaria;
- Phase 2 – 5 billion cubic meters per year in the direction of Bulgaria-Ukraine along the Transit-1 pipeline which is currently used for transportation to Bulgaria.

Implementation of the first two phases of the project will provide transportation capacity in the direction of Ukraine at the level of up to 5 billion cubic meters per year.

During the period from March 30 to April 30, 2018 PJSC “UKRTRANSGAZ” conducted a procedure for assessing the non-binding demand of natural gas market participants of Ukraine and adjacent countries for firm capacity along the Transit-1 pipeline in the direction of Romania-Ukraine. For consideration the capacity of 5 billion cubic meters per year was proposed. The results of the assessment revealed that 11 leading European and Ukrainian gas traders expressed interest in the transportation of natural gas in the direction of Romania-Ukraine for a total capacity of up to 10 billion cubic meters per year which is twice the proposed capacity. Accordingly, this project is one of the most promising.

5. Technical condition of the gas transmission system.

Characteristics of the gas transmission system of PJSC "UKRTRANSGAZ" are given in the Table 6.

Table 6

“Characteristics of the gas transmission system of PJSC “UKRTRANSGAZ” as of 01.01.2018”

Transmission system characteristics	Unit	Number
1 The length of the pipelines, in total, Including: - gas main pipelines - gas pipeline branches - distribution pipelines	km	37 933,360 22 202,788 13 339,922 2 390,650
<i>1.1. The length of the pipelines located on the temporarily occupied territory of Ukraine (hereinafter - TOT Crimea), total</i> <i>include.: - gas main pipelines</i> <i>- gas pipeline branches</i> <i>- distribution pipelines</i>	km	525,047 323,739 174,573 26,735
<i>1.2. the length of the pipelines located on the temporarily uncontrolled territory of Ukraine (hereinafter – TUC of Ukraine), total</i> <i>include.: - gas main pipelines</i> <i>- gas pipeline branches</i> <i>- distribution pipelines</i>	km	1 928,766 1 155,187 709,812 63,767
2 Capacity of gas transportation system: - entry points of adjacent GTS - exit points to adjacent GTS	bcm/year	304,0 145,8
3 Number of compressor stations (compressor plants) <i>including</i>	pcs.	73 (111)
- <i>TUC of Ukraine</i>	<i>pcs.</i>	<i>3 (3)</i>
- <i>decommissioned</i>	<i>pcs.</i>	<i>0 (1)</i>
- <i>property of PJSC “GASTRANZIT” (reference)</i>	<i>pcs.</i>	<i>1 (1)</i>
4 Number of gas pumping units <i>including</i>	pcs.	705
- <i>TUC of Ukraine</i>	<i>pcs.</i>	<i>35</i>
- <i>decommissioned</i>	<i>pcs.</i>	<i>25</i>
- <i>property of PJSC “GASTRANZIT” (reference)</i>	<i>pcs.</i>	<i>3</i>
5 Capacity of compressor stations <i>including</i>	MW	5 496
- <i>TUC of Ukraine</i>	<i>MW</i>	<i>175</i>
- <i>decommissioned</i>	<i>MW</i>	<i>108</i>
- <i>property of PJSC “GASTRANZIT” (reference)</i>	<i>MW</i>	<i>48</i>
6 Number of underground gas storage facilities (UGS)	pcs.	12
- <i>including TUC of Ukraine</i>	<i>pcs.</i>	<i>1</i>
7 Design UGS active capacity for cycle operation	bcm	30,95

- including TUC of Ukraine	bcm	0,4
8 Number of gas distribution stations (GDS)	pcs.	1 472
8.1. Number of GDS at TOT Crimea	pcs.	13
8.2. Number of GDS at TUC of Ukraine	pcs.	70
9 Employment	person	19 583

In order to ensure efficient and reliable operation of the objects and facilities of the GTS in the autumn-winter period the branches of JSC "Ukrtransgaz", each year, from May to September, prepare objects of JSC "Ukrtransgaz" for work in the autumn-winter period according to the approved Action Plan.

According to the schedule of preparation of PJSC "UKRTRANSGAZ" facilities for work during the autumn-winter period 2017/2018 as of 01.10.2017 the significant range of works was carried out, including:

The linear part of main gas pipelines:

- 28.21 km of pipelines linear parts;
- an instrumental survey of 2052.4 km of pipelines;
- overhaul of 3 water crossings of pipelines;
- 511 items of underwater and 225 items of above water crossings of the pipelines.

Gas distribution stations:

- reconstruction and repair of 300 GDS;
- overhaul of 923 items of systems of automatic fire alarm and fire-fighting system.

Compressor stations:

- repairs of 16 GPUs;
- overhaul of 270 items of systems of fire alarm and fire-fighting system.

Underground gas storage facilities:

- overhaul of 26 wells;

It was inspected technical condition of gas drying units, regeneration and gas drainage pumps, chemical pumps, as well as repaired and inspected pipelines and valve components, maintained and cleaned processing tanks.

Maintenance of heating, energy and water supply:

- repairs of 38.7 km of electricity transmission lines;
- inspection of 3 boiler houses and 34 boilers;
- repairs of 7 boiler houses and 13 boilers;
- repairs of 11.55 km of heating mains;
- repairs of 6.67 km of external fire-fighting mains;

Repair of fleet vehicles:

- 2034 pcs. of motor vehicles;

Repair of communication line:

— 3810.5 km of cable lines.

Procurement of:

— 1998.51 t combustive-lubricating materials;

— 73.3 tones of odorant.

According to the orders of PJSC “UKRTRANSGAZ” and branches, the committees have been formed to verify the execution of works on the preparation of industrial facilities and social and cultural facilities for work in the autumn-winter period.

Based on the analysis of the implementation of organizational and technical measures for preparation of the industrial facilities and social and cultural facilities for work in winter conditions and also based on the reports and acts of committees inspections, in general, the committee of PJSC “UKRTRANSGAZ” determined satisfactory measures implementation for PJSC “UKRTRANSGAZ” facilities in preparation works for autumn and winter periods of 2017/2018, the readiness of PJSC “UKRTRANSGAZ” gas transportation system for operation in the autumn and winter periods of 2017/2018. The committee issued certificates of readiness for all branches.

JSC “Ukrtransgaz” continues implementation of the investment project “Reconstruction of compressor station “Bar” of the “Soyuz” gas pipeline”, for financing of which the loan agreement under the guarantees of the Government of Ukraine has been concluded between “Deutsche Bank AG” and PJSC “UKRTRANSGAZ” on 11.12.2012. According to the procurement agreement the “Feasibility Study” (FS) was developed between PJSC “UKRTRANSGAZ” and “Ferrostaal Industrieanlagen GmbH”, which was approved by the Cabinet of Ministers of Ukraine regulation No.1403 dated 30.12.2015.

In accordance with the terms of the Agreement with “Ferrostaal Industrieanlagen GmbH”, the project and working documentation for the works performance have been developed and approved. The main (GPU type PGT-25 in number of 2 units) and auxiliary technological equipment are provided.

In JSC "Ukrtransgaz", the Feasibility Study (FS) for the reconstruction of the CS "Yagotyn" was developed and approved. Works on preparation for procurement of works on reconstruction of the CS "Yagotyn" on a turnkey basis are underway.

6. Measures of JSC "Ukrtransgaz" directed to meet peak demand

In order to prepare JSC “Ukrtransgaz” branches for the autumn-winter period of 2017/2018, planned and preventive maintenance services have been performed having an impact on Russian gas transit to European countries and being mutually coordinated by PJSC “Gazprom” and shipping countries. During 2017, 13 complexes of planned services and preventive maintenance were carried out in line with the approved time schedule.

Among key organizational and technical measures for PJSC “UKRTRANSGAZ” operation in 2017/2018 autumn-winter period, there is an essential component - natural gas injection into the underground storage facilities. The measures envisaged the injection of 7.5 billion cubic meters of gas for 2017. In general, in 2017 9.2 billion cubic meters of natural gas were injected into UGSF of PJSC “UKRTRANSGAZ” which is 2.8 billion cubic meters more compared to 2016. At the same time, availability of natural gas in UGSF of PJSC “UKRTRANSGAZ” was about 17.0 billion cubic meters, which is 2.4 billion cubic meters more than in 2016.