TRANSGAZ
MAGISTRALA ENERGIEI

Information published according to ANNEX 3 to the regulated revenue, total revenue and regulated tariff setting methodology approved by ANRE Order 32/2014, as further amended and supplemented

2017-2018

Information used at establishing regulated revenue, total revenue and regulated tariffs for 1 October 2017 – 30 September 2018

1. Information regarding the parameters used in the methodology applied for setting regulated revenue, total revenue and regulated tariffs for gas transmission, not related to the technical features of the NTS

- a) technical capacity in each entry and exit point and related assumptions

Information may be found at:

Entry - http://www.transgaz.ro/sites/default/files/Downloads/entry_01.10.2017.xlsx

Exit - http://www.transgaz.ro/sites/default/files/Downloads/exit_01.10.2017.xlsx

- b) contracted capacity estimated for each entry and exit point and related assumptions

Information may be found at :

http://www.transgaz.ro/sites/default/files/Downloads/rezervari_estimate_pentru_anul_gazier_2017-2018_ordinul_anre_nr.10_pct.b_venit_reglementat.xlsx

- c) quantity and direction of gas flow for each entry and exit point and related assumptions, such as the demand and supply for the gas flow at peak consumption

Information may be found at :

Quantity- http://www.transgaz.ro/sites/default/files/Downloads/quantities_peak_day_2017_2018.xlsx

Flow- http://www.transgaz.ro/sites/default/files/Downloads/fluxuri_snt_zi_varf_2017_2018.pdf

- d) detailed structural representation of the transmission network

Information may be found at :

http://www.transgaz.ro/sites/default/files/Downloads/reprezentare_snt_2017_2018.pdf

- e) additional technical information regarding the transmission network, such as length and diameter of the pipelines and power of gas compressor stations

Information may be found at :

http://www.transgaz.ro/sites/default/files/Downloads/reprezentare_snt_2017_2018.pdf

2. Information regarding regulated revenue and total revenue

- a) Regulated revenue and total revenue approved for October 2017-September 2018

No.	Indicator	Revenue approved October 2017-September 2018 (thousand RON)
1	Opex	556.564,71
2	Capex	446.940,22
3	**Regulated revenue (1.+2.)**	**1.003.504,93**
4	Pas-through costs	223.891,44
5	Differences	-273.073,98
5.1	- componenta de redistribuire a sporului de eficienta	-112.099,89
5.2	- componenta de corectie a venitului total	-173.098,51
5.3	- componenta de corectie a consumului tehnologic	-5.363,46
5.4	- componenta de corectie a costurilor preluate direct	17.487,87
*	**Total revenue (3.+4.+5.)**	**954.322,39**

- b) Changes of approved revenue from one year to another one

No.	Indicator	Revenue approved October 2016-September 2017 (thousand RON)	Revenue approved October 2017-September 2018 (thousand RON)	Revenue evolution
0	1	2	3	3/2 %
1	Opex	566.602,07	556.564,71	98,23%
2	Capex	435.732,77	446.940,22	102,57%
3	**Regulated revenue (1.+2.)**	**1.002.334,83**	**1.003.504,93**	**100,12%**
4	Pas-through costs	201.851,83	223.891,44	110,92%
5	Differences	-102.519,33	-273.073,98	266,36%
*	**Total revenue (3.+4.+5.)**	**1.101.667,33**	**954.322,39**	**86,63%**

2. Information regarding regulated revenue and total revenue

- c) Parameters
- (i) *Types of assets included in the RAB and their value calculated at the beginning of the third regulatory period, according to Annex 1 to ANRE Order 32/2014*

Tangible/intangible assets		Regulated value related to the gas transmission activity (RON)
Group 1	Constructions	2.461.775.813,98
Subgroup 1.1	Buildings	100.884.269,28
Subgroup 1.2	Light constructions	4.976.191,45
Subgroup 1.3	Main pipelines	2.286.030.593,70
Subgroup 1.4	Wells for injection/extraction of gas from underground storages	3.955.545,66
Subgroup 1.5	Steel distribution pipelines	30.789,25
Subgroup 1.6	Polyethylene distribution pipelines	1.749,94
Subgroup 1.7	Other constructions	65.896.674,70
Group 2	Technological equipment, machinery and work equipment	34.484.419,51
Group 3	Measuring, control and regulation devices and installations	65.753.026,61
Subgroup 3.1	Diaphragm meters, ultrasonic meters, other deprimogenous systems	42.606,12
Subgroup 3.2	Rotary pistons meter, turbine meters	981.625,61
Subgroup 3.3	Electronic converters, flow meters, other measurement, control and regulation devices and installations	64.728.794,88
Group 4	Transportation means	12.203.208,38
Group 5	Other tangible and intangible assets	25.925.218,94
Group 6	Lands	1.976.266,38
TOTAL		**2.602.117.953,80**

2. Information regarding regulated revenue and total revenue

- (ii) *Capex structure approved for October 2017-September 2018*

No.	Indicator	Capex structure October 2017-September 2018 (thousand RON)
0	1	2
1	Depreciation	164.798,84
2	Profit	282.141,38
*	**TOTAL CAPEX**	**446.940,22**

- For the third regulatory period the return on invested capital was set, according to ANRE Order 22/2012, to 7,72%
- For the third regulatory period it was established an addition to the return on invested capital amounting to 1,4 % for certain types of assets according to ANRE Order 23/2012
- The regulated return on capital for the third regulatory period was calculated in accordance with the gas transmission regulated revenue, total revenue and regulated tariff setting methodology approved by ANRGN Decision 1078/2003, as further amended and supplemented, Art.119 to 125.
- For the fourth regulatory period the return on capital will be calculated according to ANRE Order 32/2014 (Art.19 – Art.25), ANRGN Decision 1078/2003 being cancelled.
- The methodology for determination of the initial value of the assets is described in Annex no.2 to the Methodology approved by ANRE Order no.32/2014.

2. Information regarding regulated revenue and total revenue

- *The depreciation periods and the depreciation value of the assets included in the asset base established at the beginning of the third regulatory period according to Annex 1 to ANRE Order 32/2014*

Tangible/intangible assets		Regulated depreciation period	Regulated depreciation (RON)
Group 1	Constructions		88.982.157,66
Subgroup 1.1	Buildings	50	3.762.345,89
Subgroup 1.2	Light constructions	10	482.692,23
Subgroup 1.3	Main pipelines	40	78.927.289,04
Subgroup 1.4	Wells for injection/extraction of gas from underground storages	25	185.925,97
Subgroup 1.5	Steel distribution pipelines	30	1.097,45
Subgroup 1.6	Polyethylene distribution pipelines	40	43,75
Subgroup 1.7	Other constructions	10	5.622.763,33
Group 2	Technological equipment, machinery and work equipment	10	3.933.252,50
Group 3	Measuring, control and regulation devices and installations		7.897.677,43
Subgroup 3.1	Diaphragm meters, ultrasonic meters, other deprimogenous systems	20	2.367,01
Subgroup 3.2	Rotary pistons meter, turbine meters	15	75.452,72
Subgroup 3.3	Electronic converters, flow meters, other measurement, control and regulation devices and installations	10	7.819.857,70
Group 4	Transportation means	5	4.122.717,87
Group 5	Other tangible and intangible assets	5	5.684.433,23
Group 6	Lands		15.357,84
TOTAL			**110.635.596,53**

2. Information regarding regulated revenue and total revenue

- (iii) *OPEX* approved for October 2017-September 2018 amount to RON 556.564,71 thousand, of which technological consumption amounts to RON 65.083,25 thousand.
- (iv) Pass-through costs approved for October 2017-September 2018 amount to RON 223.891,44 thousand
- (v) *Incentive mechanisms and efficiency targets*

Boosting efficiency is achieved by the adjustment of operating costs. According to the methodology, operating costs are established in the first year of a regulatory period and are adjusted in the subsequent years of the regulatory period with the difference between the inflation rate and the annual rate of gas transmission economic efficiency increase.

The rate of gas transmission economic efficiency increase reflects ANRE`s estimations regarding possible OPEX savings, without the technological consumption costs, which may be achieved in a year of the regulatory period to improve the economic performance of the licence holder and is established depending on the efficiency target set for a regulatory period.

The rate of gas transmission economic efficiency increase ensures a transfer of economic efficiency in favour of the consumers.

The rate of gas transmission economic efficiency increase established by ANRE Order 74/2017 for each year of the third regulatory period between October 2017-September 2019 and used to calculate the total revenue for October 2017-September 2018 is of 3,5%.

- (vi) *The inflation rate used* to calculate the total revenue for October 2017-September 2018 amounts to 2,39%. This was established by using the anual inflation average of 1,9% for 2017 and of 2,3% for 2018, based on the spring 2017 forecasting of the National Forecast Commission.

(http://www.cnp.ro/user/repository/prognoze/prognoza_2017_2020_varianta_de_primavara.pdf)

3. Indicators regarding the total revenue approved for the period October 2017 – September 2018 and information on accrual reconciliation

- i) Indicators regarding the total revenue approved for the period October 2017 – September 2018
- a) Total revenue approved by ANRE is allocated by the fix component and by the variable component. The ratio between the fix component and the variable component of the total revenue approved for October 2017-September 2018 is 1,86.

No.	Indicator	Approved revenue October 2017-September 2018 (thousand RON)	Share in the total revenue
1	Fix revenue	620.309,55	65,00%
2	Variable revenue	334.012,84	35,00%
*	**Total revenue**	**954.322,39**	

- According to Order 10/2017 amending and supplementing Order 32/2014, from 1 October 2017, the fix component of the revenue increased to the level of 65%, used at capacity booking tariff setting, going to growing by 5% annually, until 85% of the total revenue.
- b) According to Order 31/2016 amending and supplementing Order 32/2014, the fix component of the total revenue approved is divided equally between the group of exit points and the group of entry points.
- c) The ratio between the revenue estimated to be obtained from network use inside the system, both at entry and at exit points, and the revenue estimated to be obtained from network use between the transmission systems both at entry and at exit points between October 2017 and September 2018 is 18,21:

No.	Indicator	Approved revenue October 2017-September 2018 (thousand RON)	Share in the total revenue
1	Revenue from network use inside the system	904.633,64	94,79%
2	Revenue from network use between the transmission systems	49.688,75	5,21%
*	**Total revenue**	**954.322,39**	

3. Indicators regarding the total revenue approved for the period October 2017 – September 2018 and information on accrual reconciliation

- ii) information regarding accrual reconciliation
- a) Between October 2016 and September 2017 the total gas transmission revenue amounted to RON 1,466,828.04 thousand. According to the Methodology approved by Order 32/2012 of the ANRE President, amounts recovered in excess of the revenue allowed to be recovered by the TSO are regulated by the correction component of the total revenue. Under the procedure for setting total revenue and regulated tariffs for the transmission activity between October 2017 and September 2018, ANRE approved the total revenue correction component of RON 346,197.02 thousand, representing the amounts recovered in excess by the TSO and to be returned in the benefit of network users;
- b) According to the Methodology approved by Order 32/2012 of the ANRE President, the total revenue correction component is the difference between the total revenue obtained for year *i-1* and the one considered allowed in year *i-1*, including the differences resulted from the previous years close, and the acknowledged revenue differences, but not included in the total revenue allowed in the previous years, as applicable. If the correction component generates a significant modification of the total revenue, ANRE may decide to schedule recovery/transfer of the difference over more than one year, and the discounting will be with the inflation rate relevant for the period of when recovery/transfer is performed.
- iii) According to the Methodology approved by Order 32/2012 of the ANRE President, `The tariff payable for the transmission services awarded by a capacity booking auction shall be the firm/interruptible capacity booking tariff, applicable when the capacity booked may be used, plus the auction premium`, and `Revenue obtained by applying the final tariff resulting following the auction, to be paid for the firm/interruptible booked capacity, represents the gas transmission revenue.`

4. Information regarding the transmission tariffs approved by ANRE Order 74/2017 for October 2017-September 2018

- ***Transmission tariffs for capacity booking products approved for October 2017-September 2018 in RON/MWh/h***

Group of NTS entry/exit points		Types of gas transmission services						
		Long-term	Short-term					
		Yearly	Quarterly		Monthly		Daily	
			Summer	Winter	Summer	Winter	Summer	Winter
1.	NTS group of entry points from production facilities, LNG terminals facilities for production of biogas or other gas compliant with the quality conditions enabling their delivery to/transmission through he gas transmission system, interconnection with other gas transmission systems and gas underground storages	1,76	1,37	3,23	1,59	3,70	3,16	7,40
2.	NTS group of exit points to direct consumers, distribution systems, underground gas storages, pipelines for upstream and other interconnected systems supply.	1,74	1,36	3,19	1,57	3,66	3,12	7,32

4. Information regarding the transmission tariffs approved by ANRE Order 74/2017 for October 2017-September 2018

- The capacity booking product tariffs were calculated according to the methodology approved by ANRE Order 32/2014, as further amended and supplemented, based on the following formula:

➢ For long-term capacity booking products

$$TC(gr)tl = \frac{CF(gr)}{CRe_{(gr)_{tl}} \times N_{tl} + \sum_{ts=1}^{n}(CRe_{(gr)_{ts}} \times N_{ts} \times K_{ts})} \; [RON/MWh/h]$$

where: TC(gr)tl – is the long-term firm capacity booking transmission tariff for the group of entry/exit points (gr);

CF(gr) – is the value of the fix component of the total revenue allocated to the group of entry/exit points (gr);

$CRe(gr)_{tl}$– is the capacity estimated to be booked over the long term in the period for which transmission tariffs are set, by the group of entry/exit points (gr);

$CRe(gr)_{ts}$– is the capacity estimated to be booked over the short term in the period for which transmission tariffs are set, by the group of entry/exit points (gr);

$N_{tl,ts}$ – number of hours for each type of service.

K(ts) – capacity booking tariff multiplication ratio for the type of short-term firm service.

➢ For the short-term capacity booking products

TC(gr)ts=TC(gr)tl x K(ts) ***[lei/MWh/h]***

where: TC(gr(ts)) – is the short-term firm capacity booking tariff for the group of entry/exit points (gr); TC(gr(tl)) - is the long-term firm capacity booking tariff for the group of entry/exit points (gr); K(ts) - capacity booking tariff multiplication ratio for the type of short-term firm service.

4. Information regarding the transmission tariffs approved by ANRE Order 74/2017 for October 2017-September 2018

- *Commodity transmission tariffs approved by ANRE Order 74/2017, for October 2017-September 2018 (calculated by adding the tax on the monopoly, according to GO 5/2013, as further amended and supplemented)*

Commodity tariffs for gas transmission through the National Transmission System:	
Commodity tariffs for the quantity of gas transmitted to the distribution systems	2,45 RON/MWh transmitted
Commodity tariffs for the quantity of gas transmitted only through the National Transmission System	3,20 RON/MWh transmitted

The commodity tariff for the quantity of gas transmitted (without the monopoly tax) was calculated according to the methodology approved based on the following formula:

$$\mathbf{TV(i)} = \frac{CV(i)}{Qtr(i)}$$

where:

TV(i) – is the commodity tariff calculated for 1MWh transmitted in year (i);

CV(i) – is the commodity component of the total revenue in year (i);

Qtr(i) – is the gas quantity estimated by the licence holder to be transmitted in year (i), expressed in MWh.

5. Regulated gas transmission tariff possible evolution forecast model

- **The regulated gas transmission tariff possible evolution forcast model may be found at:**

http://www.transgaz.ro/sites/default/files/Downloads/tariffs_forecast_template_2017-2018.xlsx

Instructions for use:

For estimating the possible evolution of gas transmission tariffs users must fill-in the green cells with estimations regarding:

- Total revenue estimated
- Transmission capacity estimated to be booked for each type of product
- Gas quantity estimated to be transmitted through the national transmission system
- Multiplication ratios estimated for the short-term capacity booking products