The Network Code for the National Gas Transmission System

Revised version

NOTICE: The English version of the Network Code is available for information purposes only. In the event of any discrepancies arising between the Network Code in Romanian and the Network Code in English, the provisions of the Romanian language version shall be legally binding.

SUMMARY OF THE RELEVANT LEGISLATION

1. The Network code for the National Gas Transmission System, approved by the Order of NRAE President no 16/2013 (published in the Official Journal Part I, no. 171 and no. 171 bis /29.03.2013)
2. Order No.120/20.02.2013 of NRAE President (Romanian Official Journal, Part. I, No. 32/15.01.2014);
3. Order No. 53/26.06.2014 of NRAE President (Romanian Official Journal, Part I, No. 478/28.06.2014);
4. Order No. 88/24.09.2014 of NRAE President (Romanian Official Journal, Part I, No. 709/29.09.2014);
5. Order No. 155/28.10.2015 of NRAE President (Romanian Official Journal, Part I, No. 806/29.10.2015);
6. Order No. 160/26.11.2015 of NRAE President (Romanian Official Journal, Part I, No. 893/27.11.2015);
7. Order No. 75/28.10.2016 of NRAE President (Romanian Official Journal, Part I, No. 866/31.10.2016);
8. Order No. 36/17.05.2017 of NRAE President (Romanian Official Journal, Part I, No. 393/25.05.2017);
9. Order No. 69/04.04.2018 of NRAE President (Romanian Official Journal, Part I, No. 314/10.04.2018);
10. Order No. 161/01.08.2018 of NRAE President (Romanian Official Journal, Part I, No. 681/06.08.2018);
11. Order No. 167/05.09.2018 of NRAE President (Romanian Official Journal, Part I, No. 801/19.09.2018);
12. Order No. 204/14.12.2018 of NRAE President (Romanian Official Journal, Part I, No. 1066/17.12.2018);
13. Order No. 35/27.02.2019 of NRAE President (Romanian Official Journal, Part I, No. 164/1.03.2019);
14. Order No. 52/17.04.2019 of NRAE President (Romanian Official Journal, Part I, No. 301/18.04.2019);
15. Order No. 170/24.07.2019 of NRAE President (Romanian Official Journal, Part I, No. 652/06.08.2019);
16. Order No. 215/05.12.2019 of NRAE President (Romanian Official Journal, Part I, No. 982/05.12.2019);
17. Order No. 230/16.12.2019 of NRAE President (Romanian Official Journal, Part I, No. 1011/16.12.2019);
18. Order No. 15/05.02.2020 of NRAE President (Romanian Official Journal, Part I, No. 92/07.02.2020);
19. Order No. 23/18.03.2020 of NRAE President (Romanian Official Journal, Part I, No. 225/20.03.2020);
20. Order No. 145 17/07/2020 of NRAE President (Romanian Official Journal, Part I, No. 637/20.07/2020);
21. Order No. 13/2021 of NRAE President (Romanian Official Journal, Part I, No. 225/05.03/2021).
22. Order No. 126/2021 of NRAE President (Romanian Official Journal, Part. I, No. 1180/14.12/2021)
23. Order No. 68/2022 of NRAE President (Romanian Official Journal, Part. I, No. 372/14.04.2022)
24. Order No. 80/2022 of NRAE President (Romanian Official Journal, Part. I, No. 609/22/06.2022)

ORDER no 16/27.03.2013 for the approval of the Network Code for the National Gas Transmission System

Considering the provisions of Art. 99 letters l) and m), of Art. 130 (1) letter o) and of Art. 200 (3) of the Power and Gas Law no 123/2012, based on the provisions of Art. 5(1) letter c) and of Art. 10(1) letter o) points 2 and q) of the Government Emergency Ordinance no 33/2007 regarding the organization and operation of the National Regulatory Authority for Energy (NRAE), as subsequently amended and supplemented by Law no 160/2012,

The President of the National Regulatory Authority for Energy is issuing the following Order:

Art. 1 – The Network Code for the National Gas Transmission System, as stated in the Annex which is part of this Order, shall be approved.

Art. 2 –The National Gas Transmission Company "TRANSGAZ" S.A. Mediaş shall draw up and submit for approval to the National Regulatory Authority for Energy the following documents within 60 days as of this Order date of publication in the Romanian Official Journal, Part I:

a) the procedure regarding the review of the requirements which are to be met by the users of the national gas transmission system;

b) the procedure regarding the method for calculating the energy of the in pipeline stored natural gas.

Art. 3 – On the enforcement date of this Order, the following shall be repealed:

a) the NRAE President's Order no 54/2007 regarding the approval of the Network Code for the National Gas Transmission System, published in the Romanian Official Journal, Part I, no 71 and 71 bis of January 30th, 2008, as subsequently amended and supplemented;

b) the NRAE President's Order no 31/2010 regarding the tariff approval as stated in Annex no 10 to the Network Code for the National Gas Transmission System, as approved by the

NRAE President's Order no 54/2007, as well as concerning the approval of the purchase price of the natural gas oversupplied into the national transmission system, published in the Romanian Official Journal, Part I, no 819 of 8 December 2010, as subsequently amended.

Art. 4 - The National Gas Transmission Company Transgaz - S.A. Mediaş, users of the national transmission system, natural gas producers, natural gas suppliers, distribution system operators, end userdirectly connected to the national transport system and storage system operators shall implement the provisions of this Order, while the relevant departments of the National Regulatory Authority for Energy shall monitor the compliance with these provisions.

Art. 5 – This Order shall be published in the Romanian Official Journal, Part I, and shall enter into force on 1 April 2013.

President of the
National Regulatory Authority for Energy
Niculae Havrileţ
Bucharest, March 27th, 2013
No. 16

Annex

NETWORK CODE of March 27th, 2013 FOR THE NATIONAL GAS TRANSMISSION SYSTEM

CHAPTER I - GENERAL PROVISIONS

Scope

Art.1. – The Network Code regulates conditions and rules for the use of the Romanian National Gas Transmission System.

Art.2. – (1) The provisions of the Network Code for the National Gas Transmission System, hereinafter referred to as the *Network Code*, are compliant with the provisions of Energy and Gas Law No. 123/2012, as further amended and supplemented, and of Regulation (EC) No. 715/2009 of the European Parliament and of the Council of July 13th, 2009 on conditions for access to the natural gas transmission networks and repealing Regulation (EC) No. 1775/2005, as further amended and supplemented, and shall be enforced by the National Gas Transmission Company Transgaz S.A. Mediaş, hereinafter referred to as the *transmission system operator,* by the users of the National Transmission System, hereinafter referred to as *network users,* by the gas producers, by the gas suppliers, as well as by the distribution system operators, by the direct customers and by the storage system operators.

(2) The Romanian Regulatory Authority for Energy, hereinafter referred to as the *Competent Authority (CA),* shall monitor the implementation of the Network Code provisions by the economic operators mentioned under paragraph (1).

Art.3. – The economic operators, mentioned under Article 2(1), may submit in writing, to the Competent Authority, Network Code amending proposals, specifying all the Network Code sections to be amended, accompanied by:

a) a brief presentation of the type and purpose of each proposed amendment;

b) any other documents (reviews, reports etc.) supporting the proposed amendments.

Art.4. – (1) based on the proposal of the economic operators mentioned under Article 2(1), the Competent Authority shall approve the Network Code amendment and/or supplementation, after having consulted the Working group established for this purpose. Competent Authority shall appoint the members of the Working group.

(2) The working group shall issue an opinion within 10 working days from the receipt of such a request.

Art.5. – Each amendment and/or supplementation to the Network Code shall enter into force on the date of its publication in the Romanian Official Journal, Part I.

Art.6. – (1) The following abbreviations shall be used in the Network Code:

CA – Competent Authority
DC – Direct Customer
LNG – Liquefied Natural Gas
OBA – Operational Balancing Account
DSO – Distribution System Operator
SSO – Storage System Operator
TSO – Transmission System Operator
BGM – The Balancing Gas Market
CPBGM – Closing price of the Balancing Gas Market
MCM – Main Capacity Market
SCM – Secondary Capacity Market
VTP – Virtual Trading Point
SCADA – Supervisory, control and data acquisition system
GDS – Gas Distribution System
S_{cm} – standard cubic meter (volume metered under basic conditions: temperature 15°C and pressure 1,01325 bar);
NGTS – Romanian National Gas Transmission System
GMRS – Gas Metering Regulating Station
DIT – Daily imbalance tariff

NU – Network User

(2) For the purpose hereof, the following terms shall be defined as follows:

Allocation	Assignment, by adjacent gas system operators or, if appropriate, by the TSO, of gas amounts, expressed in energy units, to NU, at the entry and exit points, according to the Network Code.
Year	Calendar year.
Gas year	Period of time starting at 07.00 a.m. on October 1st of the current year and ending at 07.00 a.m. on October 1st of the following year.
Incremental capacity	A possible future increase, by means of market based procedures, of the existing technical capacity or of a potentially newly created capacity where currently there is no such capacity which may be offered based on investment in the physical transmission infrastructure and which may be subsequently allocated, subject to the positive economic test results in the NTS entry/exit points or by creating new NTS entry/exit points.
Booked transmission capacity	The capacity contractually approved by the TSO, expressed in MWh/day, based on the request of the NU, which the TSO shall make available to the NU at any time during the transmission contract period, under firm or interruptible conditions.
NU customers	Contractual counterparts of the NU, for which the NUs shall conclude a transmission contract with the TSO.
Basic conditions	The specified conditions under which the measured gas amount is converted.

Operational balancing account	An account between the TSO and the SSO or between the TSO and the natural gas producers, used for the management of differences in steering gas flows in the entry/exit points located at the interface between the NTS and the underground storage facility in the case of the SSO or in the management of the differences between the gas amount introduced in the NTS and the one nominated by producers, in order to simplify the accounting of the gas quantities for the concerned NU.
Direct customer	The end-user connected directly to the NTS, other than the customer which has concluded a gas transmission contract in its own name.
Daily imbalance	The difference between the NTS gas intakes and offtakes per gas day.
Operational balancing	Represents the actions the TSO is obliged to take so that: a) the forecasted gas quantity expected to be present in the NTS at the end of the gas day D lies within the optimum NTS operational limits, as settled by the operational procedures of the TSO and published on its internet page. b) it compensates until the end of the gas day D the imbalances between the inputs and outputs of the relevant gas day for the economic viability and efficiency of the national transmission system
Capacity transfer facility (CTF)	Repealed
Gas transfer facility (GTF)	Repealed
Use it or lose it	The loss of the right to the approved and unused capacity.

Force Majeure	Any external, unpredictable, absolutely insurmountable and inevitable event exonerating the claiming party of liability, according to the law.
Balancing gas	The amount of natural gas needed to ensure the physical balancing of NTS under normal operating condition.
Month	Calendar month
Calibration log	Document revealing the date, method and authorized person who carried out the calibration of the transducers at the NTS entry/exit points.
Notification	Information made available to the participants to the BM, related to the gas quantities traded on the BM for each gas delivery day
Adjacent system operator	Infrastructure operator located at the interface with the NTS, upstream and downstream (adjacent producers, direct customers, DSOs, SSOs, TSOs)
Third party operator	The economic operator appointed by the producers to ensure the operation of a physical entry point from the production fields in line with the regulations in force
Main capacity market	The framework, made available and operated by the TSO, organized for the performance of activities related to contracting and contract execution with regard to transport services between different economic operators and the TSO
Secondary capacity market	The organized framework, made available and operated by the TSO, for the performance of activities related to the transfer of the right to use capacity and of those related to the complete transfer of the rights and obligations arising from the transmission contracts between various NU or between the NU and economic operators.

NU partner	Repealed
NU customer portfolio	All NU customers for whom NU concludes gas transmission contracts with the TSO.
Balancing price	The price automatically calculated by the trading system of the BM so that the tradable amount reaches the maximum level and the absolute value of the surplus lowers to theminimum level
Market closing price	The balancing price from the trading day determined upon the closing of the gas balancing market
Minimum capacity threshold	The minimum aggregate level of the binding commitments for contracting incremental capacity expressed by all the applicants, potential network users within an incremental capacity process ensuring the economic viability of the incremental capacity project
First-come, first-served	Principle based on which TSO allocates the available capacity, in order of request receipt, within each priority level.
Matching procedure	Procedure by which TSO compares the nominations of a network user with the data provided by its counterparts.
Incremental capacity process	An open and transparent evaluation process of the demand for incremental capacity on the market, which includes a non-binding stage where applicants, potential network users, express or quantify their demand for this type of capacity and a binding stage, where the transmission system operator requires from the applicants, potential network users, binding commitments for contracting incremental capacity
Transmission schedule	Annual transmission schedule provided by the network users and agreed upon with the TSO, which specifies the

	monthly gas quantities to be delivered to/taken over from NTS; the transmission schedule is an Annex to the gas transmission contract.
Incremental capacity project	An investment project aimed at the increase of the technical capacity in an existing entry/exit point in/out of the NTS or the set-up of a new entry/exit point in/out of the NTS based on the capacity allocation within an incremental capacity process
Transmission services	Activities and operations carried out by the TSO for or related to the booking of transmission capacity and the transmission through the NTS of specific gas volumes, expressed in energy units, within the duration of a gas transmission contract.
Adjacent system	Transmission / distribution / storage / production pipelines and facility system / direct customer facilities connected to the NTS.
Economic test	A test applied for the evaluation of the economic viability of the incremental capacity projects
Energy unit	Measurement unit expressed in MWh.
Volume unit	Volume measurement unit expressed in cubic meters – m^3 – or thousand cubic meters – thousand m^3.
Network user	Any user, as defined in the Electricity and Gas Law no 123/2012, as subsequently amended and supplemented.

Pro rata	Allocation principle proportional to the nomination of gas amounts at NTS points, applied by TSO to the network users, under the Network Code.
Day	Calendar day.
Gas day	Time frame starting at 07.00 a.m., the Romanian time, of any day, and ending at 07.00 a.m., the Romanian time, of the following day. The gas day shall be reduced to 23 hours when shifting to the daylight saving time and increased to 25 hours when shifting to the winter time; all related rights and obligations under the gas transmission contracts shall be decreased or increased accordingly, during the relevant gas days.

(3) The terms set forth in paragraph (2) shall be supplemented by those defined in Energy and Gas Law No. 123/2012, as further amended and supplemented and in Regulation (EC) No. 715/2009 as further amended and supplemented.

CHAPTER II – NTS ENTRY/EXIT POINTS

Art. 7 - (1) This Chapter describes the NTS entry/exit points for the network users, in terms of access to the NTS, according to the procedures set forth by this Network Code.
(2) For the performance of the operational/commercial procedures stipulated in the Network Code, the NTS entry / exit points may be physical as well as virtual.
Art. 8 - Repealed

NTS Entry Points

Art. 9 - The physical entry point shall be the point represented by the fiscal/commercial metering system/equipment where the NU takes in and the TSO takes off gas from the adjacent

systems for their transmission through the NTS, according to the NTS entry points gas transmission contract.

Art. 10 - Repealed

Art. 11 - Repealed

Art. 12 - Repealed

Art. 13

- The NTS physical entry points are:

a) physical entry points from production fields;
b) physical entry points from underground storage facilities for gas withdrawal from underground storage facilities;
c) physical entry points from other gas transmission systems of EU countries;
d) physical entry points from other gas transmission systems of third countries, non-EU countries;
e) physical entry points from LNG terminals;
f) physical entry points from biogas or different types of gas production facilities, compliant with the quality conditions allowing their delivery/transmission through the NTS.

Art. 13^1. – (1) A virtual entry point is the notional point obtained by grouping several physical entry points of the same type.

(2) The NTS virtual entry points are:

a) virtual entry points from production fields. A virtual entry point from production fields shall be established for each producer by grouping physical entry points from the production fields operated by such producer. The physical entry point from the production fields used by producers shall be allocated accordingly to the virtual point of each such producer. Should a producer own a single physical point at the NTS interface, such point shall be assimilated to a virtual point.

b) virtual entry points from underground storage facilities, for gas withdrawal from underground storage facilities. A virtual entry point from underground storage facilities shall be established for each storage system operator by grouping physical entry points

from the underground storage facilities operated by such storage system operator. Should an underground storage system operator own a single physical point at the NTS interface, such point shall be assimilated as a virtual point.
c) virtual entry points from gas transmission systems of EU member states. Should there be several NTS physical entry points from the same gas transmission system of a neighbouring EU member state, a virtual entry point may be established by the grouping the NTS physical entry points from the same transmission system of such member state;
d) virtual entry points from gas transmission systems of third countries, non-EU countries. Should there be several NTS physical entry points from the same gas transmission system of a neighbouring non-EU country, a virtual entry point may be established by grouping the NTS physical entry points or some of the physical NTS entry points from the same transmission system of such country;

Art. 13^2. –The technical capacity of each virtual entry point shall be determined by summing up the technical capacities in each physical entry point the virtual trading point consists of.

NTS Exit Points

Art. 14 - (1) The physical exit point is the point represented by the fiscal / commercial metering system / equipment where the TSO takes in and the NU takes off gas transmitted through the NTS for delivery to the adjacent systems/DC, according to the NTS exit points gas transmission contract.
(2) With regard to the supplied through several interconnected / non-interconnected physical points, based on the request of a DSO, the TSO may replace the relevant physical points by a ring-type point of physical exit point nature, as defined in paragraph (1).
Art. 15 Repealed
Art. 16 Repealed
Art. 17
- The NTS exit points are:

a) physical exit points towards distribution systems;
b) physical exit points towards DC;
c) physical exit points towards underground storage facilities for gas injection into the underground gas storage facilities;
d) physical exit points to other gas transmission systems of EU member states;
e) physical exit points towards other gas transmission systems of third countries, non-EU countries;
f) physical exit points to upstream pipelines.

Art. 17^1. - (1) A virtual exit point is the notional point obtained by grouping physical exit points of the same type.

(2) The NTS virtual exit points are:

a) virtual exit points towards distribution systems. A virtual exit point towards distribution systems shall be established for each distribution system operator by grouping the physical exit points towards the distribution systems operated by such distribution system operator;
b) virtual exit points towards underground storage facilities, for gas injection into underground storage facilities. A virtual exit point towards underground storage facilities shall be established for each storage system operator by grouping the physical exit points towards the underground storage facilities operated by such storage system operator. Should an underground storage system operator own a single physical point at the NTS interface, such point shall be assimilated as a virtual point.
c) virtual exit points towards gas transmission systems of EU member states. Should there be several NTS physical exit points towards the same gas transmission system of a neighbouring EU member state, a virtual exit point may be established by grouping the NTS physical exit points towards the same transmission system of such member state;
d) virtual exit points towards gas transmission systems of third countries, non-EU countries. Should there be several NTS physical exit points towards the same gas transmission system of a neighbouring non-EU country, a virtual exit point may be established by grouping the NTS physical exit points towards the same transmission system of such country;

e) virtual exit points towards DC. A virtual exit point is established for each DC by grouping the physical exit points to such DC. Should a DC own a single physical NTS exit point, such point shall be assimilated as a virtual point.

Art. 17^2. - The technical capacity of each virtual exit point shall be determined by summing up the technical capacities of each physical exit point the virtual exit point consists of.

Art. 17^3. - The list of virtual points and the physical points they consist of stated in Annex 11 and the list of physical points not grouped as virtual points stated in Annex 12 to the Network Code shall be published on the TSO`s web-site and shall be updated by it whenever an amendment and / or supplementation of its content has been performed, within one working day from its / their date.

VTP rules for access and use

Art.17^4.

(1) In order to have access to the VTP, the NU (end user, trader, DSO and SSO) shall conclude a balancing and VTP access contract with the TSO, according to the template in Annex 1^3.

(2) With prior notification of the NU, the TSO shall deny the NU`s right to trade at the VTP and shall interrupt the transmission service defined as scope of the NTS entry/exit transmission contracts, should there exist no balancing and VTP access contract concluded with the TSO, as well as in case of termination or suspension of such contract due to the NU`s failure to meet its contractual obligations. .

(3) Due to VTP access, the centralized market operators and the central counterparties shall conclude an agreement with the TSO regarding the VTP access and data exchange.

(4) Participants in the VTP trading as referred to in paragraphs (1) and (3) shall notify the transfers of the ownership right expressed in energy units on the IT platform of the VTP on a daily basis.

(5) Requests for the conclusion of a balancing and VTP access contract and the agreement on the VTP access, as applicable, shall be submitted before the date on which the trading participant intends to notify the VTP trade. The request shall contain at least the following

information: identification data, type of participant (end-user, DSO, SSO, operator of the centralized market, trader, central counterpart) and shall be accompanied by supporting documents.
(6) The TSO shall respond to the request submitted in accordance with the provisions of paragraph (5) no later than 10 working days after its receipt by sending the contract, signed, in 2 original copies, or its reasoned rejection.
(7) The NU shall return the contract signed by its legal representatives at least 5 working days prior to the date of the first VTP notification.
(8) The NU shall provide the TSO with the proof of rating/establishment of the guarantee related to the balancing and VTP access contract at least 3 working days prior to the date of the first VTP notification.
(9) Access to the IT platform of the VTP shall be granted according to the procedure for access to the IT platform of the TSO. The procedure for the access to the IT platform shall be published on the website of the TSO. After granting access to the IT platform, each participant is assigned an identification code.
(10) The NU shall have access rights to the title transfer services offered by the TSO at the VTP for the entire duration of the balancing and VTP access contracts concluded with TSO.

Art. 17^5

(1) Notifications shall be submitted by the trading participants referred to at Art. 17^4 (1) and (3), as applicable, directly, on the IT platform of the VTP and shall contain the following information:
a. the identification code of the NU transferring the title;
b. the identification code of the NU receiving the title;
c. the gas day to which the notification refers to;
d. the amount of gas for which the title is transferred, expressed in energy units;
e. type of notification (title transfer or receipt).

(2) Notifications or their changes shall be submitted to the TSO for each day separately by the end of the gas day the notification refers to. The TSO shall confirm the receipt of such notifications/their changes. The trading participant shall be responsible for providing the IT means enabling it to transmit and receive information by using the IT platform of the VTP.

(3) Should the IT platform of the VTP register any disfunctions, for technical reasons, information shall be exchanged by means of the following alternative communication services:
a) e-mail, in the format specified in the technical documentation of the VTP module, which is part of the IT platform of the VTP;
b) fax, if the communication service under letter a) is not available.

Art. 17^6

(1) In order to validate notifications, the TSO shall check:
a) whether the notification contains the entire information requested;
b) whether the trading participant meets the conditions for VTP access;
c) whether the sum of all net sales positions equals the sum of all acquisition positions, given the case in which notifications are sent by the central counterpart or by the trading platform operator. Notifications submitted by the operators of the trading platform or by the central counterparties on behalf of the NU shall be recorded directly in the NU`s portfolio, no confirmationof the NU being needed.
d) should the notifications be submitted by the NU, the TSO shall match the two notifications and in case of discrepancies the "lesser" rule shall be applied.
(2) The TSO shall reject the notifications which do not meet the conditions under par. (1) (a) and (b) and shall inform the NU with regard to such rejection, specifying the reasons.
(3) After the validation of the notification the TSO shall send a confirmation to the NU involved in the trade.

Art. 17^7

(1) The title transfer takes place at the same time the confirmation by the TSO is sent to the trading NUs.
(2) Should the title transfer be notified by the central counterparty of by the trading platform operator, the TSO automatically confirms the quantities within the following utmost 30 minutes after the registration of the notification.
(3) In the case of bilateral transfers, the TSO shall determine the transferred amount, based on the "lesser" rule, every 30 minutes during the gas day and shall confirm the transferred amounts to the parties within no more than 1 hour from the registration of the notification. The

transferred amount shall be determined as the difference between the sum of the sold notified amounts and the sum of the purchased notified amountsby the same NU pair. For the determination of the amount of a title transfer, the TSO shall consider the latest version of the notifications regarding the relevant transfer.

Art. 17^8.

(1) The quantities covered by the confirmed title transfers shall be taken into account when determining thedaily imbalance of the NU as follows: sales notifications shall be recorded as outputs from the NU`s portfolio, and purchase notifications shall be recorded as inputs in the NU`s portfolio.

(2) The initial and final daily imbalance of the NU shall be presented in a report for each NU following the conclusion of the imbalance determination procedures.

Commercial procedures/operations conducted at the NTS entry/exit points - Repealed

Art. 18 - The following procedures/operations set up by the Network Code shall be applied at the NTS virtual entry/exit points:

a) capacity booking;

b) communication of the transmission schedule;

c) nomination/re-nomination;

d) nomination matching;

e) allocation;

f) capacity return;

g) transfer of right to use the booked capacity;

h) complete transfer of the rights and obligations under the NTS entry points transmission contract / NTS exit points transmission contract;

i) determination of compliance with and assurance of the booked capacity level and the application of the tariffs for exceeding the booked capacity and non-assurance of the booked capacity.

Art. 19 – Repealed

Duties related to ensuring transparency regarding the NTS access conditions - Repealed
Art. 20 - Repealed
Art. 21 - Repealed

CHAPTER III – ACCESS TO NTS TRANSMISSION SERVICES

Art. 22 - TSO shall ensure non-discriminatory access to the available capacity at the NTS entry/exit points.
Art. 23 - (1) The necessary capacity for the TSO to operate and maintain the system, split into NTS entry/exit points, shall be submitted for approval to CA on a yearly basis, by March 15th.
(2) CA shall analyse and approve the requested capacity by March 31st.
Art.24. – (1) The TSO shall offer the following firm and/or interruptible (only if firm capacity products are not available) capacity products:

a) annual – for one or multiple gas years;
b) quarterly – for one quarter or multiple quarters within the gas year (subsequent quarters of the gas year begin on October 1st, January 1st, April 1st, July 1st);
c) monthly – for one month or multiple months within the gas year;
d) daily – one gas day or multiple gas days within the month;
e) intra-day – for the remaining hours until the end of the same gas day.

(2) The product under par. (1) (e) shall be offered by the TSO for the virtual entry points under Art. 13^1 (2) (a) and (b) and for the virtual exit points under Art. 17^1 (2) (a), (b) and (e) starting with 01.10.2019.
(3) The available interruptible capacity available for day (D) equals the difference between the available technical capacity in the entry/exit point and the sum of the nominations processed by the TSO based on the nominations sent by the NU until 03:00 p.m. of the day D-1 for the day D for such point. In case of the bi-directional interconnection points, the level of the available interruptible capacity is calculated separately per each transmission direction, taking into account the nominations sent by the NU in such direction.

(4) No interruptible capacity is offered in case the booked firm capacity in an entry/exit point is lower than the available technical capacity in such point.

(5) Given the case where the sum of all nominations exceeds the amount of gas which may pass through a certain interconnection point, the order in which interruptions are performed is determined based on the conclusion date of such gas transmission contracts on interruptible basis. In case of interruption, the gas transmission contract entering into force earlier shall prevail over the gas transmission contracts entering into force later on.

(6) Should two or more nominations be classified under the same positions in the order of interruption after applying the procedure under par. (5) and the TSO does not interrupt them all, a decrease shall be applied using the pro-rata-principle with the performed nominations of the NU for interruptible capacity

(7) The reasons for the interruptions may include, without being limited to, the following: gas quality, pressure, temperature, flow profile, use of firm contracts, maintenance works, upstream or downstream restrictions.

(8) The TSO notifies the NU at least 1 hour before starting the interruptions.

(9) Should the natural gas introduced in the NTS not comply with the quality and/or pressure conditions provided for in the interconnection agreements, the TSO shall not accept the delivered gas.

(10) In case the gas delivered at the exit from the NTS does not comply with the quality and/or pressure conditions provided for in the interconnection agreements the NU shall not accept gas delivery and the TSO reduces the delivery of non-compliant gas.

(11) In cases described under pa.a (9) and (10), in order to avoid imbalances, the NU shall re-nominate the new gas amounts accordingly.

Art. 24^1 – The TSO shall offer capacity booking services for distinct NTS entry/exit points.

Art. 25 - (1) TSO shall offer capacity at the NTS entry/exit points, based on the principle of 'first-come, first-served', considering the following priority:

a) for the capacities requested in order to meet the public service duties;
b) for the capacities requested to serve other purposes than the fulfilment of public service duties.

(2) Notwithstanding the provisions under par. (1), the principles of allocating capacity at the interconnection points with an adjacent transmission system may differ, based on the agreements concluded between the interconnected transmission system operators.

Capacity booking at entry points from production fields

Art. 25^1 – (1) Capacity booking is performed at NTS virtual entry points from production fields.
(2) Capacity at NTS entry points from production fields may be booked only by the producer acting as title holder of the virtual point or by the third party operator appointed by such producer.
(3) The technical capacity of the virtual points shall be determined as the sum of the technical capacities of the physical points and, as applicable, producer's shares for the physical points where multiple producers perform take-ins.
(4) The NTS physical entry points from production fields shall be operated according to an interconnection agreement concluded between the TSO and the producer or, as applicable, with the third party operator.
(5) The interconnection agreements as stated under par. (4) contain at least provisions related to:

a) metering of gas amounts;
b) control of gas flow. The producer/third party operator is bound to control gas flows so that the amounts accounted for in the OBA stay as close as possible to 0;
c) setting the OBA limit. These limits take into account the technical potential for the control of the flowas well as potential metering corrections;
d) gas quality;
e) data exchange;
f) emergency procedures;
g) details regarding the technical parameters for each physical point;
h) rights, duties and liability of the parties.

Capacity booking in the entry/exit points located at the interface between NTS and underground storage facilities

Art. 25^2 – (1) The physical points at the interface with the underground storage facilities are grouped into virtual NTS entry/exit points, one for each storage system operator.
(2) Capacity shall be booked at the virtual NTS entry/exit points.
(3) Should a storage system operator hold a single physical point at the NTS interface, such point shall be assimilated as a virtual point.
(4) The available capacity at the virtual points shall be determined as sum of the available capacities at the physical points the virtual point consists of and shall be published by the TSO on its website.
(5) The NTS entry/exit points at the interface with the underground storage facility shall be operated according to an interconnection agreement concluded between the SSO and the TSO.
(6) The interconnection agreements contain at least provisions related to:

a) the commercial rules (establishing the SSO-TSO customer pairs, the data flow regarding nominations/re-nominations, their matching/confirmation, allocations of gas amounts structured by NU);
b) control of gas flow. The SSO shall control gas flows injected into/withdrawn from the NTS, so that the amounts accounted for in the OBA stay as close as possible to 0;
c) the metering of gas quantities;
d) setting the OBA limit. These limits take into account the technical potential for flow control and potential metering corrections;
e) the gas quality;
f) data exchange;
g) emergency procedures;
h) details related to the technical parameters for each physical point;
i) rights, duties and liability of the parties.

Capacity booking at exit points towards DS

Art. 25^3 – (1) The physical exit points towards DS are grouped into virtual exit points, one for each DSO.

(2) Capacity shall be booked at the virtual exit points towards DS by the NU which is:

a) an end user connected to the DS, having concluded a distribution contract with the DSO;
b) a supplier for its own portfolio of end users connected to the DS, having concluded a distribution contract with the DSO;
c) a supplier for its own portfolio of end users connected to the DS for which it also has he quality of DSO for the relevant DS;
d) DSO for its own use, as applicable.
e) Importer that sells natural gas to the suppliers of end-users connected to SD from a single source.

(3) Given the case of a DS which is connected to another DS already connected to the NTS, the capacity of the virtual point related to the DS connected to the NTS shall also include the capacity of the downstream DS.

(4) The capacity shall be booked by the NU according to Art. 36, depending on the consumption needs of the end users in their own portfolio, connect to the related DS of each virtual exit point to the DS.

(5) The DSO shall inform the TSO of each change of supplier performed by the end users in its own portfolio, connected to the DS, at least 5 days before the first actual gas delivery day by the new supplier to the relevant end user.

(6) Should a distribution contract occur for the new consumption point after the period for which capacity has been booked, the DSO shall inform the TSO about the issue by transmitting the supplier's identification data and the capacity determined for the supply of that consumption point at least 5 days before the first day of actual gas delivery to the relevant end user.

(7) The available capacity at the virtual points is determined as the sum of available capacities at the physical points the relevant virtual points consist of.
(8) The TSO and the DSO connected to the NTS shall conclude a systems interconnection agreement containing at least provisions relatedto:

a) metering of gas amounts;
b) gas quality;
c) details related to the technical parameters for each physical exit point to the DS;
d) data exchange;
e) emergency procedures;
f) rights, duties and liability of the parties.

(9) Given the case a DS is connected to another DS which is connected to the NTS, they shall conclude a DS-DS interconnection agreement including also the NU in the downstream DS – TSO – upstream DS relation.
(10) The DS-DS interconnection agreement shall include at least the following:

a) technical parameters of the physical points;
b) data exchange between the parties and the submission terms;
c) emergency procedures.

Capacity booking at exit points towards DC

Art. 25^4 – (1) Capacity shall be booked at the virtual exit points towards each DC connected to the NTS.
(2) The TSO and the DC shall conclude an agreement containing at least provisions related to:

a) technical parameters of the physical points;
b) data exchange between the parties;
c) emergency procedures.

Requirements regarding the access to the NTS Transmission Services

Art. 26- (1) The capacity is booked by the NU, by signing with the TSO a NTS entry points transmission contract or a NTS exit points transmission contract according to the transmission contracts under Annex 1 and 1^2.
(2) The booked capacity is either firm or interruptible.
(3) The NU may conclude several contracts of the types mentioned under par. (1), as applicable.

Art. 27 - The transmission contract shall be concluded when the following requirements are met:

A. Financial requirements:

(i) prior to the conclusion of the transmission contract, the NU shall provide the TSO with the rating proof issued by a financial institution/rating agency;

(ii) should the relevant rating be valid for the parent - company of the NU applying for access, the proof shall be accompanied by a letter from the parent company stating the commitment of the latter to guarantee the payment liabilities of the NU applying for access to the NTS;

(iii) the rating proof issued to the NU or to the parent company, accompanied by the letter stating the commitment to guarantee the payment liabilities of the NU, will be submitted simultaneously with the request for capacity booking;

(iv) the minimum rating accepted shall be the one issued to TRANSGAZ or the equivalent.

(v) should the NU applying for access to NTS be unable to present proof of the rating under point (i), it is bound to submit a financial guarantee issued by a financial institution/bank. For the yearly and quarterly products, the financial guarantee set up by the NU equals the average value of the monthly invoices estimated for the transmission services for the following period of use. For the monthly product

the financial guarantee set up by the NU equals the value of the monthly invoice estimated for the transmission services for the following period of use;

(vi) the financial guarantee may be established in cash, as guaranteed account (collateral deposit), as payment guarantee (letter of bank guarantee) issued by a mutually agreed bank and/or as escrow account;

(vii) in case of an increase of more than 20% of the tariff for capacity booking, the value of the initial guarantee shall be adjusted accordingly; the TSO shall notify all NU to this respect and shall request the adjustment of the initial guarantee within five (5) calendar days from the increase of the tariff for capacity booking.

(viii) the financial guarantee mentioned in the contract shall be activated as soon as the transmission contract is accepted and signed;

B. Technical requirements:

(i) the TSO holds an IT platform set up according to the provisions hereof. The TSO servers are synchronized with a time server specified in the operating manual of the IT platform;

(ii) the NU shall own an IT system, which allows the data exchange with the TSO IT platform, according to the provisions of the Network Code;

Art. 28 - (1) The failure to fulfil the aforementioned financial and/or technical requirements related to access, at any time during the transmission contract period, may represent a ground for the termination of the transmission contract.

(2) The termination of the contract by the TSO shall be perfomed based on a prior notification sent to the NU; the notification shall be accompanied by a compliance term of minimum one working day. The termination is also communicated to the adjacent system operators on the NTS entry/exit points in which the NU booked the transmission capacity.

Art. 29 - (1) TSO shall publish on its webpage the identification data of all NU meeting the requirements for the conclusion of the transmission contract and/or of the balancing and VTP access contract.

(2) Within 2 months afterthe publication date of the Network Code in the Romanian Official Journal, the TSO shall prepare a procedure for the control of the requirements established by Art. 27 for the NU requesting the conclusion of a transmission contract.
(3) The procedure specified under par. (2) will be approved by CA and published on the TSO webpage.

Capacity Booking

Art. 30 - (1) The capacity shall be booked at the NTS entry and exit points, as energy units.
(2) The requested capacity shall be determined taking into account the annual average gross calorific power based on the available data of the previous calendar year.
(3) With respect to the transmission contracts concluded for multiple gas years, the booked capacity shall be re-determined on an annual basis according to the provisions of par. (2).
Art. 31 - The NU shall be entitled to request the necessary capacity only for:

a) meeting the contractual duties according to its own customer portfolio;
b) the execution of the storage contracts;
c) its own consumption.

Art. 32 - (1) The NU is entitled to apply for capacity beyond the current customer portfolio, provided that the request is supported by documents, at least ten (10) days before the beginning of the period for which the capacity is requested.
(2) The NU applying for additional capacity shall give a statement including the reasons for requesting additional capacity and to send the applicable transmission schedule to the TSO in case of the approval of the additional capacity request.
(3) The following may constitute reasons for the approval of the additional capacity:
a) the inclusion of new customers in the current customer portfolio, which do not come from the portfolio of other NU;
b) the connection of an isolated consumer from the NU portfolio to a DS connected to the NTS;
c) applications from the current customers as a result of the increase of the installed flow as compared with the existing one at the moment of the conclusion of the transmission contract.

(4) The Statement stipulated in par. 2 may be submitted both as a master list, as well as on a name basis, per client.
(5) Transmission contracts shall be signed in relation to the requested capacity based on the estimated customer portfolio of each NU.
(6) The NUs shall constantly update their customer portfolio and shall inform the TSO, within five (5) working days, on the changes made.
(7) The TSO shall introduce the amendments in the transmission contracts accordingly, notifying the changes to the adjacent system operators in the entry/exit in/from the NTS for which the additional booked capacity was approved.
Art. 33 - For the NTS entry/exit points, irrespective of their ownership, the TSO is entitled to book capacity and to carry out the other operations as set by the Network Code.
Art. 34 - In order to book capacity at import entry points from the production fields and underground storage facilities, as well as at the exit points towards the underground storage facilities, the NU applying for capacity at such points shall issue a statement compliant with the model in Annex no 2.
Art. 35 - In order increase of the approved capacity, the NU shall follow the same procedure as in the case of the capacity request, according to the provisions of Art. 37.

Capacity request procedure

Art. 36 - (1) Transmission capacity at the Csanadpalota interconnection of the NTS with the Hungarian gas transmission systemHungary, at the Isaccea I, II and III interconnections of the NTS with the Ukrainian gas transmission system, at the Negru Voda I, II and III interconnections of the NTS with the Bulgarian gas transmission system, at Negru Voda physical exit point– code SM1149DO, at Mangalia exit point – code SM1262DO and at the new interconnections of the NTS with the gas transmission systems of the neighboring EU member states shall be booked according to the specific regulations adopted by the CA.
(2) The annual and quarterly capacity in NTS entry/exit points different than the ones specified under par. (1) shall be booked according to the following calendar:

a) as of the first July Monday of each calendar year, within 6 working days, the applicants for transmission capacity in the NTS entry/exit points send their requests for annual capacity booking for the period between October 1st of the current gas year and October 1st of the following gas year;
b) as of the first working day from the expiry of the deadline under (a), within 5 working days, the TSO analyses the requests for annual transmission capacity sent by the applicants and notifies them with regard to the approval or rejection of the request for annual transmission capacity, as appropriate, by a notification drawn according to the template in Annex 4;
c) within two working days from the receipt of the communication from the TSO related to the rejection of the request for annual transmission capacity, the applicants for annual transmission capacity may send their objections to the TSO, in writing;
d) within two working days from the receipt of the objections submitted by the applicants for annual transmission capacity in line with the provisions under let. (c), the TSO draws up and sends to the applicants its reply regarding the notified objections;
e) the daily capacity booked for a gas year shall be made available to the NUs, at a constant level for each day of the relevant gas year;
f) the available capacity left over after contracting the annual product shall be offered as quarterly products;
g)starting with the first Monday of the months August, November, February and May, within 6 working days, the applicants for capacity in the entry/exit point of the NTS submit their requests for quarterly capacity for each quarter the gas year starting on October 1st of the current calendar year and ending on October 1st of the following calendar year as follows: the quarter starting on October 1st of the current calendar year and ending on January 1st of the following calendar year, the quarter starting on January 1st and ending on April 1st of the following calendar year, the quarter starting on April 1st and ending on July 1st of the following year and the quarter starting on July 1st and ending on Octiber 1st of the following year;
h) the daily capacity booked for a gas year shall be made available to the NU on a constant level each day of the relevant gas year;

i) within two working days from the receipt of the TSO notification regarding the rejection of the request for quarterly transmission capacity, the applicants for quarterly transmission capacity may send to the TSO, in writing, the potential objections;
j) within two working days from the receipt of the objections submitted by the applicants for quarterly transmission capacity in line with the provisions of letter i), the TSO draws up and submits its reply to the applicants with regard to the notified objectionsits reply to the objections notified;
k) the daily capacity booked for a quarter is made available to the NU at a constant level on each day of the relevant quarter;
l) as of the first working day from the expiry of the deadline provided under point j), within 4 working days, the TSO shall send the gas transmission contracts in two copies to be signed by the applicants whose requests for annual and quarterly transmission capacity were approved;
m) within two working days from the receipt of the gas transmission contracts, the applicants shall activate the financial guarantee, as appropriate, in line with the conditions stated under Art. 27 (A) and send the signed copies of the transmission contracts to be signed by the TSO, provided they agree to the contents, repectively their objections regarding the content of the transmission contract, within the limits of the provisions of the gas transmission contract according to Annex 1 and Annex 1^2. Sould ther be any objections regarding the content of the transmission contract, the TSO and the applicants for transmission capacity shall solve them jointly and ensure that the transmission contract is concluded before the date of the beginning of the gas year October 1st of the current calendar year – October 1st of the following calendar year;
n) the remaining available capacity remaining contracting the quarterly product is offered as monthly products.
(3) Starting with the 3rd Monday of the month M-1, within 2 working days, the applicants for transmission capacity in the NTS entry/exit points shall submit the requests for monthly transmission capacity for a calendar month or multiple calendar months remaining until the end of the gas year. The monthly booked capacity shall be made available to the NU on a constant level each day of the relevant month.

(3^1) Until April 1st 2019 included, the requests for daily transmission capacity for a gas day or multiple gas days remaining until the end of the gas year shall be submitted by the applicants who have concluded a capacity contract with the TSO at least 2 working days before the requested date.
(3^2) After April 1st 2019, starting with 5:30 p.m. of day D-1, within 1 hour, the applicants for transmission capacity in the NTS entry/exit points shall submit the requests for daily transmission capacity for a gas day or multiple gas days remaining until the end of the gas year, for a NU who has concluded a transmission contract. The TSO shall send the NU an electronic confirmation notice on the booked capacity within 30 minutes after the end of the booking period. The notification is part of the NTS transmission contract related to the entry points or of the transmission contract related to the exit points. The daily capacity booked shall be made available to the NU on a constant level each hour of the relevant day.
(3^3) In the case of the applicants for capacity who haven't concluded a capacity contract with the TSO, requests for daily transmission capacity for a gas day or multiple gas days remaining until the end of the gas year shall be submitted at least 3 working days before the date requested for the entry into force of the transmission contract.
(3^4) Starting with October 1st 2019, NU who have concluded a transmission contract can request intra-day transmission capacity for the remaining hours of the related day, on an hourly basis starting with 04.00 of the gas day D-1 until 03.00 of the gas day D. The request period is 30 minutes. The maximum period for which intra-day capacity may be booked is 23 hours. The minimum period for which the intra-day capacity product is available to the NU is 1 hour, the last hour of gas day D. The TSO shall submit to the NU an electronic confirmation notice of the booked capacity within 15 minutes from the end of the booking period. The notification is part of the NTS entry points transmission contract/NTS exit points transmission contract.
(3^5) Derogating from the provisions of par. (3), the applicants for transmission capacity in the entry/exit points in/out of the NTS shall submit the requests for capacity for January 2019 or multiple calendar months left until the end of the gas year as of January 2019 on December 24th 2018.
(3^6) Repealed

(4) the TSO is bound to publish on its own website the periods stipulated under par. (2) (a), (b), (e), (f) and (i) for the annual and quarterly transmission capacity for the gas year October 1st of the current calendar year – October 1st of the following calendar year until latest July 15th of each current calendar year.

Art 36^1 – (1) In case new physical entry/exit points in/out of the NTS are commissioned during a gas year, other than the new interconnection points of the NTS with the gas transmission systems in the EU neighboring member states and these points were not the subject of the transmission capacity booking procedure for such gas year provided at article 36, the applicants for transmission capacity may submit to the TSO requests for annual transmission capacity for the new NTS entry/exit points at least 15 working days prior to the date requested for the entry into force of the transmission contract. The duration of the transmission contract concluded in such case will start with the day of the conclusion of the transmission contract and the last day of such gas year.

(2) After the approval of the capacity booking request sent to the TSO in line with the provisions of par. (1), any other request for transmission capacity submitted by the same applicant for transmission capacity will be analysed by the transmission system operator in line with the provisions of art. 32 or of art. 36 par. (3), as appropriate.

Art. 36^2 – (1) The requests for capacity are mandatorily sent directly online, on the dedicated platform for capacity booking operated by the TSO.

(2) In order to obtain access to the capacity platform, the applicants for transmission capacity at the NTS entry/exit points not qualifying as NU at the date of the beginning of the capacity booking procedure shall submit an access request to the TSO. The TSO is bound to grant access on such platform, according to the Access Regulation published on its website.

(3) Should the online capacity be temporarily non-functional for technical reasons, the capacity requests will be sent by e-mail, in the XML/TXT format provided by the TSO, with extended electronic signature or, if the e-mail communication service is not available, by written letter sent by fax, using the templates included in Annex 3.

Art. 36^3 – (1) By derogation from the provisions of Art. 36 (2) capacity booking for gas year 2018-2019 at NTS entry/exit points, other than those stipulated at Art. 36 (1) shall be carried out as follows:

a) at each NTS virtual entry point from the production fields, the transmission capacity may be booked only by the gas producer operating the NTS physical entry points from the production fields the relevant NTS virtual entry point from the production fields consists of;

b) at the NTS virtual exit points towards gas distribution systems. The NTS physical exit points operated by the same distribution operator shall be grouped into a single virtual exit point;

c) at the virtual exit points towards gas distribution systems set up according to letter (b), transmission capacity shall be booked exclusively by each customer of the distribution operator separately, the customer of the distribution operator being the economic operator/end-user who has concluded a distribution contract with the relevant distribution operator, in force on October 1st 2018;

d) the customers of the distribution operators, as defined under letter (c) shall book transmission capacity at the NTS virtual exit points towards gas distribution systems to which the end users in their own portfolio (in the case of gas suppliers) and/or themselves (in the case of end users having a gas distribution contract with the relevant distribution operator) are connected;

e) between September 3rd and September 7th 2018, the applicants for transmission capacity in the NTS entry/exit points shall submit requests for annual capacity for the gas year October 1st 2018 - October 1st 2019, drawn up in accordance with the provisions under letters (a)-(d);

f) between September 10th and September 11th 2018, the TSO shall analyse the requests for annual capacity submitted by the applicants and inform them with regard to the approval or rejection of the requests for annual capacity , as appropriate, by means of a notification drawn up in accordance with the template in Annex 4;

g) should the TSO reject the request for annual capacity, the applicants for annual capacity may submit written objections to the TSO by September 13th 2018;

h) the TSO draws up and submits a reasoned reply to the applicants for annual capacity who have submitted objections in accordance with letter (g) until the end of the day of September 14th 2018;
i) between September 17th and September 19th 2018, the applicants for transmission capacity in NTS entry/exit points shall submit their requests for quarterly capacity for each of the quarters within the gas year October 1st 2018 - October 1st 2019, respectively: the quarter October 1st 2018 – January 1st 2019, the quarter January 1st - April 1st 2019, the quarter April 1st - July 1st 2019 and the quarter July 1st - October 1st 2019; the requests for quarterly capacity shall be drawn up according to letters a)-d);
j) between September 20th and September 21st 2018, the TSO analyses the requests for quarterly capacity submitted by the applicants and informs them of the approval or rejection of the requests for quarterly capacity , as appropriate, by means of a notification drawn up in accordance with Annex 4;
k) in case of rejection of the requests for quarterly capacity by the TSO, the applicants for quarterly capacity may submit written objections to the TSO by September 24th 2018;
l) the TSO draws up and submitsa reasoned reply to the applicants for quarterly capacity who have submitted objections in accordance with letter (k) until the end of the day of September 25th 2018;
m) on September 26th 2018, the TSO submits the gas transmission contracts signed by the legal representative of the TSO in two copies for signature to the applicants whose requests for annual and quarterly capacity have been approved;
n) within two working days from the receipt of the gas transmission contracts sent by the TSO in accordance with the provisions under letter (m), the applicants shall activate the financial guarantee, as appropriate, according to the transmission contractsand send the signed copies to the TSO.
o) Between December 19th 2018 and December 20th 2018 NU may send requests for quarterly capacity for the quarter 1 January 2019 – 1 April 2019; the requests for quarterly capacity related to the quarter April 1st 2019 – July 1st 2019 and to the quarter July 1st 2019 – October 1st 2019 may be sent 15 business days before the beginning of each quarter.

(2) For gas year 2018-2019, the deadline under Art. 36 (3) is September 25th 2018.

Art. 37 - (1) With regard to the application of the Network Code, the communication between the TSO, the NU, and the adjacent system operators regarding information about the capacity requests, the capacity transfer, the complete transfer of the rights and duties under the NTS transmission contract in entry points /NTS transmission contract in exit points, the transmission schedule, the nominations/re-nominations, the VTP notifications related to the accomplished transactions, the metered gas amounts, the initial/final allocations, the initial/final imbalances, the general data about the balancing state of the NTS as well as the TSO messages to the NU related to nomination acceptance, nomination adjustment, nomination confirmation, forecasted imbalances are carried out on a secured online IT platform.

(2) The technical conditions regarding the use of the IT platform shall be published by the TSO on its own website. Should the IT platform be unavailable based on technical grounds, thus hindering the TSO, TSO/NU from the direct submission of information on the platform, communication shall be carried out by means of the following alternative services:

a) e-mail, XML format supplied by the TSO;

b) fax, using the templates provided in the Network Code, if the alternative communication service under point (a) is not available.

(3) The average annual gross calorific power taken into consideration for purposes related to capacity booking in energy units (MWh/day) shall be determined as weighted average against the gas volumes of the gross calorific powers determined during the previous calendar year for each relevant point.

(4) The values of the annual average gross calorific powers determined according to paragraph (3) and published on the TSO webpage on March 31st shall be valid for the entire following gas year.

Art. 38 - Repealed

Art. 39 - Repealed

Art. 40 - The TSO shall keep records of the capacity approvals and refusals for each NU, for the purpose of informing the CA at least once a year.

Art. 41 - TSO shall be entitled to refuse the requests for capacity which fail to meet the terms specified under Art. 36.

Art. 42 - Repealed

Art. 43 - (1) Should the requested capacity inot be approved, the notification shall clearly state the grounds for the refusal.

(2) The following may constitute grounds for refusal:

a) circumstances stipulated under Art. 149 (1) of Law 123/2012, as further amended and supplemented;
b) NU/applicant fails to meet the requirements under Art. 27;
c) NU has outstanding debts resulted from the execution of previous transmission contracts and/or balancing and VTP access contracts.

The implementation of the incremental capacity processes

Art. 43^1. – (1) The incremental capacity processes carried out in the interconnection points of the NTS with the gas transmission systems in the EU neighboring Member States initiated after August 1st 2017 shall be performed in accordance with the provisions of the Commission Regulation (EU) 2017/459 of March 16th 2017 establishing a network code for capacity allocation mechanisms in gas transmission systems and repealing Regulation (EU) No. 984/2013.

(2) The incremental capacity processes carried out in the entry/exit points in/out of the NTS, other than those stipulated in par. (1) shall be performed in accordance with the provisions of the specific procedures developed by the TSO and endorsed by the CA, based on the following principles:

a) the TSO is bound to initiate an incremental capacity process upon the receipt of a request the incremental capacity supposed to be created by means projects included in the NTS investment and development plans for the following 10 years;

b) the requests for incremental capacity submitted by the potential network users may be sent any time during a gas year;
c) the request for incremental capacity sent by a potential network user may be conditioned by the allocation of a minimum capacity level for a certain number of years and/or a possible final investment decision of the latter related to the project that has determined the submission of the specific request;
d) the TSO handles requests for incremental capacity equally, regardless of the presence or absence of any conditionality;
e) the incremental capacity is allocated to each potential network user at the required level if the total capacity requested by all potential network users for each year of the period in which incremental capacity is offered is lower than or equal to the incremental capacity offered within the incremental capacity process;
f) given the case where for at least one year of the period for which the incremental capacity is offered, the total capacity requested by all potential network users exceeds the capacity offered within the incremental capacity process, this capacity is allocated to the potential network users in the decreasing order of the value of the binding commitments for capacity contracting expressed by each of them, at the required level or at the minimum required capacity level, as appropriate, within the capacity level provided in the incremental capacity process;
g) the incremental capacity process is successfully completed at such time the level of the allocated incremental capacity equals at least the minimum capacity threshold;
h) the incremental capacity allocated to a potential network user within an incremental capacity process is booked by the latter by signing a transmission contract with the TSO in accordance with the Framework gas transmission Agreement concluded following the procedure for booking incremental capacity in the National Gas Transmission System, provided in Annex no. 1^1.

Art. 44 - Repealed

CHAPTER IV – SUPPLY OF TRANSMISSION SERVICES

Art. 45 - (1) In order to execute the transmission contract, the NU shall inform TSO with regard to the NTS gas inputs/outputs planned at all entry and exit points where the NU has booked capacity; the information shall be provided as a transmission and nominations/re-nominations schedule based on the procedures and terms set forth in this chapter.
(2) In the process of drawing up the transmission and nominations/re-nominations schedule, the NUs shall take into consideration the planned works generating the decrease or interruption of the NTS capacity.
(3) The TSO shall publish on its webpage, the time-frames for the scheduled maintenance works, as follows:

a) no later than the 1st of March, for the following gas year;
b) no later than the 1st of December, the potential changes related to the period January 1st – June 30th of the current gas year;

(4) The TSO shall notify the NU with regard to the duration of the interruption and to the estimated date for resuming the transmission services, with at least 3 working days before the actual date of the works mentioned under par. (3).
(5) The network users shall be informed with regard to any possible change of the scheduled works, with at least 30 days before the execution date of the related works.
(6) In case of a change of the works schedule, notified based on par.(3), the NU shall be entitled to amend the transmission and nominations/re-nominations schedule, in mutual agreement with TSO.

Transmission Schedule

Art. 46 - (1) The transmission schedule shall be drawn up by the NU according to the template provided in Annex no. 5, the following being specified for each month:

a) the amount of gas expressed in energy units for each NTS entry point where the NU has booked capacity, split on counterparts;
b) the amount of gas expressed in energy units for each NTS exit point where the NU has booked capacity, split on counterparts.

(2) The NU shall upload the transmission schedule directly into the IT platform in accordance with the procedure set forth in Art. 27 letter (B).
(3) Should the NU be unable to upload the documents as specified in par. (1) due to a disfunction of the IT platform based on technical reasons, the transmission schedule shall be e-mailed in the XML format provided by the TSO.
(4) The average annual gross calorific power taken into account for drawing up the transmission schedule and expressed in energy units (MWh/day) shall be determined as weighted average against the gas volumes of the gross calorific powers determined for the previous calendar year for each relevant point.
(5) The values of the average annual gross calorific power as determined under paragraph (4) shall be made available on the TSO webpage on March 31st.
(6) The operational parameters of the physical NTS entry and/or exit points (minimum pressure, maximum pressure, capacity), as well as the parties' rights and duties to meet such parameters shall be the subject of bilateral arrangements concluded by the TSO with the producers, the storage system operators and the distribution systems operators, by April 15th for the following gas year. The DC shall conclude bilateral agreements, either directly or through their suppliers, as appropriate.
(7) The operational parameters of the physical NTS entry and/or exit points, mutually agreed upon within the bilateral arrangements, shall be published on the TSO webpage, according to the provisions in Art. 20 and shall represent the basis of the conclusion of the transmission contracts.
Art. 47 - The transmission schedule shall be attached to the transmission contract. The NUs may amend the transmission schedule for the following month or for the remaining gas year, as soon as the gas year has started and with at least 5 days before the beginning of the delivery month, by 2 p.m.
Art. 48 - (1) The transmission schedule may be amended by written notification of the NU. The notification shall be drawn up according to the model provided in Annex no. 6 and uploaded directly into the IT platform.

(2) Should the NU be unable to upload the documents as specified under par. (1) due to the disfunction of the IT platform based on technical reasons, the notification shall be emailed in the XML format provided by the TSO.

The nomination procedure

Art. 49 – (1) The nomination represents a statement owned by the NU, notified to the TSO, that states the amount of natural gas to be physically introduced/taken off by the NU into/out of the NTS during a gas day and which has to be confirmed by the TSO in order to be performed.
(2) The nomination expressed in energy units shall be uploaded by the NU into the IT platform of the TSO, according to Art. 37.
(3) Repealed
(4) Repealed
(5) Repealed
(6) Repealed.
(7) Repealed.
(8) Repealed.
(9) Within the nomination procedure, the TSO shall take into consideration the last nomination submitted by the NU, which is in compliance with the conditions under par. (2) and which was performed until the deadlines provided in Art. 49^1 (1), Art. 49^2 (3), Art. 49^3 and Art. 49^4 (1), as applicable.
(10) By means of derogation from the provisions of par. (1) – (9), the principles related to the nomination in cross-border interconnection points may differ, in line with the agreements concluded between the operators of the interconnected gas transmission systems in line with Commission Regulation (EU) no 312/2014 of 26 march 2014 for the establishment of a network code for balancing gas transmission networks.

Nomination in entry points from production fields

Art. 49^1 – (1) The NU shall submit nominations regarding the amount of gas planned to be taken into the NTS by day D-1, 15.00 h.
(2) The NU shall submit a nomination in its own virtual point for day D, split on physical entry points from the production fields.
(3) After the receipt of the nomination, the TSO shall deliver a confirmation message regarding the registration of the nomination on the IT platform of the TSO.
(4) The TSO shall check the matching of the amounts nominated in each NTS virtual entry point with the capacity booked by the NU in the relevant points on day D, between 15.00 and 15.30 h, aiming at the confirmation of the nomination for the day D submitted by the NU and, if applicable, shall supplement the capacity booked by the NU, in accordance with Art. 51.

Nomination in the entry/exit points located at the interface between NTS and the underground storage facilities

Art. 49^2 – (1) Each SSO shall submit the updated list of the NUs with ongoing storage contracts to the TSO and the TSO shall submit the updated list of the NU who booked transmission capacity in the virtual point at the interface between the NTS and the underground storage facilities operated by the relevant SSO to the SSO.
(2) Upon request, the SSO and the TSO shall make available the list under par. (1) to their own clients
(3) Until day D-1, 15.00 h:

a) the NU shall submit the nominations by entry/exit points at the interface between the NTS and the underground storage facilities for day D, indicating the pair partners customers of the SSO;
b) each SSO shall submit to the TSO the nominations of its customers for day D, structured on each pair of customers of the SSO-NU.

(4) On day D-1 between 3:00 p.m. and 3:30 p.m., the TSO shall carry out the following activities successively:

a) for each virtual entry/exit point located at the interface between the NTS and the underground storage facilities for day D and for each pair NU – customer of the SSO, the TSO compares the value communicated by the NU in its nomination for the relevant customer of the SSO with the value communicated by the SSO as being nominated by its customer, which indicated such NU as its pair;
b) adjusts the value communicated by the NU in its nomination for the related NU customer of the SSO pair in case the values compared in accordance to the provisions under point (a) do not match, applying the "lesser" rule;
c) sums up, at NU level, the values resulting from the application of the provisions under points (a) and (b) for each virtual entry/exit point at the interface between the NTS and the underground storage facilities for day D and for each pair NU-SSO customer, communicated by the NU in its nomination;
d) accepts as nomination for day D the value calculated in accordance with the provisions under point (c) if it matches the transmission capacity booked by the NU at the relevant virtual entry/exit point at the interface between the NTS and the underground storage facilities for day D;
e) given the case where the value determined in accordance with the provisions under point (c) exceeds the transmission capacity booked by a NU in a virtual entry/exit point at the interface between the NTS and the underground storage facilities for day D, the TSO calculates for each of such NU the difference between the transmission capacity necessary for circulating the amount of gas corresponding to the value determined in accordance with the provisions under point (c) and the transmission capacity booked by the relevant NU;
f) compares the level of the available transmission capacity in each virtual entry/exit point at the interface between the NTS and the underground storage facilities for day D with the sum of the values determined in accordance with the provisions under point (e) for all NUs, whose matched and aggregated nominations according to point (a) - (c) did not fall match the transmission capacities booked by them;
g) accepts as nomination for day D the value determined in accordance with the provisions under point (c) for each NU whose matched and aggregated nominations according to points

(a) - (c) did not match the transmission capacities booked by them, if the capacity available at each virtual entry/exit point at the interface between the NTS and the underground storage facilities for day D exceedsthe total value calculated according to point (e);
h) accepts as nomination for day D the value related to the amount of gas which can be circulated through the relevant virtual entry/exit point at the interface between the NTS and the underground storage facilities for day D by using the entire capacity booked by the relevant NU in the relevant point, plus a value determined by applying the "pro-rata" principle to the capacity available for day D in such point, based on the share of the value determined according to point (e) for each NU whose matched and aggregated nominations according to points (a)-(c) did not match the transmission capacity booked by them in the sum of the values determined according to point (e) for all NU in the same situation, if the capacity available at each virtual entry/exit point at the interface between the NTS and the underground storage facilities for day D is lower than the sum of the values determined in accordance with the provisions under point (e);
i) communicates the accepted nomination to the NU;
j) the communication under point (i) includes information regarding the breakdown of the amounts related to the accepted nomination structured on each NU-SSO customer pair, if the nomination was accepted by the TSO in accordance with the provisins under points (d) and (g);
k) the communication referred to at point (i) includes the TSO`s request to the UR to break down the accepted nomination quantity by each NU – SSO customer pair if the nomination was accepted by the TSO according to point (h), the NU having the duty to submit to the TSO the requested information within no more than 1 hour from the receipt of the notification regarding the accepted nomination. Should the NU fail to meet this duty, the nomination accepted by the TSO at the relevant virtual entry/exit point at the interface between the NTS and the underground storage facilities for day D, for such NU shall equal zero. The TSO informs the NU about the decrease of the accepted nomination value to zero between 4:40 p.m. and 4:45 p.m.;
l) the TSO shall communicate the SSO the nomination accepted for each NU-SSO client pair for gas day D by 5:00 p.m. of day D-1.

(5) The matched and confirmed nomination shall become a input/take-off duty in the entry/exit points located at the interface between NTS andunderground storage facilities.
(6) In case of submission of an intra-day nomination, the TSO shall process the hourly values related to the remaining hours until the end of the gas day.
(7) Given the case where there are nominations both for the input as well as for withdrawals for the day D, the TSO and the SSO set the direction of the gas flow by determining the difference between the nominations for withdrawals and those for inputs.
The withdrawn/input amounts in written/virtual mode by determining the difference between the nominations for withdrawal and those for input, will be subject to the same matching and confirmation procedure.

Nomination at exit points towards the DS

Art. 49^3 – (1) The NU shall submit nominations for day D in the virtual exit points towards DS, on the IT platform of the TSO in the time-frame of D-90 until D-1, at 15.00 h.
(2) On day D-1, between 3.00 p.m. and 3.30 p.m., for the purpose of confirmingthe nominations for day D submitted by the NU, the TSO shall check up the quantities nominated in each NTS entry and exit point upon their matching with the capacity booked by the NU in the relevant points and, if applicable, it shall supplement the capacity booked by the NU, in accordance with the provisions in Art. 51.
(3) The TSO shall communicate the level of the confirmed nominations to the NU and to the DSO.

Nomination at exit points towards DC

Art. 49^4 – (1) The NU shall submit nominations for day D in the exit points towards DC, on the IT platform of the TSO in the time-frame between D-90 and D-1, 3:00 p.m.

(2) On day D-1, between 3.00 p.m. and 3.30 p.m., for the purpose of confirming the nominations related to day D submitted by the NU, the TSO shall chech the nominated amounts in each NTS entry and exit point upon their matching with the capacity booked by the NU in the relevant points and, if applicable, shall supplement the capacity booked by the NU, in accordance with the provisions in Art. 51.
(3) The TSO shall notify the NU with regard to the confirmed nominations.

Art. 50 - Repealed

Art. 51 - (1) Given the case where the amount of gas nominated by a NU in a NTS entry/exit point exceeds the capacity booked by that NU in that point, the TSO checks whether the sum of the gas amounts nominated by all the NU at the relevant NTS entry/exit point matches its technical capacity and:

a) supplements the capacity booked by the relevant NU in the relevant NTS entry/exit point up to the level of the nominated quantity, if the sum of the gas amounts nominated by all NU in the relevant NTS entry/exit point matches its technical capacity.

b) supplements the capacity booked by the relevant NU in that entry/exit point up to the level of the quantity resulted after the application of the pro-rata principle with the booked capacities related to the gas amounts of all NU whose nominations exceed the capacities booked by them in that point.

(2) The nominations/re-nominations sent by a NU exceeding the capacity booked are registered by the TSO only if they match the available technical capacity.
(3) Supplementing the booked capacities under the conditions provided for in paragraph (1) is mandatory for the NU and the TSO and shall be granted at the end of each nomination/re-nomination cycle for day D based on the confirmed nomination/renomination. The NU may not waive the relevant additional daily capacity which exceeds the capacity booked by the NU in a virtual entry/exit point of the NTS.
(4) For the additional capacity resulting under the conditions provided in paragraph (1), the tariff for capacity booking is levied for delivering the firm, daily transmission service, valid on the date of the nomination approval.
(5) The provisions of par. (1) and (2) shall not apply to cross-border interconnection points.

Art.52. – (1) The NU shall notify at the VTP the transactions performed for individual balancing of its own portfolio as well as for commercial purpose.
(2) Once confirmed by the TSO, the transactions notified by the NU and/or the centralized market operators at the VTP are deemed to be firm commitments of the latter and shall be taken into consideration by the TSO within the processes of nomination, renomination, allocation and determination of the final daily imbalances recorded by the relevant NU.
(3) The transactions notified at the VTP are taken into consideration by the TSO according to the relation:
NOM(I) + T(C)= NOM(E) + T(V)
where:

- NOM(I) – represents the confirmed nomination of a NU in the entry points of the NTS;
- NOM(E) – represents the confirmed nomination of a NU in the exit points of the NTS;
- T(C) – is the notification at the VTP of a purchase performed by a NU;
- T(V) – is the notification at the VTP of a sale performed by a NU;

NOM(I) + T(C) = NOM(E) + T(V),

where:

– NOM(I) – represents the nomination of a NU in the entry points of the NTS;
– NOM(E) – represents the nomination of a NU in the exist points of the NTS;
– T(C) – represents the notification at the VTP of a purchase performed by a NU;
– T(V) – represents the notificarion at the VTP of a sale performed by a NU.

(4) Repealed
(5) Repealed
(5^1) The liability related to the performance of the transactions notified at the VTP and confirmed by the TSO lies only with the two NUs involved in such transaction.

(6) The rejection/amendment by the TSO of the nominations and renominations in the interconnection points with adjacent transmission systems and in other points than the interconnection points, is performed in line with the provisions of Regulation (EU) no 312/2014 of the Commission of 26 March 2014 for the establishment of a network code for the balancing of the gas transmission network.

Art.53. - Repealed

Art.54. - Repealed

Art.55. – The TSO shall analyse the information sent by the NU between 4.30 p.m. and 5.30 p.m. and:

a) If subsequently to the transactions notified at the VTP, the sum of the gas amounts nominated by the NU in each NTS entry point where they booked capacity, plus the quantity traded after the conclusion of the transactions at the VTP, equals the sum of the gas amounts nominated at every NTS exit point where the NU booked capacity, plus the quantity sold after the conclusion of the transactions at the VTP, the TSO shall communicate to the NU the level and the structure of the approved nominations for day D related to the individual portfolio, this notification being the TSO`s agreement regarding gas amounts of the NU for which it will provide the transmission service on day D;

b) If subsequently to the transactions notified at the VTP, the sum of the gas amounts nominated by the NU in each NTS entry point where they booked capacity, plus the quantity traded after the conclusion of the transactions at the VTP equals the sum of the gas amounts nominated in each NTS exit point where the NU booked capacity, plus the amount sold after the conclusion of the transactions at the VTP, is different form the sum of the gas amounts nominated in each NTS exit point where the NU booked capacity, plus the amount sold after the conclusion of the transactions at the VTP, the TSO shall approve the nomination of the NU by adjusting the highest value to the level of the lowest value, according to Art. 52 (6) and shall notify the NU with regard to the level and the structure of the approved nominations for day D related to the individual portfolios;

c) If the NU do not send trade notifications, the TSO shall approve the nomination of the NU by adjusting the higher value to the lowest value, according to Art. 52 (6) and shall notify the NU with regard to the level and the structure of the nominations related to the individual portfolios approved for day D.

The re-nomination procedure

Art. 56 - (1) The re-nomination is a statement owned by the NU, notified to the TSO, by which the NU changes the confirmed nomination and which, in order to be applied, must be confirmed by the TSO.
(2) Within the re-nomination procedure, the TSO shall take into consideration the last nomination/re-nomination submitted by the NU for gas day D, according to the terms stated under par. (3).
(3) A re-nomination cycle starts every straight hour within the time-frame of the 6:00 p.m. of day D-1 and 04:00 a.m. of day D. Re-nominations are made for the remaining hours until the end of the gas day and are taken into consideration 2 hours after the end of the hourly re-nomination cycle.
(4) For all re-nomination cycles, the TSO shall accept only values for the remaining hours, including for the re-nominations performed during the gas day.
(5) A confirmed re-nomination becomes a confirmed nomination.
Art. 57 – Repealed

Re-nomination in entry points from production fields

Art. 57^1 – (1) A re-nomination cycle starts every hour of the time-frame between 6:00 p.m. of day D-1 and 04:00 a.m. Re-nominations are made for the remaining hours until the end of the gas day and are taken into consideration 2 hours after the end of the hourly re-nomination cycle.
(2) The NU may change its nomination by sending a re-nomination to the TSO.

(3) For all re-nomination cycles, the TSO shall accept only values for the remaining hours, including for the re-nominations performed during the gas day.
(4) Upon receipt of the re-nomination, the TSO shall submit a confirmation of its registration on the IT platform of the TSO.
(5) For NTS dispatching purposes, the producers shall submit to the TSO`s dispatching centre on day D-1 the production forecast for day D split on physical entry points from the production fields. These data shall be matched with the value of the nomination performed for day D in the virtual point of the relevant producer.
(6) Throughout day D, the producers shall make available to the TSO`s dispatching centre the real time hourly values for the SCADA equipped stations and an estimate of the updated hourly values for the rest of them.

Re-nomination in entry/exit points at the interface between the NTS and the underground storage facilities

Art. 57^2 – (1) A re-nomination cycle starts every hour of the time-frame between 6:00 p.m. of day D-1 and 04:00 a.m. of day D.
(2) Re-nominations are made for the remaining hours until the end of the gas day, are communicated to the TSO in compliance with the requirements related to the content under Art. 49^2 (3) and are taken into consideration 2 hours after the end of the hourly re-nomination cycle.
(3) Within 30 minutes after the end of each re-nomination cycle, the TSO shall successively carry out the activities specified in Art. 49^2 (4) with the purpose of processing the re-nominations received.
(4) For all re-nomination cycles, the TSO shall accept only values for the remaining hours, including for the re-nominations performed throughout the gas day.

Re-nomination in exit points towards DS

Art. 57^3 – (1) A re-nomination cycle starts every hour of the time-frame between 6:00 p.m. and 04:00 a.m. of day D.
(2) Re-nominations are performed for the remaining hours until the end of the gas day and are taken into consideration2 hours after the end of the hourly re-nomination cycle. For all re-nomination cycles, the TSO shall accept only values for the remaining hours, including for the re-nominations performed during the gas day. Only the values for the remaining hours will be processed for the latter.
(3) Upon receipt of the re-nomination, the TSO shall send a confirmation regarding its registration on the IT platform of the TSO.
(3^1) The TSO shall send to the DSO the last confirmed re-nomination for the NUs connected to the relevant DS.
(4) For the purpose of providing data on the inputs and offtakes of the NU throughout the day, the TSO sends the DSO connected to the NTS the quantities measured at 11:00 a.m. and at 7:00 p.m. at the physical points located at the interface between NTS and DS on day D, at 11:30 a.m. and at 7:30 p.m. The data is sent in energy units, its determination being based upon the most recent gross calorific value on the IT platform of the TSO (D or D-1).
(5) Within 1 hour after receiving of the data specified in par. (4), the DSO connected to the NTS sends the TSO the amounts broken down on NU, using the following information:
a) The metered quantities for the end users for whom the metering is performed within the day, aggregated for each NU;

(i) b) Amounts the DSO estimated as having been consumed by the end users under the portfolio of each NU, customer of the DSO, for whom the metering is not performed within the day. The estimation is performed for each NU separately, based on the following elementsconsumption profiles specific to each categoru of end users;

(ii) the structure of the end-users portfolio of each NR.

(6) Should a DS be connected to another DS connected to the NTS, the downstream DSO submits to the DSO connected to the NTS the same type of information, according to the provisions in par. (5).

(7) Twice a day, at 1:00 p.m. and 9:00 p.m., the TSO make the data according to par. (5) available to the NU on the IT platform.

Re-nomination in the exit points towards DC

Art. 57^4 – (1) A re-nomination cycle starts every hour of the time-frame between 6:00 p.m of day D-1 and 04:00 a.m. of day D.
(2) Re-nominations are performed for the remaining hours until the end of the gas day and are taken into consideration2 hours after the end of the hourly re-nomination cycle.
(3) For all re-nomination cycles, the TSO shall accept only values for the remaining hours, including for the re-nominations performed throughout the gas day.
(4) In case several NUs deliver gas through the same exit point to a DC, the TSO distributes the amounts measured at 11:00 a.m. and 7:00 p.m. in the physical points at the interface between NTS and DC, by NU, based on the information received from the DC, for the purpose of providing information regarding the amounts NU have been taking in/taking off throughout the day,. The TSO submits to the DC the amounts measured at 11.00 and 19.00 in the physical points located at the interface between NTS and DC, in energy units, at 11.30 and 19.30. The most recent gross calorific power in the IT platform (D or D-1) is used for determing this value. Within 1 hour after receiving the data, the DC submits to the TSO the amounts broken down by NU. In the absence of these information, the TSO distributes the measured amount proportionally to the confirmed nomination. Within 30 minutes after receiving the data, the TSO makes it available to the NU on the IT platform.

Art.58. – Repealed
Intra-day nomination
Art. 59 – Repealed

Further provisions related to the nomination/re-nomination procedures

Art.60. – The level and the structure of the confirmed nominations/re-nominations shall be submitted by the TSO to the NU, according to the provisions in Art. 37, as a document entitled `Confirmation, nomination/re-nomination` drawn up according to the template provided in Annex 7^1, thus becoming mandatory for the NU.

Art. 61 – The TSO will draw up and permanently update the register where the approvals/rejections of the nominations/re-nominations are recorded and will submit it to the Competent Authority every time it is requested.

Art. 62 - (1) The NU are bound to accept a temporary decrease of the confirmed nomination/re-nomination if:

a) The TSO does not accept the gas supposed to be taken into the NTS by the NU, due to the fact that it fails to meet the minimum quality requirements according to the applicable laws.
b) The SSO, DSO or the DC do not accept gas supposed to be taken in by the NU, due to the fact that it fails to meet the minimum quality requirements provided for by the applicable laws.

(2) In the case stipulated under paragraph (1) (a), the TSO shall not be bound to pay the charges for not providing the capacity booked as specified at Art. 101.

(3) In the case stipulated under paragraph (1) (b), the NU shall be entitled to request and receive the value of the prejudice incurred, according to the contract.

Gas Transfer Facility

Art. 63 - Repealed

Art. 64 – Repealed

Allocation Procedure

Art.65. – (1) Allocation is the granting by the TSO of the gas amounts, expressed in energy units, to each NU, in the NTS entry/exit points, according to the provisions of the network Code.

(2) the Allocation Procedure is performed daily and monthly.

Daily Allocation

Art.66. – (1) The TSO performs the daily allocation on day D+1 for day D, for each NU, for the purpose of determining the imbalance related to day D.
(2) The TSO performs the daily allocation using the data related to the gas amounts metered at every NTS entry/exit point, the data from the DSOs and the nominations/re-nominations confirmed for the gas day D.
(3) The TSO displays on day D+1 by 2:30, for each NU, the data related to the allocation and the level of their daily imbalance for day D, according to the provisions of art 37 par (1) and (2).
(4) The data related to the allocation for each NU is split, mandatorily, per each virtual NTS entry/exit point where gas amounts were allocated to the specific NU, as follows:
a) Quantities directly allocated to the NU;
b) Quantities allocated to the NU through their partners in the specific entry/exit point in/out of the NTS, split by each NU partner respectively by each NU - customer of the SSO.

Allocation in NTS entry points of gas amounts delivered from production fields

Art.67. – (1) For the purpose of performing the allocation in the virtual entry points of the NTS from production fields, each producer/third operator submits to the TSO, by 10:00 a.m. of the gas day D+1 the following information related to the deliveries carried out ongas day D:
a) the metered volumes per each physical entry point of the NTS from the production fields of the relevant producer;
b) the gross calorific value related to the gas delivered at each physical entry point of the NTS from the production fields of the relevant producer.
(2) During 10.00 – 10:30 a.m. of the gas day D+1, the TSO carries out the following processes:
a) determines the energy amount for gas day D related to each virtual entry point of the NTS, based on the information provided for at paragraph (1);

b) allocates the amounts calculated under paragraph a) to the producers as follows:
   i. in points where a single NU producer delivers gas, the metered amount is allocated to the one;
   ii. in points where multiple NU producers deliver gas, the metered amount is allocated to each producer based on the information received from the producer/third operator. If the producer / third operator fails to submit such information, the TSO allocates the metered amount pro-rata with the nomination.

c) TSO checks if the difference between the sum of the metered amounts and the nomination related to the relevant virtual point added to the current value of the OBA account does not exceed the OBA limit agreed under the interconnection agreement;

d) Provided the OBA limit is not overdrawn, the TSO shall perform the allocation according to the nominated amounts. The difference between the nominated and the metered amounts is accounted for in the OBA.

e) In case the OBA limit is overdrawn, the OBA based procedure is suspended and the TSO allocates according to the metered amount. The OBA based allocation procedure will be resumed starting with the gas day when the OBA limit will be granted;

f) The OBA limit and the accounted for amount in the OBA shall be uploaded by the TSO on its own web-page and are subject to an ongoing update.

(3) Repealed

(4) The TSO shall inform the producers on the allocated gas amount related to day D by 10.30 a.m., on day D+1.

(5) Repealed

Allocation in entry/exit points located at the interface between the NTS and the underground storage facilities

Art.68. – (1) For the purpose of performing the allocation in the entry/exit points located at the interface between the NTS and the underground storage facilities, each SSO submits to the

TSO the following information regarding the deliveries made on gas day D, by 10.00 a.m. on day D+1:

a) The volumes metered at each physical entry/exit point located at the interface between the NTS and the underground storage facilities and operated by such SSO;
b) The gross calorific value of the gas delivered in each physical entry/exit point located at the interface between the NTS and the underground storage facilities and operated by such SSO.

(2) In the time frame 10:00 – 10:30 of gas day D+1, the TSO calculates the amount of energy related to each virtual entry/exit point located at the interface between the NTS and the underground storage facilities, based on the information provided for in par (1).

(3) Repealed

(4) The TSO checks if the difference between the sum of the metered amounts and the nomination related to the relevant virtual point added to the current value of the OBA account does not exceed the OBA limit agreed upon under the interconnection agreement and that the amounts are allocated as follows:

a) Provided the OBA limit is not overdrawn –the TSO shall perform the allocation according to the nomination. The difference between nomination and metering is accounted for in the OBA.
b) Should the OBA limit be overdrawn, the parties shall mutually agree upon the extension of the limit for a period of time as short as possible, provided such extension does not affect the NTS operation under safe conditions and the allocations are equal to the confirmed NU nominations. The subsequent settlement of the differences between the allocated quantity and the metered quantity will be performed in line with the interconnection agreement concluded between the TSO and the SSO.

(5) The OBA limit and the accounted for amount in the OBA shall be uploaded by the TSO on its own web-page and are subject to an ongoing update..

Allocation in the cross border interconnection points

Art.69. – (1) The daily allocation in the interconnection points Medieșu Aurit - Isaccea and Isaccea 1 is performed by the TSO in line with the provisions of the Interconnection Agreements concluded between the Romanian National Gas Transmission Company «Transgaz» - S.A. Mediaș and the Ukranian TSO.
(2) Until the termination of the interconnection agreement for the interconnection points Medieșu Aurit – Isaccea, capacity booking is transferred to the interconnection point Isaccea 1.
Art 69^1 – The daily allocation in the interconnection point Csanadpalota-Hungary, is performed by the TSO in compliance with the interconnection agreement concluded between S.N.T.G.N. Transgaz S.A. Romania and FGSZ Zrt. Hungary.
Art. 69^2 – The daily allocation in the interconnection point Ungheni, is performed by the TSO in compliance with the interconnection agreement concluded between S.N.T.G.N. Transgaz S.A. Romania and VESTMOLDTRANSGAZ of the Republic of Moldavia.
Art. 69^3 - The daily allocation in the interconnection point Ruse-Giurgiu, is performed by the TSO in compliance with the interconnection agreement concluded between S.N.T.G.N. Transgaz S.A. Romania and BULGARTRANSGAZ Bulgaria.
Art.70. – Repealed

Allocation in the exit points towards the distribution systems

Art.71. – The TSO notifies the DSO on gas day D+1, by 11.30 a.m., with regards to the following information:

a) the metered gas amounts in the exit points of NTS towards the distribution systems - expressed in volume units, in thousand Scm, rounded up downwards to three decimals, the name of the NUs whose nominations/re-nominations were confirmed for such exit points;
b) the gross calorific values related thereto for the gas day D, expressed in MWh/cm, rounded up to six decimals, in accordance with Art. 37 par. (2);
c) should the TSO fail to upload the gross calorific values related to gas day D into the operational platform by 11.30 a.m. of gas day D+1, it will inform the DSO on the same

platform about the use of the gross calorific values related to the gas day D-1 in the allocation process.

Art. 71^1. – (1) Given the case where the metering cannot be performed due to technical reasons or the requirements of art. 71 are not met, the daily allocation is made by the TSO based on the principle "approved allocation = nomination", any differences identified upon the restoration of the technical issues will be settled afterwards.

(2) The TSO notifies the DSO on the IT platform, regarding both the impossibility of performing the metering due to technical reasons and the final values uploaded into the platform.

Art. 71^2. – The TSO will take the necessary precautions in order to submit their information according to art. 71 to the DSO, for the days officially declared as free banking days and the latter will take the necessary precautions in order to process and submit the data to the TSO, according to Art. 71^3 and 71^4.

Art. 71^3. – (1) The DSO performs the allocation per each NU for the deliveries operated by its own distribution systems based on the information submitted by the TSO to the DSO pursuant to the provisions of art. 71 regarding the exit points of NTS towards the DS.

(2) Within 2 hours upon the receipt of the information under art. 71, the DSO performs the allocation for each NU by using:

a) the levels of the metered amounts for the end-users in the portfolio of the NU, where the reading of the metering devices is performed on a daily basis. Should the daily metering be unavailable due to technical reasons, the DSO will take into account the latest information on the daily metered amount, registered in the DSO records;

b) the estimated consumption amounts of the end-users in each NU's portfolio where the metering is not performed on a daily basis, determined for each NU based on the following:

(i) the consumer profiles drawn up by DSO for end-users in the portfolio of the NU

(ii) the structure of each NU portfolio with regard to its on end users

(2^1) The allocations under par. (1) are introduced into the IT platform of the TSO distinctly specifying the allocated amounts based on the daily readings for the end-consumers and the allocated amounts according to the consumption profiles.
(3) The consumption profiles set up by the DSO, updated at the level of the relevant gas year, are made available to the NU and TSO by publicating them on the website of the DSO and are used for all NUs nominating gas amounts in exit points towards the distribution systems.
(4) By 31st of March 2023, until latest 01:00 p.m, thermal energy producers are bound to submit to their own supplier the gas amount, which is estimated to be used on day D for the generation of thermal energy in the cogeneration plants and in the thermal energy plants for the consumption of the population.
Art. 71^4. – (1) Between May 1st 2019 –June 30th 2020, in order for the TSO to carry out the allocation process, the DSO must submit to the TSO and to the NU, on day D+1 by 2.00 p.m., the information related to the quantities allocated to each NU on day D, according to Art. 37 (1) and (2), explicitly mentioning the allocated amounts based on the daily readings related to the end users and the amounts allocated based on consumption profiles. The DSO shall submit to the NU and to the TSO both the total consumption and the consumption broken down on client categories - CC, PET and NC - taken into account for the daily allocation.
(2) The data specified under par. (1) is submitted to the NU by 1.30 p.m. Should the NU disagree with the consumption broken down by the DSO as set forth under paragraph (1), such NU shall send to the DSO within 15 minutes from the receipt of the information, the data broken down on customer categories, whereas the total consumption submitted by the NU has to be equal to the total consumption communicated by the DSO. The lack of transmission of data by the UR shall be interpreted as silent approval.
Art. 71^5 – Repealed
Art. 71^6 – Given the case where the DO is unable to send to the TSO the allocations according to in art 71^4 until 14:00 o'clock in the day D+1 for the day D, the metered quantities will be allocated and communicated by the DSO to the NU, at the level of the confirmed NU nominations. The subsequent settlement of the differences between the allocated and distributed quantity will be performed in line with the interconnection agreement concluded

between the TSO and the DSO and with the Methodology regarding the settlement of the differences between allocations and the distributed gas gas amounts, drawn up by NRAE.
Art. 71^7 – Should a DS be connected to another DS connected to the NTS, the downstream DSO will submit the information under art. 71^3, par. (2) (a) and (b) to the DSO connected to the NTS, within the deadlines provided for in the DSO-DSO interconnection agreements so that the DSO connected to the NTS shall be able to meet the deadline under 71^4.

Allocation in the exit points towards the Direct Consumer

Art.72. –The TSO notifies the DC pursuant to the agreement provided for in art. 25^4 par. (2), on gas day D+1, by 10.00 a.m., with regard to the natural gas amounts metered in the NTS exit points towards the DC, expressed in volume units, in thousand Scm, rounded downwards to three decimals, and by 11.30 with regard to the related gross calorific values for the gas day D, expressed in MWh / cm or GJ / cm, according to Art. 37 par. (1) and (2).
Art. 72^1. – Given the case where the metering cannot be performed due to technical issues or if the requirements of art. 72 are not complied with, the daily allocation is performed by the TSO based on principle "allocation = approved nomination ", whereas the potential differences found upon the remedy of the technical problems shall be regularized later on.
Art. 72^2. – The TSO takes all necessary precautions so that, in the days officially declared as free banking days, information according to art. 72 is submitted to the DC and the latter take the necessary steps for processing and submitting the data to the TSO, according to Art. 72^4 and 72^5.
Art. 72^3. – In order for the TSO to perform the allocation process, the DC are required to submit to the TSO, on the day D+1 by 2.00 p.m., the information related to the amounts allocated to each NU on day D, according to art. 37 par. (1) and (2).

Art. 72^4. – (1) The allocation is performed by the TSO based on the daily metering in the exit points located at the interface between TSO and DC.

(2) In case only one NU delivers gas to the DC, the entire quantity metered is allocated by the TSO to it.

Art. 72^5. – In case several NUs deliver natural gas through the same exit point to a DC the entire metered amount will be allocated by the DC, according to the agreements concluded with the NU. In the opposite case, the TSO performs the allocation for each NU, according to the confirmed nominations for the NRs (pro rata).

Remark:

According to point 5 of art. 6 of the Order no. 35 of February 27th 2019, for the time-frame between Aprilie 1st 2019 and February 28th 2022, art. 72^5 shall be modified and shall have the following content:

„Art. 72^5

(1) In case more NUs deliver natural gas through the same exit point towards the DC, the entire metered amount shall be allocated by the DC according to the agreements concluded with the NU.

(2) In case the DC does not perform the allocations according to par. (1), the TSO performs the allocation for each NU, split on the type of gas (import/domestic), according to the confirmed nominations (pro rata). Point 5 of art. 6 of the Order no. 35 from February 27th 2019 has been repealed by poit 4 of art. I of the Order no. 47 of March 29th 2019, published in the Official Journal no. 246 from March 29th 2019, so that the above mentioned change does not generate effects".

Art.73. Repealed

Monthly allocation

Art.74. – (1) The TSO performs the final monthly allocation no later than the 13th of the month (M+1) following the month (M) in which it has provided the transmission service, for each distinct NU, for the purpose of quantifying the gas transmission service provided by the TSO.
(2) The monthly allocation equals the sum of the daily allocations determined according to the provisions of art. 66 which is adjusted with the potential corrections resulted from the errors of the metering systems as agreed upon with the adjacent system operators based on the analysis of the data downloads from the metering systems – metered values, configuration logs, alarm and event logs, notified according to par. (3).
(3) All corrections will be notified to all adjacent system operators until the 8th of the month M + 1 for the month M, whereupon the distributor will complete the monthly allocation until the 11th of the month M + 1 for the month M.
(4) The difference between the monthly amounts distributed and the final monthly allocation is determined in line with the Methodology for the settlement of the differences between allocations and the distributed gas amounts, drawn up by NRAE.
(5) TSO notifies the NU with regard to all the corrections agreed upon with the adjacent system operators which occurred over the entire month and with regard to the final monthly allocations by means of the notifications uploaded in the IT platform.
Art.75. – (1) The gas amounts supplied during the month M are accounted for by the TSO and the producers / DSO / DC /USO by signing the protocols set out in Annex. 9 of the present Code.
(2) In order to carry out the monthly allocation process, the TSO submits to the DSO / DC or receives from the producers / SSO within the first 2 working days of the month M + 1, the natural gas amounts specified in the protocols set out in Annex. 9 of the present Code according to Art. 37 par. (1) and (2).
(3) The TSO downloads all data from the metering systems on a monthly basis, identifies any potential differences or metering failures, elaborates algorithms to correct the identified

differences/disfunctions, agrees upon them together with their adjacent system operators to which they also submit such downloads and retransmits the reports set up under par. (2) altered accordingly until the 8th of the month M + 1. The agreement upon the identified corrections, the submission of protocols and the performance by the producers / DSO / DC / SSO of the allocations of the natural gas amounts related to the days on which corrections were made, will be completed by the 11th of the month M + 1, 12:00 h.
(4) Starting with the 8th of the month M+1, the IT platform of the TSO is open, enabling the final allocation process performed by the producers/DSO/DC/SSO.
(5) Should any divergence occur between the TSO and the adjacent system operators related to the metered gas amounts and/or the corrections identified upon the monthly downloads and these divergences are not settled until the deadline set in paragraph (3), the final allocation displayed according to the provisions of par (5) equals the initial allocation and the gas amounts under dispute will be settled once the divergence is solved, which is upon the agreement related to the corrected values.
(6) Repealed
(7) On the 14th of month M+1, 12:00 o'clock, based on the monthly final allocation determined according to the provisions of art. 74, the TSO signs the reports under annex 9 with the NU and issues the monthly invoices according to art. 105 (1) (b).
Art. 76 - Repealed

NTS Congestion Management

Art. 77 - (1) The approved but unused capacity of the NU may be subject to:

a) return to TSO according to Art. 78;
b) transfer of the right to use the booked capacity according to the provisions of art. 79;
c) full transfer of the rights and duties arising from the transmission contract related to the NTS entry points / transmission contract related to the NTS exit points, according to the provisions of art. 80;

d) withdrawal by the TSO, based on the "use-it-or-lose-it" mechanism, pursuant to the provisions of art. 81.

(2) The provisions of para. (1) do not apply to the capacity booked pursuant to art. 25^1.

Secondary capacity market

Art. 77^1 – (1) the NU is entitled to transfer to other NUs either the right to use the booked capacity or to fully transfer the rights and obligations arising from the transmission contract related to the NTS entry points / transmission contract related to the NTS exit points.

(2) For the cross-border interconnection points, the transfers contemplated under art. 69^1 and 69^3 will be executed by means of the Regional Booking Platform operated by FGSZ and for the other NTS entry/exit points by means of the SCM.

(3) The SCM transactions may be performed between the NUs having ongoing transmission contracts related to the NTS entry points / transmission contracts related to the NTS exit points concluded with the TSO.

(4) SCM transactions are performed independently in the entry or exit points for which capacity was booked. The NU receiving the right to use the capacity may use such capacity only in the point which was subject to the transaction.

(5) The nature of the capacity products – firm, interruptible – traded on the Main Capacity Market may not be exchanged by trading them on the SCM.

(6) The TSO offers the NU the possibility to publish the offers on the capacity transfers by means of the SCM.

(7) In case 2 NUs agree upon a capacity transfer, they select one of the following means of trading on the SCM:

a) transfer of the right to use capacity;

b) full transfer of the rights and duties arising from the transmission contract related to the NTS entry points / transmission contract related to the NTS exit points.

(8) The TSO approves the transfer based on the same criteria used for capacity trading on the Main Capacity Market.

Voluntary Return of Capacity

Art.78. – (1) The NU having contracts concluded for capacity products with a duration higher or equal to a gas month may fully or partially return the contracted firm capacity.
(2) The NU may not trade on the SCM the capacity which is subject of the application for return of capacity. An application for return of capacity may be withdrawn by the NU if the return capacity was not allocated to another NU within the Main Capacity Market.
(3) The firm bundled capacity may be returned only asfirm bundled capacity.
(4) The NU initiates the return process using the Main Capacity Market made available by the TSO.
(5) The receipt confirmation of the application for return of capacity is delivered by the TSO by means of the Main Capacity Market. The confirmation of the return of capacity shall not exonerate the NU from the payment duty regarding the capacity which is the subject to return.
(6) The TSO shall publish on the Main Capacity Market the capacity products which are subject to return by the NU. Such products are tagged on the Main Capacity Market as "return".
(7) Capacity return can be performed on any day or days after the TSO's delivery of the receipt confirmation of the NU application and for any part of the initially contracted capacity.
(8) The returned capacity is offered by the TSO on behalf of the NU by the Main Capacity Market by day D-1, 12.00 p.m. The returned capacity which could not be sold by day D-1, 12.00 p.m. may be offered by the NU on the SCM.
(9) The contracted capacity subject to a NU's application for return is allocated to other NUs by the TSO as follows:
a) after allocating the firm capacity in the portfolio of the TSO, registered as available at the entry and/or exit point where the NU requested the capacity return;
b) before allocating the withdrawn capacity, following the mechanism described under art. 81.
(10) The tariff applicable to the NU beneficiary of the capacity which was subject to return b the initiating NU is the one provided in the contract concluded between the TSO and the NU initiating the capacity return.

(11) The initiating NU shall maintain its contractual rights and duties until the re-allocation of the returned capacity or of a part thereof to the NU beneficiary.
(12) After the re-allocation to the NU beneficiary, the TSO and the initiating NU shall properly maintain the initial contract so that it reflects the decrease of the capacity owned by the latter upon the re-allocation by the capacity re-allocated to the NU beneficiary. The NU beneficiary is obliged to provide proof of the financial guarantees to the TSO according to the provisions of the gas transmission contracts related to the NTS entry points / transmission contracts related to the NTS exit points.
(13) In case several NUs choose to return capacities in the same entry and/or exit points, the applications are handled based on the "First come-first-served" principle.

The transfer of the right to use the booked capacity

Art.79. – (1) A NU called initial NU may transfer the right to use the booked capacity, in full or in part, to another NU called NU beneficiary, without the approval of the TSO. Ttrading is applicable for the annual, quarterly and monthly capacity products.
(2) The NU beneficiary assumes all rights and duties arising from the transfer of the right to use the capacity, except for the duty to pay the capacity for which it was granted the right to use.
(3) The initial NU assumes the duty to pay to the NU beneficiary the capacity which was subject to transfer of its use.
(4) In order to perform the transfer of the rght to use the booked capacity, the initial NU subtits to the TSO, through the SCM, the information related to the transfer, specifying:

a)the identification data of the contract concluded between the initial NU and the TSO;

b)the entry and/or exit point;

c)the identification data of the beneficiary NU;

d)the entry and/or exit capacity amount subject to transfer;

e)starting, respectively ending date of the duration of the transfer;

f)type of capacity product (monthly, quarterly, yearly);

g)nature of the capacity (ferm or interruptible).

(5) The TSO receives the information under para. (4) from the NU at least 2 hours before the deadline for the submission of the nominations and confirms the transaction right after receiving the information from both NU partners, no later than 90 minutes after receiving the information related to the transactions performed by both trading parties.
(6) The TSO may refuse to confirm the transactions related to the transfer of the right to use capacity in the following situations:

a) the information is received from a single NU
b) the information submitted by the NU does not match or the submitted information is incomplete
c) the information is submitted later than 2 hours before the deadline for the submission of the nominations
d) the traded capacity is subject of the capacity return requested by the initial NU.

(7) The TSO notifies, by SCM, both NUs involved in the transfer of the right to use capacity with regard to its decision to refuse the confirmation of the transactions. In this case the transfer is deemed null.
(8) The initial NU and the NU beneficiary may renounce the confirmed transaction by informing the TSO, by the SCM, about this renunciation no later than the deadline for the delivery of the nominations. The TSO confirms the renunciation the parties provided both NUs have notified the TSO to this respect.
(9) In case the notification regarding the decision to renounce is submitted by a single NU participating in the transaction, the TSO shall consider that the relevant transaction remains valid. In this case, the TSO sumits its decision both to the initial NU and to the beneficiary NU.
(10) The TSO publishes on its website updated information on the total volume of the capacity offered / requested and transferred on the secondary market as well as other information

regarding such transactions (entry/exit point, type of capacity, etc.). The procedures and the instruction manual of the SCM platform shall be published on the TSO's website, enough time before their entry into force so that they enable the NU to test the platform.
(11) In case the initial NU fails to fulfil its payment duties, the TSO may notify both the initial NU and the NU beneficiary of the transfer ending date.
(12) The provisions of par. (1) do not apply to the virtual NTS entry points from the production fields.

Full transfer of the rights and duties arising from the transmission contract related to the NTS entry points / transmission contract related to the NTS exit points

Art.80. – (1) a NU called initial NU may transfer the rights and obligations arising from the capacity contract (firm or interruptible) for the entire booked capacity or for a part thereof to another NU called NU beneficiary, based on the TSO's approval.
(2) The NU beneficiary shall assume all rights and duties arising from the transfer, including the obligation to pay the capacity which is subject to the transfer. The TSO shall properly amend the contracts concluded both with the initial NU and with the NU beneficiary.
(3) Repealed
(4) For the purpose of performing the transfer, the initial NU and the NU beneficiary submit a transfer request to the TSO comprising at least the following:
a) identification data of the NU beneficiary / initial NU, as appropriate
b) identification data of the contract concluded between the initial NU and the TSO
c) identification data of the contract concluded between the NU beneficiary and the TSO
d) entry and/or exit point/points
e) entry and/or exit capacity subject to the transfer
f) beginning and, respectively, ending date of the duration of the transfer
g) type of capacity product (monthly, quarterly, annual)
h) nature of the capacity (firm, interruptible)

(5) The initial NU and the beneficiary NU submit their application for capacity transfer to the TSO for a time-frame starting with gas day D, until gas day D-1, 12:00 o'clock, the latest. The application for capacity transfer is submitted in the IT-platform of the TSO. The transmission capacity booked by a NU, adjusted by the capacity transfers performed by the latter in line with the provisions of the underlying paragraph and of article 79 and confirmed by the TSO at least two hours before the deadline for submitting nominations within the calendar day D-1, is taken into account by the TSO within the processes of nomination, re-nomination and determination of the capacity surplus carried out for the capacity transfer period provided for in the application for capacity transfer of that NU and confirmed by the TSO.
(5^1) The initial NU and the beneficiary NU submit their application for capacity transfer to the TSO for the gas day D in the IT-platform of the TSO in the time frame between 07:00 a.m. and 03:00 p.m. of the gas day D. The transmission capacity booked by a NU adjusted by the capacity transfers performed by the latted in line with the provisions of the underlying paragraph and of article 79 is taken into account by the TSO within the renomination procedures and determination of capacity surplus carried out for the gas day D.
(6) The TSO notifies the initial NU and the NU beneficiary of its decision related to the approval/rejection of the transfer within at least 2 hours before the deadline to submit nominations within the calendar day D-1, in the case of the transfer application provided for in par. (5), respectively, until 05:00 p.m. of the calendar day D, the latest, in the case of the application for capacity transfer provided for in paragraph (5^1).
(7) The TSO refuses to validate the transfer from the initial NU to the NU beneficiary if such capacity is subject to the capacity return requested by the initial NU or, the level of the financial guarantee established by the NU beneficiary in favour of the TSO does not cover the booked transmission capacity adjusted by the transfer of the requested capacity or the transmission capacity booked by the NU, adjusted by the capacity transfers performed by the latter in line with the provisions of par. (5^1) and of art 79 exceeds the technical capacity of that entry/exit point in/out of the NTS.
(8) The provisions of par. (1) do not apply to the virtual NTS entry points from the production fields.

(8^1) The provisions of para (1) also apply in case of the NU requests the TSO to perform a capacity transfer between the virtual NTS entry points of the underground storage facilities and the virtual NTS entry points of the adjacent gas transmission systems in which capacity is booked based on the principle "first come - first served', in which it booked transmission capacity.
(9) The full transfer of the rights and duties is applied to the annual, quarterly and monthly capacity products contracted by the initial NU.
(10) The provisions of par. (1) also apply in case the NU requests the TSO to perform a capacity transfer of the capacity booked between the virtual NTS exit points towards the DS and/or DC and the exit points located at the interface between the NTS and the underground storage facilities.
Art.80^1. Repealed

Withdrawal of the booked capacity within the "use-it-or-lose-it" mechanism

Art.81. – (1) In case of contractual congestions, the CA may request the TSO to withdraw the entry and/or exit capacity booked by the NU for one or several gas years provided that the relevant capacity is used to a low extent.
(2) The contracted capacity is considered to be used to a low extent if:
a) the average use of the contracted capacity of the NU is less than 80%, as well as in the time frames between April 1st andSeptember 30th and October 1st and March 31st and no reliable justification could be submitted to this respect; or
b) the NU systematically nominates almost 100% of its contracted capacity and re-nominates downwards.
(3) the TSO monitors the extent to which the contracted capacities are used in connection with the effective duration of the contract of over a year or on recurrent quarters covering at least two years and submits the monitoring report to the CA by October 1st each gas year.
(4) The maximum level of the capacity which could be withdrawn equals the difference between the capacity booked by the NU and the maximum level of the capacity used by the latter during

the relevant period. For the determination of the maximum level of the capacity to be withdrawn, the TSO will take the following into account:
a) any transfer, withdrawal or other decrease of the booked capacity performed by the NU during the relevant time-frame;
b) existence of multiple NUs with unused capacities in the same NTS entry and/or exit point where the TSO faces contractual congestion.
(5) The TSO is bound to develop the capacity for the points where physical congestion is identified.

NTS Balancing

Art. 82 - The NTS physical, operational and commercial balancing defines a range of activities and procedures required for the allocation of the gas amounts to NUs and for ensuring safe gas transmission through the NTS.

Physical and Operational Balancing

Art. 83 - The physical balancing is the management and balancing of the gas amounts transmitted through the NTS by means of monitoring and controlling of the parameters related to gas flow, pressure and gross calorific power in the entry and exit points as well as in the technological hubs of the NTS.
Art.83^1 – The NTS is considered to be situated in state of balance when the following conditions are simultaneously fulfilled on all transmission directions:

a) the appropriate pressure conditions are registered for the safe operation of the NTS;
b) the gas amounts related to the NU portfolios taken off the NTS are situated at the same level with the gas amounts taken into the NTS during a gas day.

Art.83^2. – (1) According to the provisions of the Power and Gas Law no 123/2012, as subsequently amended and supplemented, the TSO cannot own gas except for the purpose of balancing and safe operation of the NTS.

(2) In order to ensure the NTS balancing, the TSO performs the operational balancing actions provided for under chapter III, art. 6, par. (3) of Regulation (EU) no. 312/2014 of the Commission of March 26th 2014 for the establishment of a network code on the balancing of gas transmission networks.
(3) In addition to the actions established under paragraph (2), in order to secure the safe operation of the NTS, the TSO must have a sufficient amount of gas available for the physical balancing of the system as gas stored in the pipelines and/or balancing gas stored in the underground storage facilities.
(4) The balancing actions of the TSO will be determined only by the objective need to maintain the operative parameters related to the operation of the NTS within the maximum and minimum limits set and published by the TSO on its own website, in the section dedicated to the NU, irrespective of the potential commercial imbalances of each NU.
(5) The balancing actions may be prevented as well, in the sense that they are carried out in order to avoid the risk of altering the limits of the NTS operation parameters, risk resulted from the daily calculations performed by the TSO, based on the data from the preliminary transmission programs and/or the NU daily nominations, with the purpose of optimizating the gas flows in the system.
(6) The purchase of natural gas performed by the TSO for their use for its own consumption is not considered balancing action of the NTS.
(7) The operations performed by the TSO for the physical balancing of the NTS are meant to the balance the differences between the gas amounts taken into the NTS by the NU and the ones taken off by them from the NTS during a gas day or as a result of the occurrence of unexpected events.
(8) Repealed
(9) Repealed
(10) The TSO publishes on its own webpage, by 12.00 o'clock of gas day D+1, under the section dedicated to the NU and in the IT-platform for each NTS operational balancing action materialized by the sale or purchase of balancing gas and for each gas day for which the balancing action is performed, information related to the type of balancing action (preventive

or not), the type of the transaction (sale or purchase), the amount of traded gas, the price related to each transaction, the average weighted price of the sale transactions performed by the TSO and the weighted average price of the purchase transactions performed by the TSO for the gas day D.

Art. 84 - (1) The dispatching center of the TSO receives daily information on the approved nominations/re-nominations uploaded to the IT Platform for:

a) NU;
b) TSO, for own consumption;
c) TSO, for NTS balancing gas;

(2) The calculations made by the TSO to improve the gas flow through the NTS for each gas day of the subsequent gas week shall include the following:

a) forecast of the line-pack at the beginning of the gas day;
b) forecast of the line-pack at the end of the gas day;
c) identification of the restrains in case the deliveries are forecasted to exceed the available capacity in the relevant location (e.g. through pipeline sections which are to be repaired);
d) identification of the balancing gas amounts for the subsequent gas day in order to make use of the underground storage facilities and/or of other sources of gas.

Commercial Balancing

Art.85. – (1) The commercial balancing is a set of actions by which the NUs balance the amounts of gas they take in and off the NTS as well as all the activities necessary for the accounting and correct allocation of the transmitted gas.

(2) In order for the NU to perform the commercial balancing of the gas amounts within the own portfolio taken in or off the NTS, the TSO makes available for them at least the information set forth in art. 37 and stipulated under Regulation (EU) no. 312/2014 on the "base case" according to the regulations approved by NRAE.

(3) For the purpose of balancing its own portfolio, the NU proceeds to:

a) re-nominating the gas amounts to be taken in/off the NTS until the end of the gas day D;
b) trading short-term standardized products offered on the trading platforms;
c) bilateral trading.

Balancing equations

A. General NTS balancing equation

$$E_{PROD} + E_{IMP} + E_{DEP}^{EXTR} = E + E_{CTLd} + E_{CTNe} + E_{PL} + \Delta E_{STOC\ COND} + E_{DEP}^{INJ} \quad (1)$$

where:

• E_{PROD} - the energy of gas taken in the NTS by all NUs in the NTS entry points from the production fields and the energy of gas taken in the NTS by TSO in the above mentioned points.

For a number $i = \overline{1,n}$ of NU and for a number $j = \overline{1,p_{prod}}$ of entry points from the production fields, E_{PROD} may be written as follows:

$$E_{PROD} = \sum_{i=1}^{n} \sum_{j=1}^{p_{prod}} E_{PROD_j}^{UR_i} + \sum_{j=1}^{p_{prod}} E_{PROD_j}^{OST} \quad (2)$$

• E_{IMP} - the energy of gas taken in by all NUs in NTS import entry points and the energy of gas taken off by TSO in the same points.

For a number $i = \overline{1,n}$ of NU and for a number $k = \overline{1,p_{imp}}$ of import entry points, E_{IMP} may be written as follows:

$$E_{IMP} = \sum_{i=1}^{n} \sum_{k=1}^{p_{imp}} E_{IMPk}^{UR_i} + \sum_{k=1}^{p_{imp}} E_{IMPk}^{OST} \quad (3)$$

• E_{DEP}^{EXTR} - the energy of gas taken in by all NUs in all entry/exit points of the storage facilities included in the withdrawal cycle and the energy of gas delivered by TSO in the same points.

This formula includes two components, respectively:

$$E_{DEP}^{EXTR.} = E_{DEP}^{SURSA\ EXTR} + E_{DEP}^{ECH_{EXTR}} \quad (4)$$

where:

$E_{DEP}^{SURSA\ EXTR.}$ - the energy of gas taken into NTS as a source by all NUs in all entry/exit points of the storage facilities included in the withdrawal cycle and the energy of gas taken in by TSO in the same points.

For a number $i = \overline{1,n}$ of NU and for a number $l = \overline{1,p_{DEP}}$ of entry/exit points into/out of the storage facilities, $E_{DEP}^{SURSA\ EXTR}$ may be written as follows:

$$E_{DEP}^{SURSA\ EXTR} = \sum_{i=1}^{n} \sum_{l=1}^{p_{inm.}} E_{DEP_l}^{SURSA\ EXTR.-UR_i} + \sum_{l=1}^{p_{inm.}} E_{DEP_l}^{SURSA\ EXTR.-OST} \quad (4.1)$$

$E_{DEP}^{Ech._{extr.}}$ - the energy of gas taken in as balancing gas, by all NUs in all NTS entry/exit points into/out of the storage facilities included in the withdrawal cycle and the energy of gas delivered by TSO in the same points.

For a number $i = \overline{1,n}$ of NU and for a number $l = \overline{1,p_{DEP.}}$ of entry/exit points into/out of storage facilities, $E_{DEP.}^{ECH.EXTR.}$ may be written as follows:

$$E_{DEP}^{ECH_{EXTR.}} = \sum_{i=1}^{n} \sum_{l=1}^{p_{DEP.}} E_{DEP_l}^{ECH_{EXTR.}-UR_i} + \sum_{l=1}^{p_{DEP.}} E_{DEP_l}^{ECH_{EXTR.}-OST} \quad (4.2)$$

• E - the energy of gas taken off by all NUs in all NTS exit points, except for those of the storage facilities.

For a number $i = \overline{1,n}$ of NU and for a number $m = \overline{1,p}$ of NTS exit points, except for those of the storage facilities, E may be written as follows:

$$E = \sum_{i=1}^{n} \sum_{m=1}^{p} E_m^{UR_i} \quad (5)$$

- E_{CTLd} - the energy of located – determined unaccounted for gas - represents the energy of gas consumed by the TSO to perform the activities related to gas transmission through the NTS.

The element E_{CTLd} is determined as the sum of the following energies:

- the energy of gas used as fuel for the consumption of compressor stations;
- the energy of gas used as fuel for heating the gas and the technological facilities;
- the energy of gas exhausted from pipelines with the purpose of removing the impurities;
- the energy of gas used to blow off the impurities out of the fluid separators;
- the energy of gas exhausted during regular check and adjustment of safety valves;
- the energy of gas used for works related to repairing, rehabilitation and development of the NTS.

The above mentioned energies shall be determined using a average calorific power for the entire NTS.

- E_{CTNe} - the energy of unlocated - estimated – unaccounted for - represents the energy of gas accidentally exhausted from NTS.

The element E_{CTNe} represents the sum of the following energies:

- the energy of gas exhausted due to exceeding the standard operational life time of the pipelines;
- the energy of gas exhausted through unsealed detachable joints, caused by operational wear and tear;
- the energy of gas exhausted through safety valves as a consequence of an accidental increase of pressure;
- the energy of gas exhausted due to technical disfunctions (cracks, fractures).

The above mentioned energies shall be calculated using a average calorific power for the entire NTS.

- E_{PL} - the energy of gas due to losses located in the NTS – represents the energy of the gas amount which should have been taken off by one or several NUs but which was lost due to faults located in a section adjacent to one or several NTS physical exit points.

For a number $i = \overline{1,n}$ of NU, E_{PL} may be written as follows:

$$E_{PL} = \sum_{i=1}^{n} E_{PL}^{UR_r} \quad (7)$$

where: $E_{PL}^{UR_r}$ - the energy nominated but not taken off by NU `r` in the exit points damaged due to a fault located in the NTS:

In case the loss of gas located in the NTS affects only a single NU, `r`, $E_{PL}^{UR_r}$ shall be determined using the following formula:

$$E_{PL}^{UR_i} = E_{nominalizat}^{UR_i - afectat} - E_{preluat}^{UR_i - afectat} \quad (8)$$

where: $E_{nominalizat}^{UR_i - afectat}$ - the energy nominated by NU `r` in the exit points damaged due to a fault located in the NTS;

$E_{preluat}^{UR_i - afectat}$ - the energy taken off by NU `r` in the exit points damaged due to a fault located in the NTS;

Comment: $E_{preluat}^{UR_i - afectat}$ is included in the E component of the equation (1).

In case the gas loss located in the NTS affects two or several NUs, the E_{PL} component shall be determined for each of them using the following formula:

$$E_{PL}^{UR_i} = E_{PL} \times \frac{E_{nominalizat}^{UR_i - afectat}}{\sum_{afectati} E_{nominalizat}} \quad (9)$$

where: $\sum_{\text{afectati}} E_{\text{nominalizat}}$ - the sum of energies nominated by all NUs in the exit points damaged due to a fault located in the NTS;

Element E_{PL}, included in the equation, has only a balancing purpose.

The TSO shall recover, on its own expense, all identified losses which occurred in the NTS, except for the Force Majeure events.

Upon the submission of supporting documents by the NU, proving the cost of gas, the TSO shall ensure:

- financial compensation within 1 calendar month, or
- the amount of gas which was lost, on a mutually agreed date, depending on the settlement method agreed upon by the parties.

• $\Delta E_{\text{STOC COND}}$ - the energy fluctuation of gas stored in NTS pipelines – represents the difference between the energy contained in the NTS at the beginning of a gas day and the energy contained in the NTS at the end of the same gas day.

• $E_{\text{DEP}}^{\text{INJ}}$ - the energy of gas taken over from NTS by all NUs and the energy of gas taken off from NTS by TSO in all entry/exit points of the storage facilities included in the injection cycle.

This element has two components, respectively:

$$E_{\text{DEP}}^{\text{INJ}} = E_{\text{DEP}}^{\text{SURSA}_{\text{INJ}}} + E_{\text{DEP}}^{\text{ECH.}_{\text{INJ}}} \quad (10)$$

where:

$E_{\text{DEP}}^{\text{SURSA}_{\text{INJ.}}}$ - the energy of gas taken over from the NTS by all NUs as a source and the energy of gas taken off from NTS by the TSO in all entry/exit points of the storage facilities included in the injection cycle.

For a number $i = \overline{1,n}$ of NU and a number $l = \overline{1, p_{\text{DEP.}}}$ of entry/exit points of the storage facilities, $E_{\text{DEP}}^{\text{SURSA.}_{\text{INJ.}}}$ may be written as follows:

$$E_{DEP}^{SURSA\ INJ.} = \sum_{i=1}^{n} \sum_{l=1}^{p_{DEP.}} E_{DEP_l}^{SURSA\ INJ-UR_i} + \sum_{l=1}^{p_{DEP}} E_{DEP_l}^{SURSA\ INJ-OST} \quad (10.1)$$

$E_{DEP}^{ECH._{INJ}}$ - the energy of gas taken over from the NTS by all NUs as balancing gas and the energy of gas taken off from the NTS by the TSO in all entry/exit points of the storage facilities included in the injection cycle.

For a number $i = \overline{1,n}$ of NU and a number $l = \overline{1,p_{DEP.}}$ of entry/exit points of the storage facilities, $E_{DEP.}^{ECH._{INJ}}$ may be written as follows:

$$E_{DEP}^{ECH_{INJ}} = \sum_{i=1}^{n} \sum_{l=1}^{p_{DEP}} E_{DEP_l}^{ECH_{INJ}-UR_i} + \sum_{l=1}^{p_{DEP}} E_{DEP_l}^{ECH_{INJ}-OST} \quad (10.2)$$

B. NU balancing equation

$$E_{PROD}^{UR_i} + E_{IMP}^{UR_i} + E_{DEP}^{EXTR-UR_i} + E_{FTG}^{g.primite-UR_i} + E_{CD}^{UR_i} = E^{UR_i} + E_{PL}^{UR_i} + E_{DEP}^{INJ-UR_i} + E_{FTG}^{g.cedate-UR_i} \quad (11)$$

where:

- $E_{PROD}^{UR_i}$ - the energy of gas taken into the NTS by all NUs `i`, in all entry points of the production fields.

For a number $j = \overline{1,p_{PROD}}$ of entry points of the production fields, $E_{PROD}^{UR_i}$ shall be determined using the following formula:

$$E_{PROD}^{UR_i} = \sum_{j=1}^{p_{PROD}} E_{PROD_j}^{UR_i} = \sum_{j=1}^{p_{PROD}} \left(V_{PROD_j}^{UR_i} \times PCS_j \right) \quad (12)$$

where:

$V_{PROD_j}^{UR_i}$ - is the gas volume taken in from the production fields to the NTS by UR `i` in the `j` entry point;

PCS_j - is the determined gross calorific power related to `j` entry point from the production fields.

- $E_{IMP}^{UR_i}$ - the energy of import gas taken into the NTS by NU `i`, in all entry points.

For a number $k=\overline{1,p_{IMP.}}$ of import entry points, $E_{IMP}^{UR_i}$ shall be determined using the following formula:

$$E_{IMP}^{UR_i}=\sum_{k=1}^{p_{IMP}}E_{IMP_k}^{UR_i}=\sum_{k=1}^{p_{IMP}}\left(V_{IMP_k}^{UR_i}\times PCS_k\right) \quad (13)$$

where:

$V_{IMP_k}^{UR_i}$ - is the import gas volume taken into the NTS by NU `i` in the `k` import entry point;

PCS_k - is the determined gross calorific power related to the `k` import entry point.

- $E_{DEP}^{EXTR\text{-}UR_i}$ - the energy of gas taken into NTS by NU `i`, in all entry/exit points of the storage facilities included in the withdrawal cycle.

This element has two components, respectively:

$$E_{DEP}^{EXTR\text{-}UR_i}=E_{DEP}^{SURSA_{EXTR}-UR_i}+E_{DEP}^{ECH._{EXTR.}-UR_i} \quad (14)$$

where:

$E_{DEP}^{SURSA._{EXTR}-UR_i}$ - the energy of gas taken into the NTS as source by NU `i`, in all entry/exit points of the storage facilities included in the withdrawal cycle.

For a number $l=\overline{1,p_{DEP.}}$ of entry/exit points of the storage facilities, $E_{DEP}^{SURSA_{EXTR}-UR_i}$ shall be determined using the following formula:

$$E_{DEP}^{SURSA._{EXTR}-UR_i}=\sum_{l=1}^{p_{INM}}E_{DEP_l}^{SURSA._{EXTR}-UR_i}=\sum_{l=1}^{p_{INM}}\left(V_{DEP_l}^{SURSA._{EXTR}-UR_i}\times PCS_l\right) \quad (14.1)$$

where:

$V_{DEP_l}^{SURSA._{EXTR}-UR_i}$ - is the gas volume taken into NTS as source, by NU `i` in the `l` entry/exit point of the storage facilities included in the withdrawal cycle;

PCS_l - is the determined gross calorific power related to `l` entry/exit point of the storage facilities.

$E_{DEP.}^{ECH._{EXTR}-UR_i}$ - the energy of gas taken into the NTS as balancing gas by the NU `i`, in all entry/exit points of the storage facilities included in the withdrawal cycle.

For a number $l=\overline{1,p_{DEP}}$ of storage facilities' entry/exit points, $E_{DEP.}^{ECH_{EXTR}-UR_i}$ element shall be calculated using the following formula:

$$E_{DEP}^{ECH._{EXTR}-UR_i}=\sum_{l=1}^{p_{INM}}E_{DEP_l}^{ECH._{EXTR}-UR_i}=\sum_{l=1}^{p_{INM}}\left(V_{DEP_l}^{ECH_{EXTR}-UR_i}\times PCS_l\right) \quad (14.2)$$

where:

$V_{DEP_l}^{ECH_{EXTR}-UR_i}$ - is the gas volume taken into the NTS as balancing gas by the NU `i`, in `l` entry/exit point of the storage facilities included in the withdrawal cycle;

PCS_l - is the determined gross calorific power related to the `l` entry/exit point of the storage facilities.

- $E_{g\ cumparate\ in\ PVT-UR\ (i)}$ - the energy of gas purchased by NU `i` in the VTP.

$E_{g\ cumparate\ in\ PVT-UR\ (i)}$ shall be determined as the algebraic sum of all gas amounts – expressed in energy units – purchased in the VTP.

- $E_{CD}^{UR_i}$ - the imbalance component of NU `i` – represents the gas energy required to keep the balance of NU `i` client portfolio.

$E_{CD}^{UR_i}$ represents the actual result of NU `i` (11) balancing equation.

The value of $E_{CD}^{UR_i}$ can be:

- zero – indicating that NU `i` was unable to keep balance of its client portfolio;

- positive – indicating that NTS gas off-takes of NU „i` are higher than the in-takes;

- negative - indicating that NTS gas off-takes of NU `i` are lower than the in-takes.

• E^{UR_i} - the energy of gas taken off from the NTS by NU `i` in all exit points, except for the points related to the storage facilities.

For a number $m = \overline{1,p}$ of NTS exit points, except for the points related to the storage facilities, E^{UR_i} shall be determined using the following formula:

$$E^{UR_i} = \sum_{m=1}^{p} E_m^{UR_i} = \sum_{m=1}^{p} \left(V_m^{UR_i} \times PCS_m \right) \quad (15)$$

where:

$V_m^{UR_i}$ - is the gas volume taken off from NTS by NU `i`, in the `m` exit point;

PCS_m - is the determined gross calorific power related to the `m` exit point.

• $E_{PL}^{UR_i}$ - the gas energy related to the identified gas losses in the, which should have been off over by NU `i`.

$E_{PL}^{UR_i}$ shall be determined using the (8) and (9) formulas.

• $E_{DEP}^{INJ-UR_i}$ - the energy of the gas taken off from the NTS by NU `i`, in all entry/exit points of the storage facilities included in the injection cycle.

This element has two components, respectively:

$$E_{DEP}^{INJ-UR_i} = E_{DEP}^{SURSA_{INJ}-UR_i} + E_{DEP}^{ECH_{INJ.}-UR_i} \quad (16)$$

where:

$E_{DEP}^{SURSA_{INJ}-UR_i}$ - the energy of gas taken off from the NTS as source by the NU `i`, in all entry/exit points of the storage facilities included in the injection cycle.

For a number $_{l=\overline{1,p_{DEP}}}$ of entry/exit points of the storage facilities, $E_{DEP}^{SURSA_{INJ}-UR_i}$ shall be determined using the following formula:

$$E_{DEP}^{SURSA_{INJ}-UR_i} = \sum_{l=1}^{p_{DEP}} E_{DEP_l}^{SURSA_{INJ}-UR_i} = \sum_{l=1}^{p_{DEP}} \left(V_{DEP_l}^{SURSA_{INJ}-UR_i} \times PCS_l \right) \quad (16.1)$$

where:

$V_{DEP_l}^{SURSA_{INJ}-UR_i}$ - is the gas volume taken off by the NU `i` from the NTS as source, in the `l` entry/exit point of the storage facilities included in the injection cycle;

PCS_l - is the determined gross calorific power related to the `l` entry/exit points of the storage facilities.

$E_{DEP}^{ECH_{INJ}-UR_i}$ - the energy of gas taken off by the NU `i` from the NTS as balancing gas, in all entry/exit points of the storage facilities included in the injection cycle.

For a number $_{l=\overline{1,p_{DEP}}}$ of storage facilities' entry/exit points, $E_{DEP}^{ECH_{INJ}-UR_i}$ component shall be calculated using the following formula:

$$E_{DEP.}^{ECH._{INJ}-UR_i} = \sum_{l=1}^{p_{DEP}} E_{DEP_l}^{ECH._{INJ}-UR_i} = \sum_{l=1}^{p_{DEP}} \left(V_{DEP_l}^{ECH._{INJ}-UR_i} \times PCS_l \right) \quad ` \quad (16.2)$$

where:

$V_{DEP_l}^{ECH_{INJ}-UR_i}$ - is the gas volume taken off by the NU `i` from NTS as balancing gas, in the `l` entry/exit point of the storage facilities included in the injection cycle;

PCS_l - is the determined gross calorific power related to the `l` entry/exit points of the storage facilities.

- $E_{g\ vandute\ in\ PVT-UR\ (i)}$ - the energy of gas sold in the VTP by the NU `i`.

$E_{g\ vandute\ in\ PVT-UR\ (i)}$ shall be determined using the algebraic sum of all gas amounts sold in the VTP, expressed as energy units.

C. TSO balancing equation

$$E_{PROD}^{OST} + E_{IMP}^{OST} + E_{DEP}^{EXTR-OST} + E_{CER}^{OST} = E_{CTLd} + E_{CTNeE} + \Delta E_{STOC\ COND} + E_{DEP}^{INJ-OST} \quad (17)$$

where:

- E_{PROD}^{OST} - the energy of gas taken in by the TSO to the NTS, in all entry points of the production fields.

For a number $j = \overline{1, p_{PROD}}$ of entry points of the production fields, $E_{Prod.}^{OST}$ shall be determined using the following formula:

$$E_{PROD}^{OST} = \sum_{j=1}^{p_{PROD}} E_{PROD._j}^{OST} = \sum_{j=1}^{p_{PROD}} \left(V_{PROD._j}^{OST} \times PCS_j \right) \quad (18)$$

where:

$V_{PROD_j}^{OST}$ - is the gas volume taken in by the TSO to the NTS in the `j` entry point of the production fields;

PCS_j - is the determined gross calorific power related to the `j` entry point of the production fields.

- E_{IMP}^{OST} - the energy of import gas taken into the NTS by the TSO, in all entry points.

E_{IMP}^{OST} does not comprise the energy of gas representing the value of transit services provided by the TSO, gas which is supplied to the TSO customers. This gas is included in the import component of each NU purchasing gas from the TSO.

For a number $k = \overline{1, p_{IMP}}$ of import entry points, E_{IMP}^{OST} shall be determined using the following formula:

$$E_{IMP}^{OST} = \sum_{k=1}^{p_{IMP}} E_{IMP_k}^{OST} = \sum_{k=1}^{p_{IMP}} \left(V_{IMP_k}^{OST} \times PCS_k \right) \quad (19)$$

where:

$V_{IMP_k}^{OST}$ - is the import gas volume taken into the NTS by the TSO in the `k` entry point;

PCS_k - is the determined gross calorific power related to the `k` import entry point.

- $E_{DEP}^{EXTR-OST}$ - the energy of gas taken into the NTS by the TSO, in all entry/exit points of the storage facilities included in the withdrawal cycle.

This element has two components, respectively:

$$E_{DEP.}^{EXTR-OST} = E_{DEP}^{SURSA_{EXTR}-OST} + E_{DEP}^{ECH._{EXTR.}-OST} \quad (20)$$

where:

$E_{DEP}^{SURSA_{EXTR.}-OST}$ - the energy of gas taken into the NTS by the TSO as source, in all entry/exit points of the storage facilities included in the withdrawal cycle.

For a number $l = \overline{1, p_{DEP}}$ of entry/exit points of the storage facilities, $E_{DEP}^{SURSA_{EXTR}-OST}$ shall be determined using the following formula:

$$E_{DEP}^{SURSA_{EXTR}-OST} = \sum_{l=1}^{p_{DEP}} E_{DEP_l}^{SURSA_{EXTR.}-OST} = \sum_{l=1}^{p_{DEP}} \left(V_{DEP_l}^{SURSA_{EXTR}-OST} \times PCS_l \right) \quad (20.1)$$

where:

$V_{DEP_l}^{SURSA_{EXTR.}-OST}$ - is the gas volume taken into the NTS by the TSO as source, in the `l` entry/exit point of the storage facilities included in the withdrawal cycle;

PCS_l - is the determined gross calorific power related to the `l` entry/exit point of the storage facilities.

$E_{DEP}^{ECH_{EXTR}-OST}$ - the energy of gas taken into the NTS by the TSO as balancing gas, in all entry/exit points of the storage facilities included in the withdrawal cycle.

For a number $l = \overline{1, p_{DEP}}$ of entry/exit points of the storage facilities, $E_{DEP.}^{ECH_{EXTR.}-OST}$ shall be determined using the following formula:

$$E_{DEP}^{ECH_{EXTR.}-OST} = \sum_{l=1}^{P_{DEP}} E_{DEP_l}^{ECH_{EXTR.}-OST} = \sum_{l=1}^{P_{DEP}} \left(V_{DEP_l}^{ECH_{EXTR.}-OST} \times PCS_l \right) \quad (20.2)$$

where:

$V_{DEP_l}^{ECH_{EXTR}-OST}$ - is the gas volume taken into the NTS by the TSO as balancing gas, in the `l` entry/exit point of the storage facilities included in the withdrawal cycle;

PCS_l - is the determined gross calorific power related to the `l` entry/exit point of the storage facilities.

- E_{CER}^{OST} - the NTS residual balancing component – represents the algebraic sum, but with changed mark, of the imbalances generated by all NUs, respectively the gas quantity – expressed in energy units – taken in or off to/from the NTS by the TSO in order to keep the NTS balance.

E_{CER}^{OST} represents the actual result of the TSO (17) balancing equation.

For a number $i = \overline{1,n}$ of NU, E_{CER}^{OST} shall be determined using the following formula:

$$E_{CER}^{OST} = \sum_{i=1}^{n} E_{CD}^{UR_i} \quad (21)$$

where: $E_{CD}^{UR_i}$ - is the imbalance component of NU `i`; this component has already been explained in the NU `i` balancing equation.

E_{CER}^{OST} can have the following value:

- zero – indicating that all NUs have kept a balanced client portfolio with an impact on the overall balance of the NTS; in this case, the TSO does not need to proceed to the residual balancing of the NTS;

- negative – indicating the existence of a gas deficit in the NTS, deficit which the TSO must cover by taking into NTS the amount resulted from applying formula (21);

- positive - indicating the existence of a gas excess in the NTS, excess which the TSO must eliminate by taking off from the NTS the amount resulted from applying formula (21).

- $\mathbf{E}_{\text{CTL-D}}$ - the gas energy related to the located – determined unaccounted for gas amounts – this wording has already been explained in the NTS general balancing equation.
- $\mathbf{E}_{\text{CTN-E}}$ - the gas energy related to the non-located – estimated unaccounted for gas amounts – this wording has already been explained in the NTS general balancing equation.
- $\Delta E_{\text{STOCCOND}}$ - the energy fluctuation of the NTS line-pack– this wording has already been explained in the NTS general balancing equation.
- $E_{\text{DEP}}^{\text{SURSA}_{\text{INJ}}-\text{OST}}$ - the energy of gas taken off by the TSO from the NTS as source, in all entry/exit points of the storage facilities included in the injection cycle.

For a number $l = \overline{1, p_{DEP}}$ of entry/exit points of the storage facilities, $E_{\text{DEP}}^{\text{SURSA}_{\text{INJ}}-\text{OST}}$ shall be determined using the following formula:

$$E_{\text{DEP}}^{\text{SURSA}_{\text{INJ}}-\text{OST}} = \sum_{l=1}^{p_{DEP}} E_{\text{DEP}_l}^{\text{SURSA}_{\text{INJ}}-\text{OST}} = \sum_{l=1}^{p_{DEP}} \left(V_{\text{DEP}_l}^{\text{SURSA}_{\text{INJ}}-\text{OST}} \times PCS_l \right) \quad (22)$$

where:

$V_{\text{DEP}_l}^{\text{SURSA}_{\text{INJ}}-\text{OST}}$ - is the gas volume taken off by the TSO from the NTS as source, in the `l` entry/exit point of the storage facilities included in the injection cycle;

PCS_l - is the determined gross calorific power related to the `l` entry/exit point of the storage facilities.

- $E_{\text{DEP}}^{\text{ECH}_{\text{INJ}}-\text{OST}}$ - the energy of gas taken off by the TSO from the NTS as balancing gas, in all entry/exit points of the storage facilities included in the injection cycle.

For a number $l = \overline{1, p_{DEP}}$ of entry/exit points of the storage facilities, $E_{\text{DEP}}^{\text{ECH}_{\text{INJ}}-\text{OST}}$ shall be determined using the following formula:

$$E_{DEP}^{ECH_{INJ}-OST} = \sum_{l=1}^{P_{DEP}} E_{DEP_l}^{ECH_{INJ}-OST} = \sum_{l=1}^{P_{DEP}} \left(V_{DEP_l}^{ECH_{INJ}-OST} \times PCS_l \right) \quad (23)$$

where:

$V_{DEP_l}^{ECH_{INJ}-OST}$ - is the gas volume taken off the NTS by the TSO as balancing gas, in the `l` entry/exit point of the storage facilities included in the injection cycle;

PCS_l - is the determined gross calorific value related to the `l` entry/exit point of the storage facilities.

Balancing procedures

A. Repealed

Art.86. – (1) The daily imbalance is the difference between the gas amounts actually taken in the NTS entry points and the gas amounts actually taken off the NTS exit points by each NU separately, on a certain gas day, taking also into account the trades notified in the VTP and confirmed by the TSO.

(2)The daily imbalance, expressed in energy units, is determined for each NU by using the balancing equations established in this section, as well as the following formula:

$DI = A_i + T_C - T_V - A_e$, where:

DI – daily imbalance;

A_i – allocation in the entry points where the NU booked capacity;

A_e – allocation in the exit points where the NU booked capacity;

T_C, T_V – have the meaning stipulated under Art. 52, paragraph (3).

Art. 86^1. – (1) By 2.15 p.m. of each gas day D, the TSO determines:

a) the initial daily imbalance for the gas day D-1 for each NU, using the initial allocations for gas day D-1;
b) the total NTS imbalance and its trend, respectively "surplus" or "deficit"

(2) By 2.30 p.m., at the latest, of each gas day D, the TSO informs the NU with regard to the initial daily imbalance registered for gas day D-1 and the gross calorific value and publishes on its website latest by 03.00 p.m. the information provided for at par. (1) (b), the weighted average

price determined according to the provisions of art. 102^1 related to gas day D-1 and the prices contemplated under art. 102^2 par. (1) (a) and (b) and par. (2) (a) and (b).
(2^1) By March 31st 2023, until 07:00 a.m. of day D+1, the NU shall send to the TSO the initial daily imbalance notified according to paragraph (2), broken down on CC and PET under art. 12 of the GEO no. 27/2022 regarding the measures applicable to the end-consumers on the electrical energy and natural gas market in the time frame between April 1st 2022 and March 31st 2023, as well as for the amendment and supplementation of legal norms in the energy field, as further amended and supplemented, called hereinafter GEO No. 27/2022, as well as the one related to the other end-consumers, according to Art. 37 (1) and (2).
(2^2) By March 31st 2023, within the time frame 07:00 a.m. and 1:30 p.m of day D+1, the TSO shall process the information sent by the NU according to paragraph (2^1) and centralizes it for the purpose of trading on the balancing market or sends it to the operator appointed to ensure the compliance with the duties related to the organization and management of the balancing market.
(3) The initial daily imbalance represents the daily imbalance registered before the opening of the balancing market.

Art. 86^2

(1) The TSO organizes and manages the gas balancing market or he may conclude an agreement with a third party for the purpose of performing these tasks for the TSO, according to the provisions of the Commission Regulation (EU) No 312/2014 of March 26th 2014 establishing a network code for balancing gas transmission networks. In the event that the TSO concludes an agreement to this end, it will notify in writing the participants about the identity of the designated operator to ensure the fulfillment of the duties related to the organization and management of the natural gas market, operator which will conclude the Convention provided for in the annex to the Balancing and VTP Access Agreement with the participants, within 5 days upon the reception of this notification.

Remark

According to point 6 of art. 6 of the Order no. 35 from February 27th 2019, a new paragraph, (1^1), is introduced at art. 86^2 after paragraph (1) for the time frame betwenn Aprilie 1st 2019 and February 28th 2022, with the following content:

„(1^1) „The responsibility of the organization and management of the BM lies entirely with the TSO".

Point 6 of art. 6 of the Order no. 35 from February 27th 2019 has been repealed by point 4 of art. I of the Order no. 47 from March 29th 2019, published in the Official Journal no. 246 of March 29th 2019, so that the above mentioned addition no longer generates any effects.

(1^1) The responsibility for the organisation and the management of the BM rests entirely with the TSO
(2) By March 31st 2023, following natural gas amounts with delivery within the delivery day or the following gas day, as well as those representing the initial daily imbalance of the NU can be distinctively traded within the balancing market, intermediated by the TSO / third party designated by the TSO, based on the trading procedure related to the balancing market stipulated in Annex 1^4:
a) amounts destined for the residential sector under art. 12 of the GEO No. 27/2022; natural gas price, no services included, cannot exceed 150 lei/MWh;
b) amounts destined for the consumption of the producers of thermal enerergy under art. 12 of the GEO No. 27/2022; natural gas price, no services included, cannot exceed 250 lei/MWh;
c) amounts destined for the consumption of the other end-users.
(2^1) The TSO makes available to the NU the trading platform related to the gas balancing market meant for transactions with within day or day ahead products until 01 May 2019.
(2^2) The cost of the included services, in lei/MWh, consists of the cost of the transport services, the cost of the underground storage services, as well as the financing costs, as appropriate.
(3) Repealed
(4) The TSO has no registered gains or losses subsequent tocharging tariffs for the organisation and management of the gas balancing market.

(5) The tariffs for managing/trading established based on a methodology set up by the TSO and endorsed by the BA are transparent and non-discriminatory. The Methodology is established aiming at ensuring the recovery of the legitimate costs and achieved in a prudent manner by the TSO for the purpose of the management/trading of the BM.
B. Repealed

Art.87. Repealed

C. Repealed
Art. 88. – (1) Within maximum 45 minutes from the closing of the balancing market on day D, the TSO notifies the NU with regard to its final imbalance on gas day D-1.
(2) The final daily imbalance is determined by the TSO by taking into account the amounts traded on the BM.
(3) By way of derogation from the provisions of paragraph (2), by March 31st 2023, the final daily imbalance shall be determined by the TSO, distinctively, taking into account the amounts traded on the BM; according to the provisions of art. 86^2, par. (2).

Table 1 – Balancing procedures Repealed

Art. 89. – (1) After determining the final daily imbalance for each NU according to Art. 88, the NUs may be in one of the following three situations:
a) surplus: in case the daily imbalance is above zero;
b) deficit: in case the daily imbalance is below zero;
c) balance: in case the daily imbalance equals zero.
(2) If the TSO establishes a `surplus` imbalance situation for the individual portfolio of a NU, the TSO shall pay to the NU the daily imbalance charge determined according to Art. 102, based on the gas amount representing the registered imbalance.

(3) If the TSO establishes a `deficit` imbalance situation for the individual portfolio of a NU, such NU shall pay to the TSO the daily imbalance charge calculated according to Art. 102, based on the gas amount representing the registered imbalance.
(4) If the total imbalance of the NTS is a `surplus`, the quantity of gas representing the registered surplus is used by the TSO to meet its obligation under Art. 83^2 (3)**.**

Art. 89^1.-Repealed

Table 2 – Repealed

Table 3 – Cumulative imbalance Repealed

Emergency supply service

Art.90. – The provisions of legal provisions concerning the emergency situations in the natural gas industry shall apply.

Force Majeure

Art.91. – The emergency supply situation shall not cover the Force Majeure.
Art.92. –Force Majeure, the rights and duties of TSO and of the NU in the event of Force Majeure shall apply as provided for by the Civil Law.

Gas metering at NTS entry/exit points

Art.93. – (1) Gas metering shall be performed according to CA regulations in force.
(2) Gas metering systems at NTS entry/exit points shall be operated according to the provisions of `*Technical requirements regarding the operation of gas metering points in the NTS entry/exit points*` according to Annex no 9.

(3) The complaints regarding gas metering shall be settled according to the provisions of CA regulations and within the terms established by the applicable performance standard in force.
Art.94. – The minimum requirements related to gas quality are specified in the technical regulations drawn up by the CA.

CAP. V MANAGEMENT OF THE TRANSMISSION CONTRACTS

Art.95. – The tariffs related to the use of the NTS shall be substantiated by TSO and established by the CA on a yearly basis.
Art.96. – (1) TSO shall permanently publish the tariffs related to the use of the NTS on its webpage.
(2) The update of the tariffs shall be performed at least 30 days prior to the beginning of the capacity booking period.

NTS transmission tariff

Art.97. – NU shall pay to the TSO an amount corresponding to the value of the transmission services, according to the contractual provisions.
Art.98. - Repealed

Tariff for exceeding the booked capacity

Art. 99. – For each gas day and for each NTS entry/exit point where the NU exceeded the booked capacity, such NU shall pay to the TSO a tariff for exceeding the booked capacity (TDCR) calculated as follows:

$TDCR = RCf \times (C_{UTL} - C_{REZ})$, where:

RCf – fix component of capacity booking of the tarrif related to the ferm gas transmission service per day (RON/MWh/h);

C_{UTL} – total capacities actually used for the same type of NTS entry/exit points (MWh/day);

C_{REZ} – total capacities booked by the NU for the same type of NTS entry/exit points (MWh/day).

Table 4 – Repealed

Art.100. Repealed

Tariff for the failure to ensure the booked capacity

Art. 101. – (1) The TSO shall pay to the NU a tariff for failing to ensure the booked capacity.

(2) It is considered that the TSO fails to ensure the booked capacity when it applies a capacity limitation/interruption without complying, out of its exclusive fault, with the duties under the transmission contract or the Network Code.

(3) The tariff for not ensuring the booked capacity shall be determined for each gas day and each type of NTS entry/exit points where the TSO failed to ensure the capacity booked by the NU, according to the following formula:

TNCR= RCf x (C_{REZ} – C_{ASG}), where:

RCf – fix component of capacity booking of the tarrif related to the ferm gas transmission service per day (RON/MWh/h);

C_{REZ} – total capacity booked by the NU for the same type of NTS entry/exit points (MWh/day);

C_{ASG} – total capacity actually ensured by the TSO for the same type of NTS entry/exit points (MWh/day).

Table 5 - Repealed
Table 6 – Repealed

Daily imbalance tariff

Art.102. – The daily imbalance tariff (DIT) is determined by multiplying the final amount of daily imbalance (Q) established according to Art. 88, with the marginal sales price or the marginal purchasing price, as appropriate, established according to Art. 102^2.

Table 7 – Repealed

Tariff for the cumulative imbalance - Repealed

Art. 102^1 - In the order of precedence below the average weighted price equals:

a) the average price of the trading day, weighted against the traded quantities, related to the intra-day products traded within the markets for short - term standardized products managed by the operators of the centralized Romanian markets having as subject the gas delivery at the VTP on a section of the gas day for which the final daily imbalances were determined or in the absence of such price:

b) the average price of the trading day, weighted against the traded amounts, related to the day-ahead products traded within the short - term standardized products markets managed by the operators of the Romanian centralized markets having as subject the gas delivery at the VTP over the entire gas day for which the final daily imbalances were determined or when such price is missing:

c) the most recent average price of the trading day, weighted against the traded quantities, related to the within-day products traded within the short - term standardized products markets managed by the operators of the Romanian centralized markets, published by the

latter, registered in the 6 (six) trading days prior to the gas day for which the final daily imbalances were determined or when such price is missing:

d) the most recent average price, weighted against the traded quantities of the trading day, related to the day-ahead products, traded within the short - term standardized products markets managed by the operators of the Romanian centralized markets, published by the latter, registered in the 6 (six) trading days prior to the gas day for which the final daily imbalances were determined or when such price is missing:

e) the most recent updated average price, determined by the operators of the Romanian centralized gas markets for the weekly products traded within the medium and long term standardized products markets for the gas delivery at the VTP in the week including the gas day for which the final daily imbalances were determined or when such price is missing:

f) the price of 1 leu/MWh, applicable to the NUs who registered `surplus` imbalances on the gas day for which the final daily imbalances were determined, and the price of 500 lei/MWh, applicable to the NUs who registered `deficit` imbalances on the gas day for which the final daily imbalances were determined.

Art. 102^2. – (1) The marginal sales price equals the lesser value of:

a) the lowest price related to the sales transactions conducted by the TSO within the short-term standardized product markets managed by the centralized Romanian market operators for the gas day for which the final daily imbalances were determined; or
b) the price of the balancing services purchased by the TSO for the physical balancing of the NTS in cases of surplus and used by the TSO in the gas day for which the final daily imbalances were determined, or
c) the average weighted price related to the gas day for which the final daily imbalances were determined, determined according to the provisions of art 102^1, less the correction component, representing 10%.

Remark:

According to point 12 of art. 6 of the Order no. 35 of February 27th 2019, for the time frame between April 1st 2019 and February 28th 2022, a new paragraph, (1^1), is introduced at Art. 102^2, after paragraph (1), with the following content:

(1^1) Derogating from the provisions of par. (1), the marginal sales price in case of domestic gas needed for the consumption of the end-users, equals the average weighted price less the adjustment component, representing 10%".

Point 12 of Art. 6 of the Order no. 35 of February 27th 2019 has been repealed by point 4 of Art. I of the Order no. 47 from March 29th 2019, published in the Official Journal no. 246 of March 29th 2019, therefore the above mentioned addition does not generate effects.

(1^1) Repealed.

(2) The marginal purchasing price equals the higher value of:

a) the highest price related to the purchasing transactions conducted by the TSO wihin the short-term standardized product markets managed by the centralized Romanian market operators for the gas day for which the final daily imbalances were determined; or

b) the price of the balancing services purchased by the TSO for the physical balancing of the NTS in cases of "Deficit" and used by the TSO on the gas day for which the final daily imbalances were determined, or

c) the average weighted price related to the gas day for which the final daily imbalances were determined, determined according to the provisions of art 102^1, less the correction component, representing 10%.

(2^1) Repealed.

Art. 102^3. Repealed

Art. 102^4. Repealed

Art. 102^5. Repealed

Art. 102^6 – (1) The entire expenses and income related to the balancing activities shall be recorded separately in the accounting records of the TSO.

(2) The TSO transfers to the NU all the expenses and revenues resulting from the balancing actions, the difference between the expenses and revenues are allocated to the NU on a monthly basis.

(3) The difference between the expenses and the revenues resulting from the balancing activities shall be allocated to the NU according to the methodology drawn up by the TSO and approved by NRAE.

(4) The first allocation to the NU of the difference between the expenses and the revenues resulting from the balancing activities shall be performed after the approval of the methodology under paragraph (3).

(5) The level of the expenses and revenues resulting from the balancing activities shall be published by the TSO on its website, according to the NRAE regulations.

Art.103. Repealed
Table 8 – Repealed
Table 9 – Repealed

Art. 104. – (1) The imbalance tariffs determined in line with the provisions of art. 102, 102^1 and 102^2, as well as the value of the imbalances determined based on such tariffs will be communicated to each NU, on the operational platform, by the TSO, both daily and in the month following the delivery month.

Invoicing

Art. 105. – (1) For the entire duration of the administration of transmission contracts, the TSO shall issue and send the following to the NU until the 15th of the subsequent month to the one for which it provided the transmission service:

a) an invoice for the transmission services provided for the previous month, based on the final allocation;
b) an invoice for the final daily imbalances registered as "Deficit", recorded in the previous month, the value of which was calculated according to the provisions of Art.102^4;
c) an invoice for the tariff for exceeding the booked capacity, determined according to Art. 99 and/or one for the tariff charged for the failure ofproviding the booked capacity, determined according to Art. 101, as appropriate.

(2) As of April 1st 2016, the invoice under paragraph (1) b) shall also include the value of the final daily imbalances registered in the previous month, determined according to the methodology at Art. 102^1, 102^3 and 102^5.

(3) The TSO is entitled to issue a pro - forma invoice representing the estimated value of the service provided to the NU in the relevant month, not later than the 15th of the gas month.

Disputing the invoices

Art.106. – (1) The procedure established by this section shall apply in case invoices are being disputed.

(2) In order to check the invoice, based on a notification sent to TSO, NU shall be entitled to access the data/documents substantiating the issued invoice.

(3) Should the review of the data/documents reveal any errors in the invoice or the determination method, such errors shall be immediately rectified and the related adjustments shall be performed.

(4) All data/documents substantiating the invoice shall be kept for a time-frame of 5 years. The data/documents subject to disputes or court litigations shall be kept, at least, for a time-frame of 1 year upon the settlement of the relevant dispute.

Payment

Art. 107. – (1) All payments made by NU shall be performed by bank transfer into the account specified by TSO.

(2) All payments made by the TSO shall be performed by bank transfer into the account specified by NU.

(3) Each party may chose a different bank, provided it sends to the other party a previous notification within at least 22 working days prior to the due date of the payment.

(4) The payment shall be deemed as timely executed if the account of the TSO or the NU, as appropriate, has been credited until the due date of the payment.

ANNEX no. 1

(to the Network Code for
The National Gas Transmission System - NTS)

CONTRACT
For the gas transmission related to the entry points of the NTS (National Transmission System)
no. ... from year..... month ..... day .....

The National Gas Transmission Company TRANSGAZ - S.A. Mediaş, with the headquarter in Mediaş, 1, Constantin I. Motaş Square, Sibiu county, post code 551130, telephone 0269/803333, fax 0269/839029, fiscal registration code RO13068733, registerea in the Trade Register under no. J 32/301/2000, holder of the account no. RO79RNCB0231019525310002, opened at the bank B.C.R. - Mediaş Subsidiary, legally represented by the
General Manager, Mr. Ion Sterian, in the capacity of provider of the transmission service, hereinafter referred to as the transmission system operator or TSO, on the one hand,
and
in the capacity of user of the National Transmission System (NTS) and beneficiary of the transmission services, hereinafter referred to as the network user or NU, on the other hand,
agreed upon concluding the present transmission contract related to the NTS entry points, hereinafter referred to as the Contract.

I. Terminology and applicable legislation

ART. 1

(1) The terms used in the present contract are defined in the Energy and Gas Law no. 123/2012, as subsequently amended and supplemented, as well as in the Network Code

for the National Gas Transmission System, approved by the Order of the President of the Romanian National Energy Regulatory Authority (NRAE) no. 16/2013, as subsequently amended and supplemented (the Network Code).

(2) The provisions of this contract are supplemented by the provisions of Law no. 287/2009 regarding the Civil Law, republished, as subsequently amended (the Civil Code), the Energy and Gas Law no. 123/2012, as subsequently amended and supplemented, and the NRAE regulations, including the provisions of the Network Code and the Technical Conditions for the operation of the metering points of the gas amounts in the entry/exit points of the NTS, hereinafter referred to as the „Technical Conditions", as well as any other valid legal provisions. For all situations not explicitly provided for in this contract, the provisions of the Network Code are applicable.

II. - Scope of the contract

ART. 2

(1) The scope of this contract is the provision of natural gas transmission services, including the whole range of activities and operations carried out by the TSO for or in connection with capacity booking in the NTS entry points.

(2) The contract entitles the NU to nominate/re-nominate/take into the NTS, at the entry points, gas quantities within the limit of the booked capacity.

(3) Based on this contract, the NU is entitled to use the booked capacity at the NTS entry points for gas take-ins into the NTS with the purpose of trading on VTP using notifications VTP and/or the transmission to the exit points from the NTS, based on the transmission contract for the exit points of the NTS.

(4) The capacity booked at the entry points of the NTS is provided for in Annex no. 2 to this contract and is expressed in MWh/day.

(5) Charging the tariff for exceeding the capacity and the tariff for the failure of ensuring the booked capacity shall be performed according to the provisions of the Network Code and of the applicable NRAE regulations.

III. – Duration of the contract

ART. 3

The present contract is concluded for..... (one gas year, one quarter, multiple quarters, one month, multiple months, daily, multiple days) in the time frame ..... .

IV. Conditions for ensuring the firm capacities in the NTS entry points from the underground storage facilities.

ART. 4

The TSO, acting correctly and cautiously, shall ensure the firm capacity booked by the NU in the NTS entry points from the underground storage facilities, throughout the contract duration.

V. Gas metering in the entry points of the NTS

ART. 5

The metering of the natural gas amounts is performed on a permanent basis according to the provisions of the specific legislation, whereas the determination of the energy amounts entering the NTS is carried out according to provisions of the Network Code.

VI. Applicable tariffs, invoicing and payment conditions

Art.6

(1) The NU shall pay to the TSO the value of the booked capacity, determined based on the applicable tariff for capacity booking at the moment the booked capacity can be used.
(2) The TSO shall pay to the NU the value of the capacity which it failed to ensure, determined based on the applicable tariff for failure of ensuring the booked capacity at the moment the NU was not able to use the booked capacity.
(3) The NU shall pay the transmission system operator additionally, as applicable, the tariffs established under the Network Code.
(4) The tariffs referred to in paragraphs (1) and (2) are set out in Annex 1 to the Contract.
(5) The TSO shall submit to the NU, until the 15th of the month following the month for which the transmission service was provided, separate invoices (hereinafter referred to as `monthly invoices`), as applicable:

a) an invoice for the transmission services provided in the previous month;
b) an invoice representing the tariff for exceeding the booked capacity, determined according to Art. 99 of the Network Code, and/or the tariff for the failure of ensuring the booked capacity, determined according to Art. 101 of the Network Code, as applicable;
c) an invoice for the additional capacity, determined according to Art. 51 of the Network Code, resulting after the nomination by the NU of a gas amount exceeding capacity booked by the NU in a NTS entry point.

(6) In case the NU choses to make an advance payment, the TSO shall issue and submit to the NU an invoice for the advance payment equal to the value of the booked capacity determined for the part of the month in which the service was provided. The invoice shall be submitted at least 5 calendar days prior to the beginning date of each month of service provision.

ART. 7

(1) The payment of the invoices under Art. 6 (5) shall be performed within 15 calendar days upon issuing the invoices. In the event that the due date is not a business day, the deadline is set on the following business day.
(2) The payment of invoices issued according to Art. 6 (6) shall be performed until the beginning date of provision of the transmission service, according to the invoice for the advance payment issued to this respect.

VII. Invoicing and payment conditions for the daily transmission contracts^1

ART. 8
(1) Prior to the beginning of the provision of the transmission services, the TSO issues an invoice, for an advance payment, issued for the equivalent of the booked capacity for which the natural gas transmission services are provided.
(2) The payment of the invoice issued according to paragraph (1) shall be performed prior to the commencement of the provision of the transmission services.

ART. 9
The payment duty is deemed to be fulfilled on the date of entry of the entire amount into the account of the transmission system operator.
^1This clause applies only to daily transmission contracts.

VIII. Rights and duties of the TSO

ART. 10

The TSO has the following rights:

a) to collect from the NU the value of the services rendered and the late payment penalties;
b) to execute the financial guarantee provided by the NU in the event of failure to pay at maturity of the invoices issued;
c) to limit/interrupt the provision of transmission services, with prior notice, in the event of non-fulfilment of the payment duties within the terms and and conditions stipulated in the present contract;
d) to interrupt the provision of transmission services, in case the NU does not comply with the provisions of the Network Code;
e) to refuse the take-ins into the NTS of the natural gas which does not comply with the minimum quality conditions stipulated in the Technical Conditions;
f) to invoice the NU for the provided services, in compliance with the tariffs stipulated in the present contract, and, if necessary, for the late payment penalties;
g) to limit or interrupt the provision of transmission services in order to remedy the damages occurring in the NTS, informing the NU within maximum 6 hours after the TSO has been informed;
h) to limit the provision of transmission services to the level of the approved nomination, if the total energy take-off is higher than this nomination;
i) to limit or interrupt the provision of the firm transmission services, if the NU does not comply with the provisions of Chapter X "Guarantees";
j) all the other rights as provided for in the Network Code.

ART. 11

The TSO has the following duties:

a) to notify the NU with regard to potential limitations/disruptions in the provision of transmission services in the event of non-fulfilment of the payment duties;

b) to resume the provision of the transmission services within 24 hours upon the date of fulfilment of the payment duties;
c) to take over, transmit and deliver the energy amounts to the NU, under the conditions laid down in the bilateral conventions concluded according to art. 46 paragraph (6) of the Network Code and according to the approved nominations/re-nominations;
d) to allow the NU access to the data/documents underlying the invoice in case the NU disputes the issued invoice;
e) to make available to the NU the capacity booked at the NTS entry points according to the contracted levels;
f) to pay to the NU the tariff for the failure of ensuring the booked firm capacity;
g) to answer and settle the notifications of the NU concerning the provision of transmission services under the conditions provided for by the valid legislation;
h) all the other obligations as provided for in the Network Code.

IX. Rights and duties of the NU

ART. 12

The NU has the following rights:

a) to use the capacity booked at the entry point of the NTS for the purpose of taking the gas into the NTS, aiming at trading in the VTP based on notification and/or the gas transmission to the NTS exit points, according to the transmission contract related to the NTS exit points;
b) to return voluntarily or to transfer the approved capacity, according to the provisions of the Network Code;
c) to transfer natural gas amounts, according to the provisions of the Network Code;

d) to request and receive from the TSO the related costs for the failure to ensure the booked capacity, according to the provisions of the Network Code, determined on the basis of the tariff for the failure to ensure the booked firm capacity;
e) to challenge the invoices issued by the TSO and to request the access to the data/documents underlying the invoice;
f) all the other rights as provided for in the Network Code.

ART. 13

The NU has the following duties:

a) to pay in full and in due time the invoices issued by the TSO according to the provisions of the present contract and, where applicable, the related penalties for the delayed payments;

b) to accept the limitation/interruption of the transmission service under the conditions stipulated in the present contract;

c) to set up precisely the guarantees provided for in this contract;

d) to announce the TSO, by means of nomination/re-nomination, with regard to the designated partner and, respectively, the related amounts of energy;

e) to take all necessary precautions, by means of suppliers and system operators, to comply with the energy supply for its customers, including for the interruptible customers, according to the valid legal provisions;

f) to take the natural gas into the entry points of the NTS in compliance with the conditions regarding the quality of the natural gas provided for in the Technical Conditions;

g) all the other obligations as set out in the Network Code.

X. Guarantees

A. General provisions

ART. 14

(1) For the purpose of fulfilling their duties under the Contract, either Party shall establish a guarantee for the other Party according to the Network Code.
(2) In order to fulfil the duty under paragraph (1), the TSO shall provide the credit rating.
(3) The NU is exempted from the duty to provide the payment guarantee to the TSO if:
a) it provides the proof of a credit rating issued by one of the rating agencies agreed upon by the TSO or at least at the same level as the one of the TSO, valid for the duration of the Contract;
b) it pays the transmission services in advance.
(4) In case, for the duration of this Contract, either the NU rating level or the agency agreed upon by the TSO changes, the NU is bound to notify the TSO within 3 working days upon the occurrence of such change and shall prove the fulfillment of its duties related to guarantees, as provided for under this Chapter, no later than 5 working days from the occurrence of such change.

ART. 15

(1) The financial guarantee shall be submitted by the NU as:
a) a letter of bank guarantee in lei or the euro equivalent at the exchange rate of the Central European Bank valid on the date the guarantee was issued (according to Annex 4) and/or
b) a guaranteed account (collateral deposit) in lei or the euro equivalent at the exchange rate of the Central European Bank valid on the date the guarantee was issued and/or
c) an escrow account in lei or the euro equivalent at the exchange rate of the Central European Bank valid on the date the guarantee was issued.
(2) The TSO shall accept the letter of bank guarantee issued by a bank having a rating endowed by one of the following rating agencies: Standard&Poors, Moody's or Fitch, at least for the

`investment grade` level. The equivalence between the ratings of the three agencies is published on the website of the TSO.

ART. 16

(1) In case the NU provides the proof of its the creditworthiness according to Art. 14 (3) (a), the TSO may request, in certain legitimate cases, the provision of a financial guarantee according to Art. 15 or the advance payment related to its duties arising from the commercial relationship with the NU. The request for a guarantee or advance payment shall be made and explained in writing.
(2) A legitimate case from the point of view of the transmission services is considered the situation in which the NU has a payment delay for an amount of at least 10% of the value of the last invoice or of the amount of the partial payment duties after having received a notification from the TSO to this respect.

B. Yearly and quaterly product

ART. 17

(1) The NU is bound to supply the TSO with a financial guarantee according to (2) at least 5 working days before the beginning of the transmission service.
(2) The level of the financial guarantee provided by the NU equals the average value of the estimated monthly invoices for the transmission services related to the following period of use.
(3) The financial guarantee established according to (2) shall be valid starting with the bank day preceding the beginning date of the transmission service and shall cease on the 60th calendar day following the expiry date of the Contract.
(4) The NU may waive the option of establishing a transmission service guarantee by performing advance payments. To this respect, the NU shall notify the TSO in wrinting with

regard to the option of advance payment , within 7 working days after the termination of the booking period.
(5) The advance payment equals the value of the monthly invoice for the transmission services related to the following period of use.
(6) The advance payment/advance payment invoice shall be compensated with the settlement invoice of the month for which the payment was performed.
(7) In case such advance payment does not cover the value of the settlement invoice for the respective month, the difference shall be paid by the NU on the invoice due date.
(8) The NU may waive the advance payment option, subject to the provision of a financial guarantee according to Art. 14 (3) or Art.15.

C. Monthly product

ART. 18

(1) The NU is bound to submit to the TSO the financial guarantee in the amount provided for in paragraph (2) at least 3 working days before the beginning of the transmission service period.

(2) The level of the financial guarantee provided by the NU equals the estimated monthly invoice for the transmission services for the following period of use.

(3) The financial guarantee established according to par. (2) shall be valid from the banking day preceding the date of commencement of the provision of the transmission service and shall cease to be valid on the 60th calendar day following the termination of the contract by its due date.

(4) The NU may waive the option of establishing a guarantee for the provision of the transmission service by performing advance payments. To this respect, the NU shall notify the TSO in writing, within maximum two working days after the termination date of the capacity booking period, with regard to the advance payment option.

(5) The advance payment equals the monthly invoice for the transmission services related to the following period of use.

(6) The advance payment/invoice is compensated with the settlement invoice for the month for which the payment was performed.

(7) In case the advance payment in question does not cover the value of the settlement invoice for that month, the difference shall be paid by the NU on the due date of the invoice.

D. Daily product

ART. 19

In case of the daily product, the payment is performed in advance, within 24 hours from the acceptance and conclusion of the transmission contract and before the beginning of the provision of transmission services according to art. 7.

ART. 20

(1) The payment guarantee issued according to Art. 17 (1) shall be valid starting from the bank day preceding the beginning date of the transmission service and shall cease on the 60th calendar day following the expiry date of the Contract.

(2) In case the level of the financial guarantee:

a) decreases by more than 5% below the level specified in Art. 17 (2), the NU shall supplement the financial guarantee accordingly;

b) is more than 5% above the level specified in Art. 17 (2), the TSO shall return to the NU the difference between the actual level of the guarantee and the one specified in Art. 17 (2).

(3) The payment guarantee shall be adjusted within no more than 5 working days upon the recording date of the decrease/increase as compared to the level specified in Art. 17 (2).

(4) The TSO shall be entitled to make claims against the guarantee under this Article within the limits of the incurred prejudice, if the NU fails to fulfil its contractual duties completely or partly or if it delays to fulfil such obligations.
(5) Prior to making any claim against such guarantee, the TSO shall notify the NU with regard to the duties it failed to fulfil.
(6) The TSO shall send the the notification regarding the execution of the guarantee by fax within 24 hours after the termination of the period specified under Art.23 (1) (a).
(7) In case the guarantee is executed partly or entirely, the NU shall re-establish the guarantee within 5 days from execution.

XI. Transmission program

ART. 21

(1) The transmission program will be submitted directly into the IT platform according to the provisions of art. 27 letter B of the Network Code and will represent Annex no. 3 to this contract.
(2) The transmission program may be altered according to the procedure provided for in the Network Code.
(3) The parties have the duty to comply with the provisions regarding the minimum/maximum pressure in the NTS entry points, as set forth in the bilateral conventions concluded according to the provisions of the Network Code.

XII. Confidentiality Clause

ART. 22

(1) The parties are required to keep confidentiality with respect to the data, documents and information obtained from the execution of the contract.

(2) The following data, documents and items of information are exempted from the provisions of para. (1):
– those which may be disclosed according to the Network Code;
- those for whose disclosure the written agreement of the other Contracting Party has been obtained;
- those required by the competent state institutions, based on a legal duty related to information.

(3) The provisions of this article shall remain valid for a period of five years after the termination of the contractual relations.

XIII. Contractual liability

ART. 23.

(1) Failure to meet the duties related to invoice payment as stipulated under Art. 7 (1) shall incur:
a) delay penalties related to the unpaid amount, equal to the delay interest due for failure to perform the budgetary payments in due time, for each day of delay, starting with the 16th calendar day upon the date the invoice was issued until its full payment, the payment date included, or until the execution of the guarantee stipulated by the contract, in case of failure to meet the payment duty within 15 calendar days from the maturity date;
b) in case of failure to meet the payment duty, the limitation/interruption of the gas transmission service, with a prior notice of 3 calendar days, starting with the day following the period of 15 calendar days foreseen at letter a);
c) the limitation/interruption of the gas transmission service, with a prior notice of 3 calendar days, starting with the day following the day when the sum of the NU imbalances exceeds the value of the balancing guarantees.

(2) In case the maturity date or the day following the warranty expiration date is a bank holiday, the terms foreseen at paragraph (1) shall be shifted accordingly.

ART. 24

In case the NU, upon TSO`s request, does not voluntarily return/does not refer to the transfer facility of the booked and not used capacity, thus the mandatory capacity transfer being applied, the NU shall pay 5% of the transferred capacity for the time-frame between the date of mandatory capacity transfer and the expiry date of the Contract.

ART. 25

(1) The NU is entitled to request and receive an amount established based on the tariff for the failure of ensuring the booked capacity, according to the Network Code, in case the TSO does not keep at NU's disposal the entire transmission capacity booked by the latter;
(2) In case the amount under paragraph (1) does not cover the entire prejudice incurred, the NU is entitled to request and to additionaly receive prejudice, up to full coverage of the one incurred in the event the TSO does not meet its duty related to the gas transmission services as well as any other duty set forth within this Contract.

XIV. Force majeure / Act of God

ART. 26

(1) Force majeure is the external, unpredictable, absolutely insurmountable and inevitable event that exonerates the parties from liability, under art. 1.351 of the Civil Code.

(2) In the event that the force majeure does not cease within 30 calendar days, the parties have the right to request the rightful termination of the contract, without any of them having the right to claim compensatory prejudices.
(3) The party invoking force majeure is bound to notify the other party, in writing, within maximum 5 days upon its occurrence and the proof of force majeure shall be communicated within 30 days upon its occurrence.

ART. 27

(1) The fortuitous case is an event that cannot be predicted or prevented by the party that would have been liable provided the event had not occurred.

(2) Parties are exonerated of liability when the performance of a duty has become impossible due to circumstances that are not attributable to the party that should have fulfilled it.

XV. Termination of the contract

ART. 28

(1) The present contract is terminated:

a) once the contractual duties have been fulfilled;

b) upon the expiry of the contract;

c) *ipso jure*, in case of failure to meet one of the requirements regarding the access to the transmission services related to the NTS, according to the Network Code, including in case of dissolution of the contract related to balancing and VTP access concluded between the TSO and the NU;

d) in case of voluntary return of the total approved capacity, according to the Network Code;

e) in the case of mandatory transfer of the total capacity approved under the conditions of the Network Code;
f) by denunciation in case of bankruptcy, dissolution, liquidation or withdrawal of the license, as the case may be, of the contractual partner;
g) on grounds of force majeure, according to the contract.

(2) The termination of this contract has no effect whatsoever upon the contractual duties arising from the performance of the contract until its termination.

(3) In the event of the termination of the contract before its expiry date, according to par. (1) lit. c) and f), the NU is bound to pay the TSO the value of the contracted capacity products for the remaining period until the expiry date of the contract.

XVI. Notifications

ART. 29

(1) The parties are bound to notify each other, for the entire duration of the contract, to the headquarters provided in the introductory part of this contract with regard to any change in the circumstances envisaged at the time the contract was signed.
(2) The deadline for notification shall be no more than 5 calendar days upon the date of the change of circumstances, unless otherwise specified in this contract.
(3) The notification means shall be determined by the Parties by mutual agreement, according to the provisions of the Network Code.

XVII. Applicable legislation and dispute settlement

ART. 30

(1) The provisions of this contract are subject to and are interpreted according to the valid Romanian legislation.

(2) The parties agree that all misunderstandings regarding the validity, interpretation, execution and termination of the contract shall be settled amicably. Should the parties fail to settle the disputes in an amicable way, these are to be settled by the competent courts of law.

XVIII. Contract divestiture

ART. 31

(1) Neither party may in any way, in whole or in part, assign to a third party any rights and/or duties arising from this Contract unless there is a written consent of the other Party that cannot be unduly refused.

(2) The notification of the intention to assign is submitted to the other party at least 10 working days prior to the planned divestiture.

(3) The notified party is bound to reply, presenting its reasons, within a maximum of 5 working days upon the registration date of the notification.

XIX. Further clauses

ART. 32

(1) This contract may be amended or supplemented by an addendum in written form.

(2) By way of exception to the provisions of par. (1), this contract shall be automatically amended or supplemented with any change or addition applicable to the gas transmission contract or to the TSO-NU contractual relation, provided by a national or European regulatory act, each party having the duty to take over the respective changes/additions.

ART. 33

The following annexes are inherent parts of this agreement:

– Annex no. 1 – Tariffs for the provision of the transmission services;

– Annex no. 2 – Booked Capacity in the NTS entry points;

– Annex no. 3 - Transmission programme;

– Annex no. 4 – Template of the Bank guarantee letter.

The present contract was concluded today, on ....., in two original counterparts and each party declares to have received an original copy thereof.

Transmission System Operator Network User

SNTGN TRANSGAZ S.A.

ANNNEX no. 1^1
(to the Network Code for the National gas transmission system)

FRAME-CONTRACT – for the gas transmission concluded subsequently to the procedure related to incremental capacity booking within the national gas transmission system

The National Gas Transmission Company Transgaz S.A., headquartered in Mediaș, 1 C. I. Motas Square, Sibiu County, phone. 0269-803333, 0269-839031, e-mail cabinet@transgaz.ro, registered with the Trade Register under no. J32/301/2000, tax no. RO13068733, transfer account IBAN RO 09 RNCB 0231 0195 2531 0001, opened with B.C.R. Mediaș, as transmission service provider, hereinafter referred to as the "transmission system operator" or the "TSO", on one hand

and

the Network user, hereinafter referred to as NU ..... [to be filled out with the name and identification data of the network user], as the beneficiary of the transmission service, on the other,

hereinafter referred to individually as "Party" and together as "Parties",

have agreed to conclude the underlying gas transmission contract, consequently to the procedure related to incremental capacity booking for the allocation of incremental capacity in the ..... point [To be filled out, as appropriate, with „entry" or „exit ".] of the national gas transmission system in Romania (NTS) ..... [To be filled out with the name of the point.].

CHAPTER I.

Terminology; law and further applicable documents

Art. 1. (1) The terms used in this gas transmission contract shall be understood as they are hereinafter defined:
- confirmation date – the date of ..... [the confirmation date provided in the incremental capacity process documentation shall be filled in.], up to which the NU has the right to terminate the contract unilaterally, according to art. 8 letter e);
- beginning date – the date of ..... [the beginning date provided in the incremental capacity documentation shall be filled in.], from which the TSO will ensure all conditions for the actual use of incremental capacity allocated to the NU.

(2) The terms used in the contract are defined in the Electricity and Gas Law no. 123/2012, as subsequently amended and supplemented, as well as in the Network Code for the National Gas Transmission System, approved by the Order of the President of the National Regulatory Authority for Energy no. 16/2013, as subsequently amended and supplemented, hereinafter referred to as the Network Code.

(3) The provisions of this contract are supplemented by the provisions of the Civil Law, of the Electricity and Gas Law no. 123/2012, as subsequently amended and supplemented, of the regulations of the National Regulatory Authority for Energy (NRAE), including the provisions of the Network Code.

CHAPTER II.

Scope of contract

Art. 2. (1) The scope of the Contract is the transmission capacity booking and the provision of firm gas transmission services in the .....point [To be filled out, as appropriate, with „entry" or „exit"] of the NTS ..... [To be filled out with the name of the point.] as of..... [To be

filled out with the starting date provided in the documentation related to the incremental capacity process.].
(2) In case the point referred to under paragraph (1) is an exit point from the NTS, the scope of the contract stipulated in par. (1) shall be complemented by all activities and operations carried out by the TSO for or in connection with the transmission through the NTS of the gas amounts, expressed in energy units, up to that NTS exit point.
(3) The booked transmission capacity has the following characteristics:
- Identification coordinates of the point (longitude/latitude):
- the town /administrative unit:
- type of point [Entry/Exit]:
- booked transmission capacity, expressed in MWh/day: ... [To be filled out with the booked transmission capacity in each year of the period provided for in art. 3 of the contract.].-
(4) In case according to thespecific procedure for carrying out the incremental capacity process, the TSO offers the NU additional incremental capacity and the NU accepts, then, the booked transmission capacity provided in art. 2 par. (3) will be amended accordingly by concluding an addendum to this contract.

CHAPTER III.

Contract duration

Art. 3. The Contract is concluded for the time-frame between …… [insert the starting date] and ……[insert the last day of the last gas year for which the capacity was allocated to the NU, but no more than 40 years] and generates effects on the date of the signature of both parties.

CHAPTER IV.

Gas metering in the NTS entry/exit points.

Art. 4. (1) The gas amounts shall be metered and the determination of energy amounts taken in and off the NTS through the interconnection point shall be performed according to the valid regulations.
(2) The gas amounts circulated through the interconnection points shall comply with the minimum quality specifications established by the valid regulations.

CHAPTER V.

Applicable tariffs. Payment and invoicing terms and conditions.

Art. 5. (1) The NU shall pay to the TSO the value of the booked transmission capacity established based on the applicable tariff for capacity booking on the date of the provision of the transmission service. In the situation provided by art. 2 par. (2), the NU shall additionally pay to the TSO, as the case may be, the volume component of the tariff applicable on the date of the provision of the transmission service for the transmitted amount of gas as determined on the basis of the final allocations.
(2) As applicable, the NU shall pay additionally to the TSO further tariffs under the Network Code. Invoices issued to this respect shall be paid within 15 calendar days from the invoice notification date. If the due date is a bank-holiday, such term is considered to be achieved on the next working day.
(3) The firm gas transmission services provided shall be invoiced in lei based on the booked capacity, the number of days in the invoicing period and the natural gas amounts determined based on the final allocations, in line with the provisions of the Network Code.
(4) The payment method, as well as the designation of the banks conveined upon for carrying out the banking operations shall be established by mutual agreement, in compliance with the valid legislation.

(5) Any amount payed under this contract shall be considered to have been received when the creditor's account is credited with the appropriate amount.

CHAPTER VI.

Rights and duties of the TSO

Art. 6. The TSO shall be entitled to:
a) receive the value of services provided and of the delay penalties;
b) execute the financial guarantee/guarantees submitted by the NU according to chapter VIII „Guarrantees" of the underlying contract in case of failure to pay the issued invoices until their maturity date;
c) limit or interrupt, as applicable, the transmission services, with a prior notice of 3 (three) calendar days, if the payment duties are not fulfilled according to the terms and conditions hereof;
d) limit or interrupt the firm transmission services, if the NU fails to comply with the provisions of Chapter VIII - `Guarantees`
e) limit or interrupt the transmission services, if the NU fails to comply with the provisions of the Network Code, with a prior notice of 3 (three) calendar days sent to the NU before the limitation/interruption;
f) refuse to accept the take-ins into the NTS of the gas which does not comply with the minimum quality specifications established in the specific legislation;
g) invoice the value of the `Deficit` imbalance of the NU, including the potential delay penalties, based on the provisions and tariffs under the Network Code;
h) invoice the NU the value of the transmission services provided under the scope of the Contract, based on the tariff for capacity booking applicable at the moment the booked capacity may be used, and, as applicable, of the volume component of the tariff applicable for the time-frame in which the booked capacity may be used, for the amount of gas transmitted, including the delay penalties;

i) limit or interrupt, as appropriate, the firm transmission services for the purpose of the execution of unscheduled maintenance works, notifying the NU of such limitation or interruption within maximum 6 hours;
j) to limit or, as applicable, to interrupt the provision of firm transmission services for the purpose of the execution of scheduled maintenance works;
k) all further rights, as provided for in the valid legislation or in this contract.

Art. 7. The TSO has following duties:
a) to notify the NU, within 10 calendar days upon the conclusion date of the last stage provided for by the specific procedure for carrying out the incremental capacity process, with regard to the successful or unsuccessful completion of this process;
b) To ensure all conditions for the effective use of the incremental capacity booked by the NU from the beginning date and to ensure the provision of transmission services under this contract within the time-frame provided for in Art. 3 in case the minimum capacity threshold provided for in the documentation underlying the incremental capacity allocation has been met, after the last step provided for by the specific procedure for carrying out the incremental capacity process;
c) To notify the NU with regard to possible limitations or, as appropriate, disruptions in the provision of transmission services in the event of filure to fulfil the payment duties;
d) To resume the transmission services within 24 hours from the date of fulfilment of the NU's payment duties;
e) To allow the NU to access the data/documents underlying the issued invoice, in the event that the NU disputes it;
f) To take in, transmit and take off to the NU the confirmed quantities expressed in energy units according to the provisions of the Network Code and in compliance with the quality specifications provided for in this contract for the duration specified in art. 3;
g) answer and settle the complaints of the regarding the transmission services, according to the applicable laws;

h) pay in full and in time the invoices issued by the NU for the value of the `Surplus` imbalance of the NU;
i) To pay to the NU the tariff for the failure of ensuring the booked firm transmission capacity, for the duration stipulated in art. 3, according to the provisions of the Network Code and this contract;
j) To initiate the amendment and/or completion of this contract in case of change of circumstances, according to art. 20 par. (2);
k) To notify the NU, in writing, on a quarterly basis, on the status of all activities and works specific to the incremental capacity project related to the entry/exit point into/out of the NTS provided for in art. 2 par. (1);
l) To inform the NU on any delay in the implementation of the incremental capacity project related to the entry/exit point into/out of the NTS provided for in Art. 2 par (1) which would lead to the postponement of the beginning date provided for in art. (3) and to notify the NU on the new beginning date (delayed beginning date) within a maximum of 30 calendar days upon the date when the TSO became aware of that delay;
m) To perform all other dutiesfor as provided by the applicable law or this Contract.

CHAPTER VII.

Rights and duties of the NU

Art. 8. The NU has the following rights:
a) in the situation stipulated in art. 2 par. (2), to refuse to take-off at the NTS exit point the gas which does not comply with the quality requirements laid down in the specific legislation;
b) to challenge the invoices issued by the TSO and to request the access to the data/documents that underlie the issued invoice;
c) to charge, in compliance with the provisions and tariffs provided for in the Network Code, the value of the imbalances registered as "surplus", including any possible delay penalties;
d) to request the TSO to amend this contract under the conditions stipulated in art. 20 par. (2);

e) to terminate the contract unilaterally, at any time prior to the confirmation date, in compliance with the duty stipulated in art. 9 letter b), as appropriate;
f) to inform the TSO about the termination of the contract, with immediate effect, with no further duties and without the intervention of the courts or furthrt formalities, in case the beginning date provided for in art. 3 is postponed for 12 months or more, by submitting a written notification to the TSO within 90 calendar days upon the date of the last notification transmitted by the TSO according to the provisions of Art. 7 letter l) or, in the event that no notice is sent, within 90 calendar days upon the date when the NU has become aware of the 12 months-delay or longer;
g) to notify the TSO the extension of the contractual period accordingly, if the start date provided in art. 3 is deferred for less than 12 months in total or if the NU has not exercised the right provided for in subparagraph f) by submitting a written notification to the TSO within 90 calendar days of the date of the last notification sent by the TSO in accordance with the provisions of Art. 7 letter l);
h) to charge delay penalties according to the provisions of art. 16;
i) any further rights as provided for in applicable law or this Contract.

Art. 9. The NU has the following duties:
a) to pay in full and in due time the invoices issued by the TSO according to the provisions of the Contract
b) to pay to the TSO a compensation up to the maximum amount set in the documentation of the incremental capacity process and which can be reduced according to the provisions of the specific procedure for carrying out the incremental capacity process in the event that the incremental capacity process is unsuccessful, as a result of the exercise by the NU of the right under Art. 8 letter e);
c) to accept the limitation/interruption of the transmission service according to the Contract;
d) to set up accordingly the financial guarantee stipulated in chapter VIII „Guarantees";
e) All further duties as provided for in applicable law or this Contract.

CHAPTER VIII.

Guarantees

Art. 10. The NU shall set up in favour of the TSO:
a) A financial guarantee related to the NU obligation provided for in art. 9 letter b);
b) A financial guarantee for the provision of transmission services.

Art. 11. (1) The NU may be exempted from the duty of setting up the financial guarantee under art. 10 letter b) provided:
a) The NU makes the proof of a credit rating issued by one of the rating agencies Standard & Poor`s, Moody's or Fitch, at least at the same level as the one of the TSO, valid for the entire duration of the Contract; or
b) it pays in advance the value of the transmission services.
(2) In case during the execution of the Contract the NU`s rating is modified in the meaning of a decrease below the rating level of the TSO as well as in the case the issuing rating agency changes according to the provisions of par (1) letter a), the NU shall notify the TSO within 3 calendar days upon the occurrence of the change/alteration.

Art. 12. (1) The financial guarantees provided for in art. 10 are presented by the NU as:
a) a letter of bank guarantee in lei or euro equivalent at the exchange rate of the European Central Bank on the day the guarantee is issued; and/or
b) a guaranteed account (collateral deposit), in lei or in euro equivalent at the exchange rate of the European Central Bank on the day the guarantee is issued and/or
c) an escrow account in lei or in euro equivalent at the exchange rate of the European Central Bank on the day the guarantee is issued.
(2) The TSO accepts the letter of bank guarantee issued by a bank that has a rating issued by one of the rating agencies approved by the TSO at least for the "investment grade" level. The equivalence among the rating levels granted by the agencies is published on the TSO's website.

(3) The level of the financial guarantee provided for in art. 10 letter a) is..... [To be filled out with the maximum amount set in the incremental capacity documentation.].
(4) The financial guarantee under art. 10 letter a) shall be set up within 30 calendar days upon the date of the Contract signing and shall cease to be valid on the 20th calendar day upon the confirmation date.
(5) The financial guarantee under art. 10 letter a) may be executed by the TSO up to the amount determined according to the provisions of the specific procedure for carrying out the incremental capacity process. The remaining part of the guarantee will be refunded by the TSO within 15 calendar days upon the confirmation date.
(6) The level of the financial guarantee provided for in art. 10 letter b) will be twice the estimated average value of the monthly invoice for transmission services.
(7) should the level of the financial guarantee provided for in art. 10 letter b):
a) fall below the level stipulated in paragraph (6), the NU is required to supplement the level of the financial guarantee accordingly;
b) be above the level specified in par. (6), the TSO is bound to return to the UR the difference between the effective level of the guarantee and the one stipulated in par. (6).
(8) The adjustment of the guarantee level shall be performed not later than 5 working days upon the decrease/increase compared to the level established according to par. (6).
(9) The financial guarantee set up according to par. (6) shall be valid from the banking day preceding the beginning date of the provision of the transmission service and shall cease to be valid on the 60th calendar day following the termination of the contract.

Art. 13. (1) In case the NU provides the letter of creditworthiness according to Art 11 par. (1) letter a), the TSO may require, in legitimate cases mentioned under par. (2), the establishment of a payment guarantee according to Art 12 para (6).
(2) A legitimate case with regard to the transmission services is considered the event in which a NU has registered a payment delay for an amount representing at least 10% of the value of the last invoice or of the value of the partial payment duties, after the receipt of a notice from the TSO to this respect.

Art. 14. (1) The TSO is entitled to execute the financial payment guarantee if the NU fails to fulfil its contract duties entirely or partly or if it delays fulfilling such duties.
(2) Prior to executing the financial guarantee, the TSO shall notify the NU, in writing, on the duties it failed to fulfil, at least 5 calendar days prior to such execution.
(3) In case the financial guarantee provided in art 10 letter b), is executed partly or entirely, the NU shall re-establish the guarantee according to the provisions of art. 12 para (7) letter a).

CHAPTER IX.

Confidentiality

Art. 15. (1) The Parties shall keep confidentiality over all data, documents and information obtained during the execution of the Contract.
(2) Following data, documents and information are exempted from the provisions of paragraph (1):
a) those which have been known to a contracting Party prior to the date of receipt by the other contracting Party, or
b) those which have been disclosed upon written consent of the other contracting party for such disclosure,
c) those which are subject to legal duty of disclosure or
d) those which are disclosed to an affiliated economic operator; in this case, the party who discloses to the affiliated economic operator remains liable for the damages that the other party may suffer as a result of disclosure by the affiliated economic operator; the affiliated economic operator benefits from all the exceptions set out in this Article.
(3) The provisions of this Article shall be effective for a period of 5 years upon the termination of the Contract.
(4) Failure to comply with the duties arising from paragraphs (1) to (3) entails the liability of the Party in default, determined according to the provisions of the law.

CHAPTER X.

Contract Liability

Art. 16. (1) Failure to pay the invoices within the deadline stipulated in art. 5 par. (2) entails the execution of the guarantee established for this purpose and the payment of delay penalties, determined based on the outstanding amount, equal to the level of the due interest for the failure to pay the contributions to the state budget, for each day of delay, from the maturity date up to the full payment.
(2) In case the TSO does not comply with the duty stipulated in art. 7 letter b) to ensure, at the beginning date provided for in art. 3, all conditions of actual use of incremental capacity booked by the NU, it will pay to the NU a delay penalty, on a monthly basis. This penalty will equal the tariff for capacity booking of long-term firm services applicable in that month, multiplied by the booked daily capacity and the number of days of the specific month in which the booked capacity was not ensured.
(3) The TSO shall be exempted from the payment of the penalties for the first..... months [To be filled out with the number of months] upon the beginning date specified under Art. 3, provided the following conditions are cumulatively met:
(i) the TSO notifies the NU on the new beginning date (postponed beginning date), according to the provisions of Art. 7 letter l) at least 12 months before the beginning date provided in art. 3; and
(ii) the booked capacity becomes effectively and fully available within ... months [To be filled out with the number of months] upon the beginning date provided for in Art. 3.
(4) If the availability of the booked capacity is delayed beyond ..... months [To be filled out with the number of months provided for in paragraph (3)], the TSO shall pay retrospectively, in the month following this time-frame, all monthly penalties determined according to the provisions of paragraph (2).

(5) The number of months provided for in paragraph (3) may be at best equal the whole number resulting by applying 10% to the number of months of the time-frame between the confirmation date and the beginning date provided for in art. 3.

Art. 17. (1) The full or partial culpable breach of the contract duties by the NU, other than the payment duties, shall entitle the TSO to claim damages, proportionally with the registered prejudice, according to the applicable law.

(2) The full or partial culpable breach of the contract duties by the TSO, other than the ones for which the Contract provides a specific penalty, shall entitle the NU to claim damages, proportionally with the registered prejudice, according to the applicable law.

(3) The debtor of the duty shall be rightfully in default by the meeting of the due dates set for the execution of the contractual duties, except for the specific cases set forth in this Contract.

CHAPTER XI.

Force Majeure

Art. 18. (1) Force majeure is an event that is external, unforeseeable, absolutely insurmountable and unavoidable, which exonerates the Parties of any liability, according to Art. 1.351 of the Civil Law.

(2) The Party claiming Force Majeure shall notify the other Party on such occurrence in writing, within no more than five (5) calendar days upon the occurrence of the event, and the proof of the Force Majeure shall be communicated within maximum thirty (30) calendar days upon such occurrence.

(3) Provided the Force Majeure event does not cease within 12 (twelve) months from the occurrence of the force majeure, either Party shall be entitled to request the termination of the Contract de jure, without any of the Parties being entitled to claim damages.

(4) The Act of God does not eliminate the contractual liability.

CHAPTER XII.

Contract termination

Art. 19. (1) The Contract is terminated:

a) at expiry of the duration, according to Art. 3;

b) rightfully, based on a notification submitted by the TSO according to the provisions of 7 letter a), in the event the incremental capacity process has not ended successfully;

c) upon the agreement of the parties;

d) upon unilateral termination, in case of bankruptcy of the contractual partner, subject to a prior notice,

e) upon unilateral termination, under the conditions stipulated in art.18;

f) upon unilateral termination by the NU, under the conditions stipulated in art 8 letter e) and f);

g) upon unilateral termination by the NU, provided the TSO loses its right to operate the NTS:

h) by unilateral termination, under the conditions stipulated in art. 1.552 of the Civil Law.

(2) The termination of this Contract shall bear no effect on the contracting obligations arisen validly during the execution of the Contract, independent of their deadlines.

CHAPTER XIII.

Notifications

Art. 20. (1) The TSO and the NU shall notify each other of any change of circumstances, in writing, during the execution of the contract, at the registered office of the NU indicated by it, respectively, at the address indicated on the webpage of Transgaz – The National Gas Transmission Company.

(2) For the purposes of this contract, an amendment to a circumstance shall be interpreted as theenactment, the amendment or repeal of a regulatory act regulating, in whole or in part, the specific terms and conditions of this contract. Subsequent legislative changes to the conclusion of this contract will not lead to the amendment of the provisions related to its subject matter and duration.
(3) The deadline for notification shall be no more than 3 calendar days upon the date of the change of circumstances, unless otherwise specified in this contract.
(4) Notifications between TSOs and NUs may also be performed by fax or e-mail, subject to written confirmation of receipt of the communication.
(5) Any written document must be registered both at the time of the transmission and at the time of receipt.

CHAPTER XIV.

Applicable law and dispute settlement

Art. 21. (1) This Contract is subject to the Romanian law.
(2) The TSO and the NU agree upon the amicable settlement of any dispute arising in relation to the validity, interpretation, execution and termination of the Contract. Should the fail in the amicable settlement, the disputes shall be referred to the competent Romanian law courts.

CHAPTER XV.

Contract divestiture

Art. 22. (1) None of the parties shall be able to assign to a third party, in any way, in full or in part, the rights and/or duties arising from the contract, unless there is a specific written agreement to this respect, issued by the other party, agreement which cannot be groundlessly denied.

(2) The notification related to the intention of assigning the contract to a third party shall be submitted to the other Parties at least 30 calendar days prior to the scheduled date of divestiture.
(3) Within maximum 20 days upon the registration of the notification, the notified Parties shall submit their reasons in a written answer.
(4) In case the Party notified according to paragraph (2) fails to answer or, as applicable, fails to submit its reasons, the intention of divestiture is considered:

a) denied, in the case of the divestiture of the underlying Contract, according to the applicable law;
b) accepted, in the case of transfer of debts.

(5) The transfer to an affiliated economic operator of the rights and/or duties of the NU arising from this Contract, without the specific written agreement of the TSO, is allowed only in the event that the affiliated economic operator establishes a financial guarantee in favour of the TSO, at the level of the one set up by the NU, within a maximum of 10 calendar days from the notification date of the divestiture.
(6) In any case, the TSO may require the divestiture of this Contract only if the releasee is or becomes a licensed operator of the NTS or of a gas transmission system that includes the entry/exit point under article 2 par. (1).
(7) Should the TSO lose the right to operate the NTS, it shall take all steps to assign this Contract to the new NTS operator or to the operator of that gas transmission system including the entry/exit point underarticle 2 para (1).

CHAPTER XVI.

Final provisions

Art. 23. The Contract is concluded in Romanian language.

ANNEX 1^2
to the Network Code for the National Gas Transmission System

CONTRACT
for gas transmission in the NTS exit points of the NTS

no. ... from year..... month ..... day .....

The National Gas Transmission Company TRANSGAZ S.A. Mediaş, headquartered in Mediaş, 1, Constantin I. Motaş Square, Sibiu county, post code 551130, telephone 0269/803333, fax 0269/839029, fiscal registration code RO13068733, registered in the Trade Register under no J 32/301/2000, holder of the account no. RO79RNCB0231019525310002, opened at the bank B.C.R. - Mediaş Subsidiary, legally represented by the General Manager, Mr. Ion Sterian, in the capacity of provider of the transmission service, hereinafter referred to as the transmission system operator or TSO, on the one hand,

and

in the capacity of user of the National Transmission System (NTS) and beneficiary of the transmission services, hereinafter referred to as network user or NU, on the other hand,

agreed upon concluding the present transmission contract related to the NTS exit points, hereinafter referred to as the Contract.

I. Terminology and applicable legislation

ART. 1

(1) The terms used in the present contract are defined in the Electricity and Gas Law no. 123/2012, as subsequently amended and supplemented, as well as in the Network Code for the National Gas Transmission System, approved by the Order of the President of the National Regulatory Authority for Energy (NRAE) no. 16/2013, as subsequently amended and supplemented (the Network Code).

(2) The provisions of this contract are supplemented by the provisions of Law no. 287/2009 regarding the Civil Law, republished, as subsequently amended (Civil Law), the Electricity and Gas Law no. 123/2012, as subsequently amended and supplemented, and NRAE regulations, including the provisions of the Network Code and the Technical Conditions for the operation of gas metering points at the NTS entry/exit points, hereinafter called „Technical Conditions", as well as any other valid legal regulations. For all situations not explicitly provided for in this contract, the Network Code provisions are applicable.

II. The scope of the contract

ART. 2

(1) The scope of this contract is the provision of natural gas transmission services, describing the whole range of activities and operations carried out by the TSO for or connected to the capacity booking in the NTS exit points and the transmission through the National Transmission System (NTS) of the gas amounts, expressed in energy units, to the NST exit points.

(2) The contract entitles the NU to nominate/re-nominate/ take-off from the NTS, at the exit points, amounts of natural gas within the booked capacity.

(3) Within this contract the NU has the right to use the booked capacity at the NTS exit points for the take-off of gas from the NTS in order to supply its end-users, to cover their own

consumption, for storage and/or transmission to interconnected transmission systems.
(4) The booked capacity at the NTS exit points is provided for in Annex no. 2 to this contract and is expressed in MWh/day.
(5) The application of the tariff for exceeding the capacity and of the tariff for failure of ensuring the booked capacity shall be performed accoding to with the provisions of the Network Code and the applicable NRAE regulations.

III. Contract duration

ART. 3

This contract is concluded for ..... (one gas year, one quarter, multiple quarters, one month, multiple months, daily, multiple days) in the time frame ..... .

IV. Conditions for ensuring firm capacities at the NTS exit points towards the underground storage facilities

ART. 4

The TSO, acting correctly and prudently, will ensure the firm capacity in the NTS exit points towards the underground storage facilities, booked by the NU throughout the duration of the contract.

V. Gas metering in the NTS exit points

ART. 5

The metering of the gas quantities is performed on a permanent basis according to the provisions of the specific legislation, the determination of energy quantities supplied from the NTS is performed according to the provisions of the Network Code.

VI. Applicable tariffs, invoicing and payment

ART. 6

(1) The NU will pay to the TSO the value of the booked capacity established on the basis of the tariff for capacity booking applicable at such time the booked capacity can be used and the volume component of the tariff applicable for the same time for the transmitted gas amount, based on the final allocations.
(2) The TSO shall pay to the NU the value of the transmission capacity which it failed to ensure, determined on the basis of the tariff for failure of ensuring the capacity, applicable at the time the NU could not use the booked capacity.
(3) Additionally, the network user shall also pay the transmission system operator, as applicable, the tariffs provided for in the Network Code.
(4) The tariffs mentioned in par. (1) and (2) are set out in Annex no. 1 to this contract.
(5) The TSO shall submit to the NU, by the 15th of the month following the one for which the transmission service was provided, separate invoices (hereinafter referred to as "monthly invoices") drawn up on the basis of the final allocations, as applicable:
a) an invoice for the transmission services provided for the previous month, drawn up based on the final allocations;
b) an invoice for exceeding the booked capacity, determined according to the provisions of art. 99 of the Network Code, and/or for failure to ensure the booked capacity, determined according to the provisions of art. 101 of the Network Code, as applicable;
c) an invoice for the additional capacity, determined according to the provisions of art. 51 of the Network Code resulting from the nomination by the NU of a quantity of natural gas which exceeds the capacity booked by the NU in an NTS exit point.
(6) In case the NU decides to perform an advance payment, the TSO issues and submits to the NU:
(i) at least 5 calendar days prior to the beginning date of each month of service provision, an invoice for the advance payment, equal to the amount of the booked capacity determined for

the month of service provision plus the value of the volume component of the tariff, determined at the contractual level of capacity for the same period;
(ii) within 15 working days after the end of the month of service provision, a payment settlement invoice drawn up based on the final allocation.

ART. 7

(1) The payment of the invoices provided for in art. 6 para. (5) and para. (6) point (ii) shall be performed within 15 calendar days upon the date the invoices were issued. Should the due date be a bank-holiday, the deadline is determined for the next business day.
(2) The payment of the invoices provided for in art. 6 par.. (6) point (i) shall be performed up to the beginning date of the provision of the transmission service on the basis of the advance payment invoice issued to that purpose.

VII. Invoicing and payment in the case of daily transmission contracts ^1

ART. 8

(1) Prior to the beginning of the provision of transmission services, the TSO issues:
a) an invoice representing an advance payment issued for the amount of the booked capacity for which natural gas transmission services are provided plus the amount of the volume component of the tariff determined at the level of the capacity for the same period;
b) within 15 working days from the end of the month of the services provision, a payment settlement invoice drawn up on the basis of the final allocation.
(2) The payment of the invoice amount issued according to paragraph (1) letter a) is performed before the beginning of the transmission services.

ART. 9

The payment obligation is considered to be fulfilled on the date of entry of such total amounts into the account of the transmission system operator.

^1 This clause applies only to daily transmiassion contracts.

VIII. Rights and duties of the TSO

ART. 10

The TSO has the following rights:

a) to collect from the NU the value of the services rendered and the delay penalties;

b) to execute the financial guarantee provided by the NU in the event of failure to pay the issued invoices on their maturity date;

c) to limit/interrupt the provision of transmission services, with prior notice, in the event of failure to fulfil the payment duties within the deadline and under the terms and conditions stipulated in the present contract;

d) to interrupt the provision of transmission services, in case the NU does not comply with the provisions of the Network Code;

e) to invoice to the NU the value of the transmission services provided, based on the tariffs stipulated in the present contract, and, as applicable, the delay penalties;

f) to limit or interrupt the provision of transmission services in order to remedy the damages occurring in the NTS, notifying the NU within maximum 6 hours from the moment the TSO became aware of it;

g) to limit the provision of transmission services to the approved nomination level if the daily total energy offtake is higher than this nomination;

h) to limit or interrupt the provision of firm transmission services, if the NU does not comply with the provisions of Chapter X "Guarantees";

i) all further rights as set out in the Network Code.

ART. 11

The TSO has the following duties:
a) to notify the NU on the potential limitations/interruptions in the provision of transmission services in case of failure to fulfil the payment duties;
b) to resume the provision of the transmission services within 24 hours upon the date the payment duties have been fulfilled;
c) to deliver the natural gas at the exit point out of the NTS according to the bilateral conventions concluded under art. 46 par. (6) of the Network Code and based on the approved nominations/re-nominations;
d) to allow the NU access to the data/documents that underlie the invoice in case the NU contests the issued invoice;
e) to ensure to the NU the capacity booked at the NTS exit points according to the contracted levels;
f) to pay to the NU the tariff for failure of ensuring the booked capacity;
g) to answer and solve the notifications of the NU concerning the provision of transmission services under the conditions provided for by the valid legislation;
h) all further duties as set out in the Network Code.

IX. Rights and duties of the NU

ART. 12

The NU has the following rights:
a) to use the capacity booked at the NTS exit points for taking over the gas from the VTP and the transmission to the NTS exit points;
b) to return voluntarily or to transfer the approved capacity according to the provisions of the Network Code;
c) to transfer gas amounts according to the provisions of the Network Code;
d) to request and receive from the TSO the related value for failure of ensuring the booked

capacity according to the provisions of the Network Code;
e) to challenge the invoices issued by the TSO and to request the access to the data/documents underlying the the invoice;
f) to refuse to take over at the exit points from the NTS the natural gas which does not comply with the quality conditions stipulated in the Technical Conditions;
g) all further rights as set out in the Network Code.

ART. 13

The NU has the following duties:
a) to pay in full and on time the invoices issued by the TSO, according to the provisions of this contract and, where appropriate, the related delay penalties;
b) to accept the limitation/interruption of the transmission service under the conditions stipulated in the present contract;
c) to establish accurately the guarantees provided for in this contract;
d) to notify the TSO, by nomination/re-nomination, of the designated partner and, respectively, of the related energy amounts;
e) to take all the necessary precautions, through suppliers and system operators, for the supply of energy to its customers, including to the interruptible customers, in compliance with the valid legislation;
f) all further duties as set out in the Network Code.

X. Guarantees

A. General provisions

ART. 14

(1) For the purpose of fulfilling the contractual duties, each party will establish in favour of the other party a guarantee according to the provisions of the Network Code.

(2) For the purpose of fulfilling the duties stipulated in par. (1) of this article, the TSO shall provide the proof of its credit rating.
(3) The NU is releaved of the duty to establish the financial payment guarantee to the TSO if:
a) it produces evidence of a credit rating issued by one of the rating agencies approved by the TSO or at least at the same level as the one granted to the TSO, valid for the entire duration of this contract;
b) it pays in advance the value of the transmission services.
(4) In case throughout the duration of this contract, either the NU's rating or the agency agreed upon by the TSO changes, the NU shall notify the TSO within 3 working days upon the occurance of the change and it shall provide proof of the fulfilment of its duties related to its guarantee as stipulated in this chapter within no more than 5 working days upon the date of the change.

ART. 15

(1) The financial guarantee is provided by the NU in the form of:
a) a bank guarantee in lei or Euro equivalent at the valid exchange rate of the European Central Bank on the day the guarantee was issued (according to the template in Annex 4); and/or
b) a guaranteed account (collateral deposit) in lei or Euro equivalent at the valid exchange rate of the European Central Bank on the day the guarantee was issued; and/or
c) an escrow account in lei or the Euro equivalent at the valid exchange rate of the European Central Bank on the day the guarantee was issued.
(2) The TSO accepts a bank guarantee issued by a bank rated by one of the rating agencies: Standard & Poor's, Moody's or Fitch, at least for the "investment grade" level. The equivalence between the rating levels awarded by the three agencies is published on the

TSO's website.

ART. 16

(1) In case the NU proves the creditworthiness according to art. 14 par. (3) letter a), the TSO may in certain legitimate cases require the provision of a financial guarantee according to the provisions of art. 15 or the payment in advance of the duties arising from the commercial relationship with the NU. The request of a guarantee or an advance payment will be submitted and explained in written form.
(2) A legitimate case from the perspective of the transmission services, is considered as such in the event that the NU is in default for the payment of an amount of at least 10% of the value of the last invoice or of the amount of the partial payment duties, after a notification has been received from the TSO to this respect.

B. Annual and quarterly product

ART. 17

(1) The NU has the duty to submit to the TSO the financial guarantee in the amount provided for in par. (2) at least 5 working days before the beginning of the transmission service.
(2) The level of the financial guarantee established by the NU shall equal the average amount of the estimated monthly invoices related to the transmission services for the following period of use.
(3) The financial guarantee established in accordance with par. (2) shall be valid starting with the banking day preceding the beginning date of the transmission service until the 60th calendar day following the termination of the contract by reaching its due date.
(4) The NU may waive the option of establishing a guarantee for the provision of the transmission service by making advance payments. To this end, the NU shall notify the TSO on the prepayment option in writing, within a maximum 7 working days after the end of the capacity booking period.

(5) The prepayed amount equals the amount of the monthly invoice for the transmision services related to the next period of use.
(6) The advance payment/invoice is compensated with the settlement invoice related to the month for which the payment was made.
(7) If such advance payment does not cover the amount of the settlement invoice for that month, the difference shall be paid by the NU at the due date of the invoice.
(8) The NU may waive the option of advance payment, subject to the establishment of a financial guarantee under the conditions of art. 14 par. (3) or art. 15.

C. Monthly product

ART. 18

(1) The NU has the duty to submit to the TSO the financial beginning in the amount provided for in paragraph (2) at least 3 working days before the start of the transmission service period.
(2) The level of the financial guarantee provided by the NU shall equal the estimated monthly invoice for the transmission services for the following period of use.
(3) The financial guarantee established according to par. (2) shall be valid starting with the banking day preceding the beginning date of the provision of the transmission service until the 60th calendar day upon the termination of the contract by reaching its due date.
(4) The NU may waive the option of establishing a guarantee for the provision of the transmission service by making advance payments. To this purpose, the NU shall notify the TSO of the advance payment option in writing, within a maximum of two working days upon the end - date of the capacity booking period.
(5) The amount of the advance payment equals the monthly invoice related to the transmission services for the next period of use.
(6) The advance payment/Advance payment invoice is compensated with the settlement invoice for the month for which the payment was made.
(7) If the advance payment in question does not cover the value of the settlement invoice for that month, the difference shall be paid by the NU at the due date of the invoice.

D. Daily product

ART. 19

For the daily product, the payment is made in advance, within 24 hours from the acceptance and signing of the transmission contract and before the beginning of the provision of the transmission services according to art.7.

ART. 20

(1) The financial guarantee issued under art. 17 par. (1) shall be valid starting with the banking day preceding the beginning date of the provision of the transmission service until the 60th calendar day upon the termination of the contract by its due date.
2. In case the level of the financial payment guarantee:
a) decreases with more than 5% below the level specified in art. 17 par. (2), the NU is required to supplement the level of the financial guarantee accordingly;
b) increases more than 5% above the level specified in art. 17 par. (2), the TSO is bound to return to the NU the difference between the effective level of the guarantee and the one specified in art. 17 par. (2).
(3) The adjustment of the level of the financial guarantee shall be made no later than 5 working days after the decrease/increase of the guarantee level as compared to the one provided for in art. 17 par. (2).
(4) The TSO shall have the right to claim the guarantee provided for in this Article within the limit of the prejudice incurred in case the NU fails to fulfil in full or in part its contractual duties or performs them with delay.
(5) Prior to the guarantee claim, the TSO is bound to notify the NU, stating the unfulfilled duties.
(6) The notification regarding the guarantee claim shall be submitted by the TSO by fax within 24 hours upon the expiry of the time-frame stipulated in art. 23 par. (1) letter a).

(7) In case of execution of the guarantee in part or in full, the NU has the duty to re-establish the guarantee within 5 days from its execution.

XI. Transmission programme

ART. 21

(1) The transmisson programme will be uploaded directly into the IT platform, according to the provisions of art. 27 letter B of the Network Code and represents Annex no. 3 to this Contract.
(2) The transmission programme may be altered according to the procedure laid down in the Network Code.
(3) The Parties shall comply with the provisions related to the minimum/maximum pressure at the NTS exit points as forest forth in the bilateral Conventions concluded according to the provisions of the Network Code.

XII. Confidentiality Clause

ART. 22

(1) The parties are required to keep the confidentiality over the data, documents and information obtained from the execution of the contract.
(2) The following data, documents and items of information are exempted from the provisions of par. (1):
- those which may be disclosed according to the Network Code;
- those for whose disclosure the there is a written consent from the other Contracting Party;
- those requested by the competent state bodies, based on a legal duty regarding information.

(3) The provisions of this article shall remain valid for a time-frame of five years upon the termination of the contractual relations.

XIII. Contractual liability

ART. 23

(1) The failure to fulfil the duties regarding the payment of invoices at the time indicated in art.7 par.(1) triggers the following effects:
a) the charging of a delay penalty, determined upon the outstanding amount, which equals the default interest due for of the failure to pay the contritutions to the state budget for each day of delay starting from the 16t^{h} calendar day upon the date the invoice was issued until the payment date, including the latter, or until the guarantee provided in the contract is executed in the event of default, within 15 calendar days upon the due date;
b) the limitation/interruption of the transmission service, with a prior notice of 3 calendar days, starting on the next day after the expiry of the 15 calendar day period stipulated in letter a) in the case of failure to fulfil the payment duty;
c) the limitation / interruption of the transmission service, with prior notice of 3 calendar days, starting with the next day upon the day when the amount of the NU imbalances exceeds the value of the balancing guarantees.
(2) If the due date or the following day upon the expiration of the grace period is a bank holiday, the deadlines provided for in paragraph (1) are extended accordingly.

ART. 24

In case the NU, at the request of the TSO, does not voluntarily cede /does not use the transferred and unused capacity transfer facility, by performing the mandatory capacity transfer, the NU is required to pay 5% of the transferred capacity, for the time-frame between the date of the mandatory capacity transfer and the one of the termination of the contract.

ART. 25

(1) The NU is entitled to request and receive an amount determined based on the tariff for failure of ensuring the booked capacity, according to the provisions of the Network Code, if the TSO does not keep available for the NU the entire capacity booked by it.
(2) In the event the amount stipulated in par. (1) does not fully cover the prejudice incurred, the NU is entitled to claim and receive additional compensatory damages, up to the full coverage of the caused prejudice, in case the TSO fails to fulfil its duty related to the provision of the transmission services, as well as any further duties set forth in this contract.

XIV. Force majeure/ Act of God

ART. 26

(1) Force majeure is the external, unpredictable, absolutely insurmountable and inevitable event that exonerates the parties of liability, under art. 1.351 of the Civil Code.
(2) If the force majeure event does not cease within 30 calendar days, the parties are entitled to request the termination of the contract, without any claim for compensatory damages.
(3) The party invoking force majeure is bound to notify the other party, in writing, by means of notification, within maximum 5 days upon its occurrence, whereas the proof of force majeure shall be communicated within 30 days upon its occurrence.

ART. 27

(1) The Act of God is an event that cannot be predicted or prevented by the party that would have been deemed liable if the event had not occurred.

(2) The Parties are exonerated of any liability at the time when the performance of an obligation has become impossible due to circumstances that are not attributable to the party that would have fulfilled it.

XV. Cancellation and termination of the contract

ART. 28

(1) The present contract is terminated:
a) upon the execution of the contractual duties;
b) upon the expiry of the contract duration;
c) *ipso jure*, in case of failure to meet one of the requirements regarding the access to the transmission services through the NTS, established by the Network Code, including the case of termination of the balancing and VTP access contract concluded between the TSO and the NU;
d) in case of voluntary return of the total approved capacity according to the Network Code;
e) in case of mandatory transfer of the total capacity approved according to the Network Code;
f) upon termination in case of bankruptcy, dissolution, liquidation or withdrawal of the license, as appropriate, of the contractual partner;
g) in case of force majeure, according to the contract.
(2) The termination of this contract has no effect whatsoever on the contractual duties arising from the execution of the contract until its termination.
(3) In the event of termination of the contract before the expiry of its duration, (1) lit. c) and f), the UR is bound to pay to the TSO the value of the contracted capacity products for the remaining period until the expiry of the of the contract duration.

XVI. Notifications

ART. 29

(1) Throughout the entire duration of the contract, the parties shall mandatory notify each other at the headquarters provided for in the introductory part of this contract on any change in the circumstances envisaged at the date of the contract conclusion.

(2) The deadline for notification shall be no more than 5 calendar days upon the date of the change of circumstances, unless otherwise specified in this contract.
(3) The arrangements for notification shall be determined by the Parties by mutual agreement, according to the provisions of the Network Code.

XVII. Applicable laws and dispute settlement

ART. 30

(1) The provisions of this contract are subject to and interpreted according the valid Romanian legislation.

(2) The parties agree that all misunderstandings regarding the validity, interpretation, execution and termination of the contract shall be settled amicably. Should the parties fail to settle the disputes amicably, they will be settled by the competent courts of law.

XVIII. Contract divestiture

ART. 31

(1) Neither party may in any way, in whole or in part, assign to a third party any rights and/or duties arising from this Agreement except with the written consent of the other Party, consent which cannot be unduly refused.
(2) The notification of the intention to assign is forwarded to the other party at least 10 working days prior to the planned divestiture.

(3) The notified party is bound to present its reasons for the denial of the divestiture within a maximum of 5 working days upon the date of registration of the notification.

XIX. Further clauses

ART. 32

(1) This contract may be amended or supplemented by written addendum.
(2) By way of exception to the provisions of par. (1), this contract shall be automatically amended or supplemented with any change or addition applicable to the gas transmission contract or to the contractual relation between the TSO and NU, provided by a national or European regulatory act, each party having the duty to take over the respective modifications/supplements.

ART. 33

The following annexes are inherent parts of this contract:

– Annex no. 1 – Tariffs for providing the transmission services;

– Annex no. 2 – Capacity booking in the NTS exit points;

– Annex no. 3 – Transmission programme;

– Annex no. 4 – Template for the Letter of bank guarantee.

The present contract was concluded today, the ....., in two original counterparts and each party declares it has received an original copy thereof.

Transmission System Operator Network User

SNTGN TRANSGAZ S.A.

ANNEX no. 1^3

(to the Network Code for
the National Gas Transmission System - NTS)

CONTRACT

for balancing and access to the VTP

no. ... from year ..... month ..... day .....

The National Gas Transmission Company TRANSGAZ S.A. Mediaş, headquartered in Mediaş, 1, Constantin I. Motaş Square, Sibiu county, post code 551130, telephone 0269/803333, fax 0269/839029, fiscal registration code RO13068733, registerea in the Trade Register under no J 32/301/2000, holder of the account no. RO79RNCB0231019525310002, opened at the bank B.C.R. - Mediaş Subsidiary, legally represented by the General Manager, ..., in the capacity of provider of the transmission service, hereinafter referred to as the transmission system operator or TSO, on the one hand,

and

....., in the capacity of client of the TSO and beneficiary of the title transfer services, hereinafter referred to as „**network user"** or „**NU"**, on the other hand,

Hereinafter collectively referred to as the "Parties" and each one, individually, as the "Party", agreed upon concluding the present contract of balancing and access to the VTP, hereinafter called "contract".

I. Terminology and applicable legislation

ART. 1. – (1) The terms used in the present contract are defined in (EU) Regulation no 312/2014 of the Commission dated March 26th 2014 for setting a network code on balancing gas transmission networks, in the Electricity and Gaz Law no. 123/2012, as subsequently amended and supplemented, as well as in the Network Code for the National Gas Transmission System, approved by the Order of the President of the National Regulatory Authority for Energy (NRAE) no. 16/2013, as subsequently amended and supplemented (the Network Code).
(2) The provisions of this contract are supplemented by the provisions of Law no. 287/2009 regarding the Civil Law, republished, as amended (Civil Law), Power and Gas Law no. 123/2012, as amended and NRAE regulations, including the provisions of the Network Code as well as any other valid legal regulations. For all situations not explicitly provided in this contract, the Network Code provisions are applicable.

II. – Subject of the contract

Art. 2. - The subject of the contract is the establishment of the rights and duties of the parties arising from the balancing of the differences between the natural gas in-takes and off-takes into/out of the NTS, as well as from the access to the VTP and the title transfer.

III. – Duration of the contract

Art. 3. **–** This contract is concluded for .....(one gas year, one quarter, multiple of quarters, one month, multiple of months, daily, multiple of days) in the time-frame between ..... and .....

IV. – Rights and duties of the parties

Rights and duties of the NU

Art. 4. - (1) NU is entitled to title transfer services for the purpose of registering transactions of natural gas amounts existing in the NTS.
(2) NU has the right to access to the IT platform that serves operating the VTP under the circumstances provided by the Procedure of access to the information platform that serves the VTP. The procedure for access to the information platform is developed by the TSO and is published on its own website.
(3) NU has the right to collect fully and duly the value of the positive imbalances recorded by the UR as „Surplus", including potential delay penalties.
(4) NU has the right to receive information on the daily imbalance, according to the procedures provided by the valid regulations.
(5) NU has the right, throughout the entire duration of the contract, to empower, according to the law, a representative designated to submit commercial notifications to the TSO on behalf of the NU. The NU will notify the TSO on its decision to empower a representative.
(6) NU has the duty to perform the daily balancing of its own portfolios so that at the end of each gas day, the registered imbalance is 0.
(7) NU has the duty to provide the financial guarantee as provided for in this contract.
(8) NU has the duty to invoice the amount of the positive imbalances, registered as „Surplus", and pay in full and on time the invoices issued by the TSO, representing the value of the negative imbalances registered by the NU as „Deficit".
(9) NU has the duty to pay to the TSO the invoice issued according to the Methodology for determining the neutrality charges for balancing, including their distribution among the users of the natural gas transmission network, approved by the order of thePresident of the NRAE, in cas of a negative outcome of the balancing activity.
(10) NU has the duty to comply with the provisions of the Covenant for the participation in

the natural gas balancing market, set out in the Annex to this contract.
(11) NU has all further rights and duties under the applicable regulations.

Rights and duties of the TSO

Art. 5 - (1) The TSO has the right to collect in full and on time the issued invoices, representing the value of the negative imbalances registered by the NU.
(2) TSO provides access to the IT platform serving the VTP to the NU, under the circumstances stipulated in the Access to the Informational Platform that serves the VTP.
(3) The TSO keeps record of the notifications, validates and confirms the title transfers, in compliance with the rules provided for by the valid regulations in force.
(4) The TSO determines and makes available to the NU its daily imbalance, according to applicable regulations.
(5) The TSO has the right to invoice, according to the provisions and tariffs provided for in the Network Code, the value of the imbalances registered as "Deficits", including potential delay penalties;
(6) TSO has the right to execute the financial guarantee submitted by the UR in the event of failure to pay the issued invoices on their due date.
(7) TSO allows the NU, upon its request, to access the data / documents underlying the invoices issued under this contract.
(7^1) The TSO is entitled to limit/interrupt the natural gas transport service, with a prior notice of 3 calendar days, starting the day after the registration of overdue debts by the NU, based on the contract for balancing and access to the VTP.
(8) The TSO has the duty to pay in full and on time the value of the positive imbalances registered by the NU as „Surplus".
(9) The TSO has the duty to pay to the UR the value of the invoices issued according to the provisions of the Methodology for determining the neutrality charges for balancing, including their distribution to the users of the natural gas transport network approved by order of the President of the NRAE, should there be a positive result of the balancing activity.

(10) The TSO has the duty to comply with the provisions of the Covenant for the participation in the natural gas balancing market, set out in the Annex to this contract.
(11) TSO has all further rights and duties under the applicable regulations.

V. – Daily imbalance. Imbalance tariff

Art. 6 – The determination of the daily imbalances of the NUs, as well as of the daily imbalance tariffs, are performed according to the provisions of the Network Code.

VI. – Invoicing and payment

Art. 7 - TSO shall submit to the NU:
a) an invoice related to the final daily imbalances registered as „Deficits" in the previous month, by the 15th of the month, , whose value was determined according to the rules laid down in the Network Code;
b) an invoice related to the difference between the costs and revenues resulting from the balancing activity, until the 10th of the month following the month in which the neutrality charge for balancing is calculated, in the event of a negative result of the balancing activity, determined according to the methodology for determining the neutrality charge for balancing, approved by the order of the President of NRAE.
Art. (7^1) – The NU permanently monitors the compliance of the value of the aggregated registered imbalance, representing the algebraic sum of the daily imbalances registered along the delivery month, with the level of the guarantee determined according to Art. 12 (7). In case the value of the aggregated imbalance of a NU is a `deficit`, such value cannot exceed the balancing guarantee established by the NU.

Art. 7^2 NU shall submit to the TSO:
a) an invoice for the final daily imbalances registered as «Surplus» in the previous month, until the 15 th day of the month, whose value was determined in line with the regulations provided in the Network Code.

b) an invoice for the difference between the costs and revenues resulting from the balancing activity, until the 10th of the month following the one in which the neutrality charge for balancing is determined, in the event of a positive result of the balancing activity, determined in line with the Methodology for determining the neutrality charge for balancing approved by the order of the President of the NRAE.

Art. 8 - (1) The payment of the invoices under Art. 7 and Art. 7^2 shall be performed in Lei, within 15 calendar days upon the date on which the invoice was issued. In case the due date is a banking holiday, the deadline is deemed accomplished for the next banking day.
(2) All payments of the NU shall be performed by bank transfer into the account specified by the TSO.
(3) All payments of the TSO shall be performed by bank transfer into the account specified by the NU.
(4) Throughout the entire duration of the contract, either party may choose another bank, provided that prior notice is given to the other party at least 30 days before the due date of the payment.
(5) Mutual debts shall be compensated according to the provisions of the Law no. 227/2015 regarding the Fiscal Code, as subsequently amended and supplemented.

Art. 9 - The payment duty is considered to be fulfilled at the time the account of the TSO or the NU, as appropriate, has been credited.

Art. 10 - (1) In case an invoiced amount is challenged in full or in part, the objector shall submit an Explanatory Note, including his objections, within 3 (three) working days from the date on which the invoice was communicated, by fax or e-mail with extended electronic signature, and shall pay the remaining unchallenged amount until the payment deadline, according to art.8.
(2) The objections regarding the invoiced values presented in the explanatory note will be settled between the parties within 3 (three) working days from the receipt of the claims.
(3) For the amounts challenged, but subsequently settled amicably or by a final court decision,

the debtor shall pay, in addition to the due amount, penalty interest calculated according to art. 11.
(4) In case that, upon litigation, a decrease of the invoiced value was decided, the debtor shall be refunded any amounts and related penalties calculated according to par. (3), already paid, related to the respective decrease, within 3 working days.

Art. 11 – The failure to meet the payment duty related to the issued invoices within the term stipulated in art. 8 par. (1) entails the following:

a) charging a delay penalty, determined based on the unpaid amount, equal to the level of the default interest owed for failure to pay in due time the contributions to the state budget, for each day of delay, starting with the 16th calendar day upon the date whem the invoice was issued until the full payment thereof, including the date of payment, or until the execution of the guarantee provided for in the contract, in case of failure to fulfil the payment duty within 15 calendar days upon the due date;
b) the execution of the guarantees provided by the NU according to art. 12, only for the owed and unpaid amounts and the related default interests.

(2) In case the due date or the day immediately following the expiry of the grace period is a banking holiday, the deadlines provided for in paragraph (1) are extended accordingly.

VII. - Guarantees

Art. 12. - (1) The NU has the duty to establish a financial guarantee in favour of the TSO with the purpose of covering the risk for the failure to pay the invoices issued by the TSO.
(2) The guarantee under par. (1) shall not be established for trading platforms operators and for the central counterparty.
(3) NU may be exempted from the duty to establish the financial guarantee referred to in par. (1) in case it proves that it has a credit rating issued by one of the rating agencies approved by the TSO at least for the same level as the one granted to the TSO, valid for the entire duration of this contract; should the issued credit rating be valid for the mother-company of

the NU, this will be accompanied by a letter from such company, stating its commitment related to the guarantee for the payment duties of the NU.
(4) In the event that, throughout the duration of this contract, the rating granted to the NU is modified so as to decrease below the rating of the TSO, as well as in case the rating agency is changed with regard to the provisions of par. (3), the NU is bound to notify the TSO to this respect within 3 calendar days from the occurrence of the change.
(5) The financial guarantee is presented by the NU in the form of:

a) a letter of bank guarantee in lei or in the Euro equivalent at the exchange rate of the European Central Bank valid on the day the guarantee was issued; and / or
b) a guaranteed account (collateral deposit) in lei or in the Euro equivalent at the exchange rate of the European Central Bank valid on the day the guarantee was issued; and / or
c) an escrow account in lei or in the Euro equivalent at the exchange rate of the European Central Bank valid on the day the guarantee was issued.
d) cash, in the guarantee account of the TSO.

(6) The TSO accepts a letter of bank guarantee issued by a bank that has a rating issued by one of the rating agencies approved by the TSO: Standard & Poors, Moody's or Fitch at least for the "investment grade" level. The equivalence between the rating levels given by the three agencies is published on the website of the TSO.
(7) The level of the financial guarantee (NG) under paragraph (1) will NG = 1.000 RON.
(8) In case the value of the aggregated value of the imbalance of an NU, registered and unpaid for is a ‚deficit' and exceeds the value of the established guarantee, the TSO shall notify the NU with regard to the need of supplementing the level of the bank guarantee. The TSO is entitled to restrict the access to the sales in the VTP starting with the following gas day.
(9) The NU is compelled to supplement the level of the bank guarantee accordingly, witin utmost 2 banking days upon the notification under par. (8).
(10) Should the NU not supplement the level of the bank guarantee, the TSO is entitled to interrupt the natural gas transport service. Acces to the sales in the VTO, meaning the natural gas transport service shall be resumed at such time the NU supplements the guarantee.

(10) a) Repealed.
b) Repealed.
b^1) Repealed.
(11) In case the value of the cumulative imbalance determined according to Art. 71 is lower than the level of the financial guarantee established by the NU according to paragraph (9), the NU may request the decrease of the level of the financial guarantee if such NU has no outstanding invoices in the current gas year. The level of the financial guarantee may in no case be lower than the one established according to paragraph (7).
(12) The financial guarantee established according to par. (7) shall be valid starting with the banking day preceding the beginning date of the duration for which the contract for balancing and access to the VTP is concluded until the 60th calendar day following the termination of the contract.
(13) If the NU proves its creditworthiness according to paragraph (3), the TSO may request, in legitimate cases provided for in paragraph (14), the provision of a financial guarantee according to the provisions of paragraph (7) and (9).
(14) A legitimate case is considered as such when the NU has registered delayed payments for at least 10% of the amount of the last "Deficit" invoice or of the value of the partial payment duties after the receipt of a notification to this respect submitted by the TSO.
(14) TSO may execute the guarantee provided for in this Chapter in case the NU fails to fulfil in full or in part the contractual duties or if it registers delays in the fulfilment thereof.
(15) The TSO can execute the guarantee under the present chapter, if the NU fails to fulfill in part or in full its contractual duties or fulfills them with delay.
(16) At least 5 calendar days prior to the execution of the guarantee, the TSO has the duty to notify the NU in writing, stating the breached duties.
(17) In the event of the partial or total execution of the financial guarantee, the NU has the duty to restore it according to the provisions of par. (7) and (9).

VIII. – Force majeure / Act of God

Art. 13 – (1) Force majeure is the external, unpredictable, absolutely insurmountable and inevitable event that exonerates the parties from liability, under art. 1351 of the Civil Law.
(2) If the force majeure event does not cease within 30 calendar days, the parties have the right to request the rightful termination of the contract, without any claim for compensatory damages.
(3) The party invoking force majeure has the duty to notify the other party, in writing, within maximum 5 days from its occurrence, whereas the proof of force majeure shall be communicated within 30 days of its occurrence.
Art. 14. - (1) The Act of God is an event that cannot be predicted or prevented by the party that would have been held liable if the event had not occurred.
(2) Parties are exonerated from liability when the performance of an obligation has become impossible due to circumstances that are not attributable to the party that would have fulfilled it.

IX. – Confidentiality Clause

Art. **15**. -(1) The parties are required to keep confidentiality of the data, documents and information obtained from the performance of the contract.
(2) The following data, documents and items of information are exempted from the provisions of para. (1):
(i) those which may be disclosed according to the Network Code;
(ii) those for which there is a written consent from the other contracting party;
(iii) those required by the competent state bodies, based on a legal duty regarding information.
(3) The provisions of this article shall remain valid for a period of five years after the termination of the contractual relations.

X. – Divestiture of the contract

Art. 16 – The present contract cannot be subject to divestiture.

XI. – Applicable legislation and dispute settlement

Art. 17 - (1) The provisions of this contract are subject to and interpreted according to the valid Romanian legislation.
(2) The Parties agree that all disputes regarding the validity, interpretation, execution and termination of the contract shall be settled amicably. Should the parties fail to settle the dispute amicably, it will be settled by the competent Romanian courts of law .

XII – Notifications

Art. 18 - (1) The parties shall notify each other at the headquarters provided for in the introductory part of this contract of any change in the circumstances envisaged at the date of signature hereof.
(2) The deadline for notification shall be no more than 5 calendar days upon the date of the change of circumstances, unless otherwise specified in this contract.
(3) The arrangements for notification shall be determined by the Parties by mutual agreement, according to the provisions of the Network Code.
(4) Communications between the parties are performed by means of written letters, fax and e-mail.

XIII. Contractual liability

Art. 19. For breach of contractual obligations, the party in default shall pay prejudices to the other party, according to the provisions of art.1531 and foll. of the Civil Law.

XIV. Contract dissolution

Art. 20 Either party is entitled to dissolute the contract in case of culpable breach of the contractual duties in full or in part by the other party.

Art. 21 - (1) The intention to dissolute the contract must be notified to the other party and to NRAE within 45 (forty five) days upon the maturity date of the unfulfilled duty.
(2) The dissolution by either Party as a result of the simple breach by the other Party of the contractual duties to pay the imbalance tariffs or the balancing guarantees provided for in art. 71 and art. 12 shall be performed without the intervention of the court, without delay and without any prior formality except by submitting written notice of dissolution to the other Party at least 3 (three) calendar days before the date specified in the notice of Contract dissolution.

XV. – Suspension of the execution of the contract

Art. 22 - (1) In the event that, during the execution of the contract, the conditions underlying its conclusion are no longer fulfilled, the NU has the duty to notify the TSO within 24 hours on the occurrence of such change.
(2) If the NU does not comply with the duty under par. (1), the TSO has the right to partially or totally suspend this contract, with prior notification.
(3) NU shall have no right on claiming damages for the suspension of the contract or a part of it as a result of the failure of the NU to comply with the conditions for access to the VTP.

XVI – Termination of the contract

Art. 23 - (1) This Agreement ceases to be effective in the following situations:
a) the expiry of the duration established according to the provisions of art. 3;
b) by mutual agreement of the Parties, on the basis of an addendum;
c) by dissolution under point XIV;
d) as a consequence of a force majeure case / Act of God , according to the Contract.
(2) The termination of this contract is without prejudice to the performance of contractual duties arising within the duration of the contract, irrespective of their chargability.

XVII. Alteration of legal circumstances

Art. 24 - For the purpose of this contract, "alteration of legal circumstances" signifies the case in which, throughout the duration of the present contract, one or more laws are entering into force, laws which, in relation to the subject matter of the regulation, justify the de jure amendment and/or completion of the contract, in order to ensure compliance with the valid legal provisions.

XVIII – Further clauses

Art. 25. - (1) This contract may be amended or supplemented by an addendum in written form. (2) By exception from the provisions of par. (1), this contract is automatically amended or supplemented with any amendment or completion applicable to the contract for balancing and access to the VTP or the contractual relationship between the TSOs and the NUs, enforced by a national or European regulatory act, each party having the duty adopt the changes/completions.

Art. 26. Repealed

The present contract was concluded today, the ....., in two original counterparts and each party declares to have received an original sample thereof.

Transmission System Operator Network User

SNTGN TRANSGAZ SA"

Annex to the Contract for balancing and access to the VTP

CONVENANT FOR THE PARTICIPATION IN THE NATURAL GAS BALANCING MARKET

I. TERMINOLOGY AND APPLICABLE LEGISLATION

Art. 1 (1) The terms used in this Covenant are defined in the Electricity and Gas Law no. 123/2012, as subsequently amended and supplemented, as well as in the Network Code for the National Gas Transmission System, approved by the Order of the President of the NRAE no. 16/2013, as amended and supplemented (*the Network Code*).

(2) For the purposes of this Covenant, the terms, expressions and abbreviations used have the following meaning:

Annulment of an offer – deleting the offer from the record of active offers of a participant on the BM which have been taken into account for the transaction, the offer remaining on record in the database for the statistic platform

Covenant – convention regarding the participation on the natural gas balancing market

Letter of bank guarantee – document based on which the guaranting bank irrevocably and unconditionally commits itself to paying, upon the first written request of the TSO/ third designated party by the TSO, any amount up to the maximum amount set by the Participant to the balancing market, as guarantee officer; it is issued for a limited time-frame, according to the template agreed upon by the banking community.

Suspension of an offer – deleting of an offer by the participant from its list of active market offers. A suspended offer may be reactivated by the participant on the BM at any time during the trading session for the Instrument for which it was entered;

Daily settlement note – report issued by the settlement platform for each participant to the BM, which specifies, cumulatively for the gas day, the amounts of natural gas traded for sale or purchase, the market closing price, and the values of the cash-ins / payment duties, including the VAT;

NRAE – National Regulatory Authority for Energy

BM – natural gas balancing market

BM procedure – the trading procedure on the natural gas balancing market, stipulated in Annex no. 1^4 to the Network Code.

II. SUBJECT OF THE COVENANT

Art. 2 - (1) The subject of the Covenant is the provision by the TSO/the third party designated by the TSO of the services related to the organization and management of the natural gas balancing market and to granting to the participant on the BM the right to carry out natural gas sales and purchases on such market with the TSO/ the third party designated by the TSO as a counterpart in compliance with the primary and secondary legislation applicable to this market.
(2) Upon the conclusion of this Covenant, the Parties take note of the mutual rights and duties related to the organised framework for conducting transactions on the BM, namely the returns and payments connected to such transactions, on the basis of specific rules.
(3) The Covenant is applicable to the BM and the related trading procedure is the BM Procedure. The purpose of the transaction is to sell/purchase natural gas within the limits of the amounts registered as initial daily imbalance, at a price established in a transparent and non-

discriminatory manner, following the trading session.
(4) The transactions are concluded based on orders entered into the trading platform, which contain the firm contracting commitments of the market participant. For each traded order, the TSO notifies through the trading platform the traded amount and the closing price of the balancing market for the gas day for which the order was placed.
(5) The conditions for participating in trading sessions, submission of offers, trading, publishing and making available the results of the trading sessions, returns and payments related to the transactions on the BM are performed according to the specific procedures developed by the TSO and published on its Internet page, as well as to the BM Procedure.
(6) If the identification data of the Participant contained in the Covenant are modified, the Parties shall sign an addendum thereto which shall specify the incurred changes.

III. RIGHTS AND DUTIES OF THE PARTIES

Art. 3

The participant on the BM has the following rights:

a) to receive from the TSO, upon its request, assistance and practical training sessions for the use of the BM trading platform;
b) to introduce natural gas sales and/or purchase offers for the BM according to the daily trading schedule;
c) to use a letter of bank guarantee, specifically issued for the use on the trading platform of the BM;
d) to check the records of their own transactions and view the offers submitted by the other participants on the BM trading platform;
e) to alter, suspend or cancel the gas offer(s) for natural gas during the trading session on the BM trading platform;
f) to receive from the TSO/third designated party through the BM trading platform confirmation of the validation of the offers / information regarding the invalidation of the

offers;
g) to access the transaction confirmations, daily settlement notes and notifications, or request from the TSO the submission thereof in case the BM trading platform cannot be accessed;
h) to fully collect the value of the encashment rights related to the sales of natural gas on the BM through daily cash-ins of the value related to the seller's position as provided for in the daily settlement notes, by means of daily payment orders issued by the TSO/third party designated by the TSO for crediting the bank account opened by the participant on the BM at a Romanian commercial bank and to document, on a monthly basis, the payment of the payment duties, the receipt of the rights and payment of the mutual duties to settle, to an equal amount and to issue and transmit to the TSO the daily invoice for the natural gas amounts sold on the BM;
i) to be notified through alternative communication channels (telephone, fax, e-mail, website) in case of disruption and resuming the operation of the BM trading platform;
j) to decide, upon its own initiative, to withdraw from the BM based on a written notice submitted to the TSO/third party designated by the TSO.

Art. 4

The participant on the BM has following duties:

a) to comply with the provisions of the Procedure set out in Annex no. 1^4 of the Network Code, as well as other procedures related to the functioning of the BM;
b) in case of the intention to introduce purchase offers, to conclude a SEPA Direct Debit Mandate with its settlement bank which will ensure the registration of the document in the TransFonD and to submit the scanned document by email to the TSO/third party designated by the TSO;
c) to perform all necessary steps with the bank for the purpose of obtaining its own guarantee, so that the TSO/ third party designated by the TSO receives from the central account bank no later than 12:00 o'clock of the banking day before the day on which

the participant on the BM wishes to introduce its purchase offers, the original bank guarantee, issued in its favor, in case the letter of bank guarantee is issued by the central account bank or the swift message of the guaranting bank together with the approval of such bank, in case the letter of bank guarantee is issued by another guaranting bank than the central account bank.;

d) to request from the TSO/third party designated by the TSO the approval for the diminution of the value of the letter of bank guarantee, as well as for the exoneration of the guaranting bank from its duties upon the expiry of the validity of the letter of bank guarantee;
e) to provide the financial resources necessary to debit its account opened at the settlement Bank in the amount requested by the direct debit instructions, on the deadlines stipulated in the SEPA Direct Debit Mandate and to communicate to the TSO/third party designated by the TSO the bank account in which it wishes to charge the value of the sales transactions on the BM;
f) to make sure that the amount of the letter of bank guarantee covers the amount of the intended purchases and of the payment duties for which it has already taken responsibility;
g) to make sure that the values in their offer reflect their own interest prior to placing the offer in the trading system;
h) to make sure that the offers submitted to the BM have been placed in the trading system;
i) to accept as firm commitments the Transaction Confirmations and the Notifications related to the transactions on the natural gas balancing market;
j) to pay in full the equivalent of the payment obligations related to the management / trading tariff on the BM;
k) the participant on the BM is directly responsible for the confidentiality of the identification data received from the TSO for accessing the trading platform;
l) if its own identification data contained in the Covenant are amended, to conclude with the TSO an addendum to this Coventant in order to emphasize the incurred changes.

m) to conclude the Covenant with the third party designated by the TSO within maximum 5 days from the notification received to this respect from the TSO;

Art. 5

The TSO/third party designated by the TSO has the following rights:

a) to receive from the Participant on the BM, by email, the scanned SEPA Direct Debit Mandate and the identification data related to the bank account opened with a commercial bank in Romania to be credited with the amount of its encashments;
b) to receive from the central account Bank the letter of bank guarantee issued for the TSO/the third party designated by the TSO, in original, if it is issued by the central account Bank or the swift message of the guarantor bank accompanied by the approval of the central account Bank, if the letter of bank guarantee is issued by another bank than the central account bank, no later than 12.00 o'clock, with one (1) banking day prior to the trading day in which the participant to the BM wishes to submit purchase offers;
c) to monitor the value and the validity period of the letter of bank guarantee and to invalidate the purchase offer/offers introduced by the Participant on the BM in case the validity of the letter of bank guarantee was not extended with the time periods established in the specific procedures drawn up by the TSO/third party designated by the TSO and published on its website;
d) to determine the amount of the validation guarantee and the available value, to validate the offer(s) submitted / introduced by the Participant on the BM and invalidate the purchase offer(s) whose value exceeds the amount of the validation guarantee according to the specific procedures drawn up by the TSO/ third party designated by the TSO and published on its website;
e) to send the direct debit instruction to the central account Bank on every banking day , instruction corresponding to the value of the daily net payment duties (including the VAT equivalent) of the participant on the BM, registered in the Daily Settlement Note;

f) to send the application for the execution of the bank guarantee letter to the central account Bank, in the event that it receives from the central account Bank denial reports due to lack of funds on the account of the participant on the BMand deny the decrease of its value, as requested by the Participant on the BM, in case the amount resulting from the decrease does not cover its payment duties;
g) to issue and submit the monthly invoice to the participant on the BM who has performed gas purchases (including the VAT value);
(g^1) to issue and submit the monthly/annual invoice/invoices to the participant on the BM for the amount representing the management/trading tariff on the BM (including the VAT value);
h) to collect the equivalent of the encashments related to the management/trading tariff on the BM (including the VAT value);
i) to decide, as appropriate, according to the valid regulations, the suspension from trading or the dismissal of the participant's registration on the BM;
j) to receive information from the participant on the BM related to any change of its identification data from the Trading Registry, supported by appropriate documents to this respect and to conclude with such participant an Addendum to this Covenant that will register the incurred changes;
k) to submit the information requested by the public authorities or courts of law related to the participant on the BM, without the consent of the latter if required by the Covenant, applicable laws and / or regulations.

Art. 6

The TSO/the party designated by the TSO has the following duties:

a) to ensure a trading environment in a fair, objective, independent, correct, transparent and non-discriminatory manner, according to the applicable primary and secondary legislation;

b) to provide assistance to the BM participant and practical training sessions on the use of the BM trading platform;
c) to provide the participant on the BM with "The Guide of the BM Participant" and to inform it in due course of its changes by means of information published on the main page of the TSO's website;
d) Repealed
e) to validate the sales/purchase offers submitted by the participant on the BM according to the provisions of the valid regulations;
f) to automatically notify the BM participant on the rejection of a natural gas offer through the BM trading platform;
g) to make available to the BM participant, who has placed offers for gas on the BM, the confirmations of transactions and the daily settlement notes for the performed gas trades, including by means of alternative communication channels (e-mails) in the event the BM participant submits a notification related to his failure to access the trading platform;
h) to make available to the BM participant the physical notifications related to the transactions concluded on the BM;
i) to notify the participant on the BM via alternative communication channels on the impossibility of using the usual ways of communication or on the malfunction of the trading system, as well as on resuming of trading and to publish the reasons for the accidental interruption of the trading session;
j) to pay in full the equivalent of the net encashments related to the daily gas sales performed by the BM participant by sending the payment orders in favor of the BM participant and document, on a monthly basis, the cash-ins and the payment duties related to the mutual settlements, in equal amount;
k) Repealed
l) to perform the updates on the Trading Registry of the BM with the data of the participant registered on the BM;

m) to publish on its website the secondary legislation related to the organisation and functioning of the BM as well as the specific valid procedures.

IV. SUSPENSION FROM THE GAS BALANCING MARKET

Art. 7 - (1) The following situations constitute instances of failure to fulfil the duties which lead to the suspension from the gas balancing market, for a period of 30 days, including, but without limitation to the following situations:

a) the case in which, within a 1 (one) month time, the activity of the participant on the BM determines on such market more than 3 (three) payment denials (due to lack of funds in the account) for the direct debit instructions transmitted and execution of the financial guarantee instrument established for participation in the trading sessions organized on this market;
b) the failure to observe the deadlines for the submission of invoices for the sold gas;
c) the case in which the Participant on the BM breaks the provisions of this Covenant on such market and / or the provisions of the specific procedures for the operation of the BM, including but not limited to the obligation of the participant to assume the duties related to the outcome of the trading session related to the amount and the closing price of the market.

(2) If the participant on the BM cannot prove that he has remedied the causes that led to his suspension from trading on the gas balancing market, it is suspended from the gas balancing market until the end of the situation that caused such suspension.

V. FORCE MAJEURE

Art. 8 - (1) Force majeure is any external, unpredictable, absolutely insurmountable and inevitable event.
(2) The parties are exonerated from any liability in the event that the damage is caused by

force majeure, under art. 1351 of the Civil Law.
(3) The party invoking a case of force majeure is bound to notify the other party, within maximum 48 hours upon its occurrence, a notification followed by the submission of the supporting document, issued according to the valid legislation, within 20 calendar days upon the same date.
(4) In case force majeure does not cease within 30 calendar days, the parties shall have the right to request the termination of the contract, without any claim for compensatory damages.

VI. CONFIDENTIALITY

Art. 9 – (1) Each Party is bound to keep confidentiality upon all data, documents and information obtained from the performance of this Covenant and not to disclose it to a third party, in whole or in part, without the written consent of the other Party.

(2) The following data, documents and information items are excepted from the provisions of paragraph (1):

a) those that may be disclosed according to the valid legislation;
b) those requested by the competent state institutions, based on a legal duty regarding information;
c) those considered to be non-confidential, according to the valid legislation.
(3) The provisions of this article shall remain valid for a period of 5 (five) years after the expiry of this Covenant.

VII. FINAL PROVISIONS

Art. 10 - In the event that after the conclusion of this Covenant, the content of the Covenant is amended/supplemented with the approval of the NRAE, the Parties are bound to comply with the Covenant, as amended/supplemented with the approval of NRAE.

Annex no. 1^4

(to the Network Code for
The Natural Gas National Transport System - NTS)

The trading procedure on the natural gas balancing market

Art. 1 Principles of the natural gas balancing market

(1) The registration on the balancing market is performed by concluding the Contract for balancing and access to the VTP.
(2) The TSO/the third party designated by the TSO is counterpart in all transactions concluded on the BM. Actual participation in trading is anonymous and allowed to the participants on the BM who wish to introduce purchase offers within the limits of the validation guarantees determined before the beginning of the trading session.
(3) NUs must place on day D+1 for the gas day D-1 orders for sale and purchase for the purpose and within the limit of the daily imbalance communicated by the TSO, namely selling in the case of surplus and purchase in the case of deficit.
(3^1) Repealed
(4) The offer consists of a pair defined as price-amount offered for purchase or for sale which represents the firm commitment of the participant on the balancing market.
(5) For the sale offers, the amount offered is the largest amount offered for sale and the price offer is the lowest price for which the amount may be sold.
(6) For the purchase offers, the amount offered is the largest amount requested for purchase and the price offer is the highest price for which the amount may be bought.

(7) In the automatic process of matching offers and establishing transactions performed by the trading system of the balancing market, the offer may be matched in full or in part.
(8) For the gas day D-1, participants may enter more than one distinct offer, but the sum of all offered amounts shall equal the daily imbalance communicated by the TSO.

Art. 2 – Organisation of the trading sessions

(1) The trading session is organised for each gas delivery day.
(2) The tool for the gas delivery day D-1 is available in the Trading System of the Balancing Market for placing the offers on Day D.
(3) The trading sessions are carried out as follows:

I. The opening stage of the balancing market and submission of offers, between 15:00 and 17:00 h;

II. The closing stage of transaction between 17.00 and 17.15 h.

Art. 3 – Opening Stage of the balancing market (BM) and submission of offers

(1) Starting with 15:00 h, the participants interested in participating in the trading session enter their own offers into the BM trading system, specifying the natural gas amount and the offered price.
(2) The offers placed by the BM participant represent firm commitments of such BM participant, which is directly liable for the accuracy of the input data.
(3) Repealed
(4) The trading system automatically compares the amount of each purchase/sale offer related to day D-1 with the amount and the initial daily imbalance of the NU and automatically invalidates the offer in case the quantity or the sum of the amounts in the placed offers up to that point, in the event that the NU has introduced more than one offer, it exceeds the amount

associated with the initial daily imbalance of the NU or is not introduced pursuant to the correct type of imbalance, i.e. purchase offer in case of "deficit" or sale offer in case of "surplus".
(5) The trading system automatically compares the value of each introduced purchase offer, determined as a as the product between the offered price and the offered quantity multiplied with the validation/available guarantee related to the BM participant and automatically invalidates the offer if its value exceeds the value of the validation/available guarantee.
(6) The participants on the BM, whose offers have been invalidated, are notified via automatic messages of the trading system and they may take any of the following measures:

a) to introduce an altered offer, so that the total amount offered does not exceed the amount of the daily imbalance and / or the value of the offer does not exceed the available validation guarantee, as appropriate;
b) Repealed
c) to alter and / or cancel previously submitted offers using the features available through its own interface provided via the BM trading system, so as to create the possibility of placing a new bid on the market, which meets the conditions of acceptance.

(7) Throughout this stage, the BM participants can enter, alter, suspend for further reactivation or cancel their existing offers in the trading system.
(8) The BM trading system automatically allocates to each offer a unique identification number and a time stamp in the shape of "hh: mm: ss", specifying hour (h), minute (m) and second (s) the offer was placed, visible in the Report / History section in the interface of the BM participant.
(9) In the event that an offer has been altered, the trading system shall automatically update the data related to the new offer with the time stamp corresponding to the change of the initial offer. This change may have consequences regarding the placing of the offer on the market as a whole, because, in the case of similar offers suggesting the same price, the ranking is achieved based on the time stamp.
(10) The placed and validated offers are updated and ordered automatically by the trading system, in real time, based on the best price, increasing for the sale offers and decreasing for the purchase offers and on the time stamp within the same type of offers with the same price.

(11) All participants on the BM may view in the trading system, at any time of the trading session, purchase offers and sales offers, ranked based on price, while keeping anonimity ofthe participants who have submitted such offers. The own offers are marked distinctively on the participant's screen.
(12) The BM trading system registers and keeps track of all submitted offers and related actions (placing, alteration, suspension, cancellation, matching). Data and reports for the past year are kept in electronic format and they are accessible to the BM participant.
(13) The transactions are not concluded at this stage of offer submission. The trading system calculates and automatically displays, based on active offers, the balancing price and the offer surplus. This information is updated automatically each time an order is placed / altered / withdrawn / cancelled.
(14) At the end of this stage, which is at 17.00h, the participants on the BM are restricted, so no new orders can be placed, respectively the active orders in the trading system can no longer can be altered, suspended and / or cancelled.

Art. 4 – The stage of trading closure

(1) After the closure of the stage for the submission of offers, the BM trading system determins the balancing price by means of an automatically applied correlation algorithm. This price is called the closing market price;
(2) All active offers for the gas delivery day D-1 are compared in order to determine compatible offers and to conclude transactions for compatible bids;
(3) Compatible offers for the conclusion of transactions are automatically determined by the BM Trading System, i.e. the offers suggesting higher prices or prices at least equal to the CPBM and bids suggesting lower prices or at least equal to the CPBM.
(4) Compatible bids are traded based on the CPBM.
(5) In case of a zero surplus bid, all sales orders are traded for a price which is lower than or equal to the CPBM and purchase orders for a price which is higher than or equal to the CPBM.

(6) In the event of a surplus offer which is different from zero, active market orders are traded as follows:

a) all purchase offers having a prices higher than the CPBM;
b) all sales offers with prices lower than the CPBM;
c) in case of a positive offer surplus, orders having the same price as the CPBM are executed as follows:
   i) all sales orders;
   ii) purchase orders ranked based on time stamp time stamp until the entire bought amount equals the entire sold amount.
d) in case of a negative surplus offer, orders having the same price as the CPBM are executed as follows:
   i) all purchase orders;
   ii) sales orders ranked based on time stamp until the entire sold amount equals the entire bought amount.

(7) The TSO/third party designated by the TSO makes available to the BM participants, via trading system, the transaction confirmation and the daily settlement notes after the conclusion of the transaction.
(8) The TSO/third party designated by the TSO draws up on a daily basis, for each participant to the BM, which has registered natural gas sales or purchase transactions, the daily settlement note related to the traded delivery gas day, containing the following information:
a) the gas amounts corresponding to the sales/purchases for the delivery gas day;
b) the closing market price, specifying the gas price without included services;
c) the value of the gas sales/purchases related to a delivery gas day;
d) the VAT, if applicable;
e) the value of the daily encashments/payment obligations.

Art. 5 – By means of derogation from the provisions of art. 2 and art. 3, par. (1), by March 31st 2023, the trading sessions are performed as follows:

a) in the time-frame between 15.00 – 15.30, the participants interested in participating in the trading session shall introduce the own offers destined for the transactions with the gas amounts from the domestic production destined for the residential sector into the trading system of the BM, specifying the amount of natural gas and the price offered, according to the provisions of art. 86^2, par. (2), letter a);
b) the closing of the transactions under letter a) takes place in the time-frame between 15.30 and 15.45;
c) in the time-frame between 15.45 and 16.15, the participants interested in the trading session shall introduce the own offers destined to the trading of natural gas amounts from the domestic production for the production of thermal energy into the trading system of the BM, specifying the natural gas amount and the price offered according to art. 86^2, par. (2), letter b);
d) the closing of the transactions under letter c) takes place in the time-frame between 16.15 and 16.30;
e) in the time-frame between 16.30 and 17.00, the participants interested in participating in the trading session shall introduce into the trading system of the BM the own offers destined for the transaction of natural gas amounts for the other end-users under art. 86^2, par. (2), letter c);
f) the closing of the transactions under letter e) takes place in the time-frame between 17.00 and 17.15.

ANNEX 2

(to the Network Code for the National Gas Transmission System)

Statement of the Network User

Pursuant to the provisions of the Network Code for the National Gas Transmission System, I hereby declare that this application for capacity related to each entry/exit point of the national gas transmission system is compliant with:

a) the contracts concluded with the customers in the own portfolio;
b) the storage contracts;
c) the demand for own consumption.

Network User

Date: .....

Authorized representative

Signature: .....

ANNEX 3

(to the Network Code for the National Gas Transmission System)

Application for Capacity

I. Applicant

NU: .....

[name and identification data of NU]

Contact person for this Application: .....

II. Capacity period

The capacity is requested for the time-frame: .....

1. [Gas day]; [month]; [year], 6.00 a.m. – 1. [gas day]; [month]; [year], 6.00 a.m.

III. Information regarding the capacity

The capacity is requested for the following entry/exit point/points:

Entry points

No	MP (metering point)* Code	MP* Name	Capacity
			MWh/day
1.	[code]	[name]	[value]

* Physical entry point.

Exit points

No	GMS* (Gas Metering Station) Code	GMS* Name	Capacity
			MWh/day
1.	[code]	[name]	[value]

* Physical exit point.

The gross calorific power taken into account for the conversion of the capacity into MWh/day shall be determined as weighted average against the gas volumes of gross calorific powers metered during the previous calendar year for each considered point.
From the capacity requested in the exit points, the following shall be with emergency interruptible supply:

No	GMS* Code	GMS* Name	Capacity
			MWh/day
1.	[code]	[name]	[value]

* Physical exit point.

IV. Additional information
For the capacity in entry points:
1. NU Clients must be specified.

2. Statements according the model of Annex no 2 to the Network Code for the National Gas Transmission System shall be enclosed.

Network User

Date: .....

Authorized representative

Signature: .....

ANNEX no 4

(to the Network Code for the National Gas Transmission System)

Notification

☐ of approval / ☐ of denial

Following your Application no ..., registered under no ...

☐ We hereby notify the booking of the following capacity is approved:

☐ Pursuant to Art. 43(2) of the Network Code for the National Gas Transmission System, we hereby notify that the booking of the following capacity is denied:

Entry points

No	MP* Code	MP* Name	Capacity
			MWh/day
1.	[code]	[name]	[value]

* Physical entry point.

Exit points

No	GMS* Code	GMS* Name	Capacity
			MWh/day
1.	[code]	[name]	[value]

* Physical exit point.

TSO
Authorized representative

Date: .....
Signature: .....

Revised version

ANNEX no 5

(to the Network Code for the National Gas Transmission System)

Transmission Schedule

We hereby notify you on yearly transmission schedule, according to the provisions of the Network Code for the National Gas Transmission System. To this purpose, please find below the monthly quantities, agreed upon with the producers, suppliers, storage operators, distribution operators, direct customers, which will be subject to the transmission contract for the time-frame ..., as follows:

Entry points

No	MP* Code	MP* Name		Quantity *MWh*

Revised version

				July	August	September	October	November	December	January	February	March	April	May	June
1.	[code]	[name]	[name]	[value]	[value]	[value]	[value]	[value]	[value]	[value]	[value]	[value]	[value]	[value]	[value]

* Physical entry point.

Exit points

	GMS* Code	GMS Name*		Quantity *MWh*

Revised version

No				July	August	September	October	November	December	January	February	March	April	May	June
1.	[code]	[name]	[name]	[value]	[value]	[value]	[value]	[value]	[value]	[value]	[value]	[value]	[value]	[value]	[value]

* Physical exit point.

The gross calorific power taken into account for the conversion of the capacity into MWh shall be determined as weighted average against the gas volumes of gross calorific powers metered during the previous calendar year for each considered point.

Please take note that this transmission schedule is mandatory for the gas year [ ], except in the event it is altered by us, in writing, based on the Terms and Conditions of the Network Code.

Revised version

Network User
Authorized representative

Date: .....
Signature: .....

Revised version

ANNEX no 6

(to the Network Code for the National Gas Transmission System)

Notification on the amendment of the transmission schedule no ..... of .....

We hereby notify you on the amendment of our yearly transmission schedule, according to the provisions of the Network Code for the National Gas Transmission System. To this purpose, please find below the new amounts taken into account:

Entry points

No	MP* Code	MP* Name		Quantity *MWh*											
				July	August	September	October	November	December	January	February	March	April	May	June

Revised version

1.	[code]	[name]	[name]	[value]	[value]	[value]	[value]	[value]	[value]	[value]	[value]	[value]	[value]	[value]	[value]

* Physical entry point.

Exit points

No	GMS* Code	GMS* Name		Quantity *MWh*											
				July	August	September	October	November	December	January	February	March	April	May	June

Revised version

1.	[code]	[name]	[name]	[value]	[value]	[value]	[value]	[value]	[value]	[value]	[value]	[value]	[value]	[value]	[value]

* Physical exit point.

Network User
Authorized representative

Date: .....
Signature: .....

ANNEX no 7

(to the Network Code for the National Gas Transmission System)

Nomination/Re-nomination/

Entry points

No.	Code MP/VMP*	MP/VMP* Name	Name of NU	Nominated quantity for dd/mm/yy MWh
				Total of which:
1.	[code]	[name]	[name]	[amount]
2.	[code]	[name]	[name]	[amount]
... n.	[code]	[name]	[name]	[amount]

* Physical/virtual entry point.

Exit points

No.	GMS* Code	GMS* Name	Name of NU	Nominated quantity for dd/mm/yy MWh
				Total of which:
1.	[code]	[name]	[name]	[amount]
2.	[code]	[name]	[name]	[amount]
... N	[code]	[name]	[name]	[amount]

* Physical exit point.

The gross calorific powers taken into account for the nomination/re-nomination are those available on the TSO webpage on the date of the relevant request, also determined and published according to the provisions of the Regulation for metering the gas amounts traded in Romania, approved by Order no 62/2008 of the President of the National Regulatory Authority for Energy, as subsequently amended.

☐We hereby confirm that this is the only nomination/re-nomination for the gas week/day [dd/mm/yy] and, at the same time, we reserve the right to make a re-nomination, according to the provisions of the Network Code.

☐We hereby confirm that this is the only nomination/re-nomination for the gas week/day [dd/mm/yy]

We hereby declare that the nomination/re-nomination is compliant with the contractual duties pursuant to own client portfolio.

We are waiting for your approval regarding the above mentioned values.

Network User

Date: .....

Authorized representative

Signature: .....

ANNEX no 7[1]
(to the Network Code for the
National Gas Transmission System)

Confirmation of Nomination/Re-nomination/

Entry points

No.	Code MP/VMP*	Name MP/MP*	Name of NU	Approved nominated amount for dd/mm/yy MWh Total of which:	Reason for the adjustment**
1.	[code]	[name]	[name]	[amount]	
2.	[code]	[name]	[name]	[amount]	
… n	[code]	[name]	[name]	[amount]	
				Traded quantity based on a VTP notification (purchase) related to dd/mm/yy MWh	
1.	VTP		[name]	[amount]	
2.	VTP		[name]	[amount]	
… n	VTP		[name]	[amount]	

* Virtual/physical entry point
** Specify the reason for the adjustment, that is:
E –imbalanced entry/exit nominations (only if the nominations are sent by alternative channels);
M – Application of the matching procedure.

Exit points

No.	GMS* Code	GMS* Name	Name of the NU	Nominated amount for dd/mm/yy MWh	

				Total Of which:	Reason for the adjustment**
1.	[code]	[name]	[name]		
2.	[code]	[name]	[name]		
… n	[code]	[name]	[name]		
				Traded amount based on a VTP notification (sale) for dd/mm/yy MWh	
1.	VTP		[name]	[amount]	
2.	VTP		[name]	[amount]	
… n	VTP		[name]	[amount]	

* Physical exit point.

** Specify the reason for the adjustment, that is:

E –imbalanced entry/exit nominations (only if the nominations are sent by alternative channels);

M – Application of the matching procedure.

↑We hereby confirm that this is the nomination/re-nomination for the gas day [dd/mm/yy].

ANNEX no 8

(to the Network Code for the National Gas Transmission System)

Capacity Transfer Request in the entry points of the NTS

A. [this section of the capacity transfer request will be filled out by the NU who wishes to transfer transmission capacity to another NU]

The undersigned ..... [name and identification data of NU], party in the Transmission Contract no ....., concluded by ..... [name of the NU] and .....[name of the TSO] on ..... [date], as **Transferring NU**, hereby request the transfer, starting with ..... [date]/for the time-frame .....[time-frame for which the transfer is requested] to .....[the name/NU/the applicant beneficiary of the transfer] of the following transmission capacities:

no,.	Code MP/VMP*	Name MP/VMP*	Capacity offered for transfer (MWh/day)			
			Annual	Quarterly	Monthly	Daily
1.	[code]	[name]	[amount]	[amount]	[amount]	[amount]

*Phyisical/virtual entry point.

Please find attached the proposal related to the transmission schedule applicable if the transfer is approved.

Considering the above mentioned issues, in case of the approval of the transfer request you will alter accordingly the levels of the booked capacity specified in the transmission contract no. [to be fiiled out with the contract no concluded between the NU and the TSO].

This Capacity Transfer Request is based on the following grounds ..... [to be filled out with the relevant grounds]

Transferring NU Date: .....
Authorized representative Signature: .....

B. [this section of the capacity transfer request will be filled out by the NU/applicant beneficiary of the transfer]

The undersigned ..... [name and identification data of NU], *party in the Transmission Contract no ....., signed by ..... [name of the NU] and .....[name of the TSO] on ..... [date]*, [the text in italics will not be inserted in the transfer request if the NU as beneficiary of the

transfer did not conclude a transmission contract with the TSO on the date of the transfer request)] as NU/applicant beneficiary of the **transfer**,

a) Agree upon taking over from……[name and identification data of the transferring NU], the following transmission capacities:

Entry points

no	MP* Code	MP* Name	Capacity accepted to be transferred (MWh/day)			
			Annual	Quarterly	Monthly	Daily
1.	[code]	[name]	[amount]	[amount]	[amount]	[amount]

* Physical/virtual entry point.

b) I do not agree upon taking over from……[name and identification data of the transferring NU], the following transmission capacities:

no	MP* Code	MP* Name	Capacity denied to be transferred (MWh/day)			
			Annual	Quarterly	Monthly	Daily
1.	[code]	[name]	[amount]	[amount]	[amount]	[amount]

* Physical/virtual entry point.

Please find attached the proposal related to the transmission schedule applicable if the transfer is approved.

Considering the above mentioned issues, please take note that in case of the approval of the transfer request, you will have to alter the levels of the booked capacity specified in the transmission contract no [to be filled out with the no of the transmission contract concluded bwtween the transferring NU and the TSO] / *you will have to sent the applicable transmission contract for the transmission of the transferred capacity* [the text in italics will be inserted in the transfer request in case the beneficiary of the transferred capacity hasn't concluded any transmission contract with the TSO at the moment of the transfer request].

This Request for Capacity Transfer is based on the following grounds …… [fill out the relevant grounds]

NU beneficiary of the transfer
Authorized representative

Date: .....
Signature: .....

ANNEX no 8[1]

(to the Network Code for the National Gas Transmission System)

Capacity Transfer Request in the exit points of the NTS

A. [this section of the capacity transfer request will be filled out by the NU who wishes to transfer transmission capacity to another NU]

The undersigned ..... [name and identification data of NU], party in the Transmission Contract no ....., signed by ..... [name of the NU] and .....[name of the TSO] on ..... [date], as Transferring NU, hereby request the transfer, starting with ..... [date]/for the time-frame .....[time-frame for which the transfer is requested] to .....[the name/NU/the applicant beneficiary of the transfer] of the following transmission capacities:

No,.	GMS*Code	GMS* Name	Capacity offered for transfer (MWh/day)			
			Annual	Quarterly	Monthly	Daily
1.	[code]	[name]	[amount]	[amount]	[amount]	[amount]

*Physical exit point

Of which the following interruptible capacity in case of emergency supply:

No,.	GMS*Code	GMS* Name	Capacity offered for transfer (MWh/day)			
			Annual	Quarterly	Monthly	Daily
1.	[code]	[name]	[amount]	[amount]	[amount]	[amount]

*Physical exit point

Please find attached the proposal related to the transmission schedule applicable if the transfer is approved.

Considering the above mentioned issues, please take note that in case of the approval of the transfer request, you will have to alter accordingly the capacity levels in the transmission contract no [to be filled out with the no of the transmission contract concluded between the transferring NU and the TSO].

This Capacity Transfer Request is based on the following grounds ..... [fill out the relevant grounds]

Transferring NU — Date: .....
Authorized representative — Signature: .....

B. [this section of the capacity transfer request will be filled out by the NU/applicant transfer beneficiary]

The undersigned ..... [name and identification data of NU], *party in the Transmission Contract no ....., signed by ..... [name of the NU] and .....[name of the TSO] on ..... [date]*, [the text in italics will not be inserted in the transfer request in case the transfer beneficiary has not concluded a transmission contract with the TSO on the date of the transfer request) as NU/Applicant **Transfer Beneficiary**,

a) Agree upon taking over from.....[name and identification data of the transferring NU], the following transmission capacities:

No	GMS* Code	GMS* Name	Capacity accepted to be transferred (MWh/day)			
			Annual	Quarterly	Monthly	Daily
1.	[code]	[name]	[amount]	[amount]	[amount]	[amount]

* Physical exit point.

Of which the following capacity for emergency interruptible supply:

No	GMS* Code	GMS* Name	Capacity accepted to be transferred (MWh/day)			
			Annual	Quarterly	Monthly	Daily
1.	[code]	[name]	[amount]	[amount]	[amount]	[amount]

* Physical exit point.

b) do not agree upon taking over from.....[name and identification data of the transferring NU], the following transmission capacities:

No	GMS* Code	GMS* Name	Capacity denied to be transferred (MWh/day)			
			Annual	Quarterly	Monthly	Daily
1.	[code]	[name]	[amount]	[amount]	[amount]	[amount]

* Physical exit point.

Of which the following capacity for emergency interruptible supply:

No	GMS* Code	GMS* Name	Capacity denied to be transferred (MWh/day)			
			Annual	Quarterly	Monthly	Daily
1.	[code]	[name]	[amount]	[amount]	[amount]	[amount]

* Physical exit point.

Please find attached the proposal related to the transmission schedule applicable in case of transfer approval.

Considering the above mentioned issues, please take note that in case of the approval of the transfer request, you will have to alter accordingly the levels of the booked capacity specified in the transmission contract no. [fill in the number of the contract concluded by the transferring NU and the TSO] / *send us the transmission contract for the transferred capacity in order for this to be signed* [the text in italics will be inserted in the transfer request in case the applicant transfer beneficiary hasn't concluded any transmission contract with the TSO on the date of the transfer request].

This Capacity Transfer Request is based on the following grounds ..... [fill out the relevant grounds]

Transfer Beneficiary NU Date: .....

Authorized representative Signature: .....

ANNEX no 8[2]

(to the Network Code for the National Gas Transmission System)

Capacity Transfer Request at NU-level

The undersigned..... [name and identification data of the NU], party in the transmission contract no. [ ] concluded between .....[name of the NU], and .....[name of the TSO], on ..... [fill out the date], hereby request the capacity transfer between the following NTS entry/exit points, starting with ..... [fill out the date]/ for the time-frame .....[fill out the time-frame for which the transfer is requested].

Entry points

No.	Entry point from which it is transferred		Entry point to which it is transferred		Transferred capacity (MWh/day)	Transferred capacity type (annual, quarterly, monthly, daily)
	MP/VMP* code	MP/VMP* name	MP/VMP* code	MP/VMP* name		
1.	[code]	[name]	[code]	[name]	[amount]	[capacity type]

***** Virtual/physical entry point.

Exit points

No.	Exit point from which it is transferred		Exit point to which it is transferred		Transferred capacity (MWh/day)	Transferred capacity type (annual, quarterly, monthly, daily)
	GMS* code	GMS* name	GMS* code	GMS* name		
1.	[code]	[name]	[code]	[name]	[amount]	[capacity type]

*Physical exit point.

Please find attached the proposal related to the amendment of the transmission schedule, applicable in case of the transfer approval.

Considering the above mentioned issues, please take note that in case of the transfer approval, you will have to alter the levels of the booked capacity accordingly.

This Capacity Transfer Request is based on the following grounds ..... [fill out the relevant grounds]

Transfer Beneficiary NU Date: .....

Authorized representative Signature: .....

ANNEX no 9

(to the Network Code for the National Gas Transmission System)

TECHNICAL REQUIREMENTS FOR OPERATION OF GAS METERING POINTS FOR THE AMOUNTS OF NATURAL GAS IN NTS ENTRY/EXIT POINTS

Chapter. 1 General Requirements

1.1. *The Technical requirements for operation of gas metering points for the amounts of natural gas in NTS entry/exit points,* hereinafter referred to as the **Technical Requirements**, are part of the *Network Code* and they stipulate:

a) the rights and duties of the TSO, the NU related to the operation of NTS entry/exit points;
b) the data exchange between the TSO, the NU, data required to safely and efficiently operate and use the NTS;
c) the metering methods and tools for traded gas amounts (meters/metering systems);
d) the formulas for the determination of the natural gas amounts;
e) the methods and tools for determining the quality parameters of the natural gas.

1.2. The Technical Requirements apply to the relationship between TSO and NUs, being part of the Gas Transmission Contract no _____ of _____.

1.3. The terms used in this **Technical Requirements** are defined by the Energy and Gas law no 123/2012, as well as by the *Network Code*.

Chapter 2. Operation of the NTS entry/exit points

2.1. The operation of the NTS entry/exit points held by the TSO shall be performed by TSO by complying with the work procedures drawn up according to the *Quality Ensurance Manual* and the specific legislation and mainly consists of the following activities:

a) Ensuring the safe, secure and continuous supply of the whole technological installation and related equipments, by operating and maintaining the previously mentioned with the assistance of authorized qualified personnel;
b) Operating the technological installation in order to ensure the established parameters of pressure, flow and odorization level;
c) Metering and determining the gas amounts by means of metering systems in the NTS entry/exit points;

d) Adjustment of the structure and configuration of the metering system to the requirements related to gas pressure and flow, according to the provisions of the transmission contract concerning the approved capacity;

e) Regular metrological check-up of the metering systems based on the valid legal provisions and on the specifications of Chapter 4 of the present **Technical Requirements**;

f) Keeping and updating the technical book of the technological installation of the NTS entry/exit point, which must include at least:

(1) a general description of the technological installation, specifying the technical characteristics and the year of its commissioning;

(2) the technological scheme of the technological installation;

(3) the geometric configuration of the meter board, specifying its sizes;

(4) the type of the used metering system, specifying the technical and metrological characteristics of all components;

(5) separation of the operation areas, pointing out the areas classified as being hazardous;

(6) the documents certifying the compliance of the metering system with the requirements of the valid legal provisions in matters of metrology;

g) Ensuring the metering security by:

(1) sealing the metering systems according to the sealing scheme included in the model approval;

(2) air-tight isolation of the back-up metering lines, if applicable, by closing and sealing the valves;

(3) complying with the requirements related to the operation, of the installations and metering systems, by sealing all valves in the fully closed or fully opened position, as applicable, according to the technical manual;

(4) protecting by software passwords all data recorded by the flow computers;

(5) protecting and sealing all parts of the devices and transducers which may be disturbed during operation and may affect the result of the gas metering.

h) Ensuring the watch, integrity and security of the technological installation of the NTS entry/exit point;

i) Ensuring the labor, fire and environment protection measures, according to the specific valid legislation.

j) Maintaining the integrity of the calibration log and filling out the log according to the principle: *`As found, as left`*.

k) Maintaining the integrity and updating the *configuration log* and of the *damage log*.

2.2. The rights and duties of the TSO and the NU are those set forth by the Gas Transmission Contract and the *Network Code*.

2.3. For the purpose of executing the transmission contracts, the NU has the responsibility of providing the contracts concluded with their partners with duties regarding the operation of the metering points for natural gas amounts and the data exchange between such partners.

2.4. For the purpose of operating the metering points for natural gas amounts in the NTS entry points, the TSO, the NU and the partners of the NU have the following specific duties:

A. NU partners – producers, importers, SO - in relation to TSO have the following duties:

(1) To allow access of the representatives designated by the TSO, upon the written request of the latter, on the premises of the technological installations for the check-up of the metering systems and the metrological control of their components, in the presence of the NU and/or their partners;

(2) To notify the TSO with regard to the scheduled alteration of the technological regime for gas delivery, with a prior notice of at least 24 hours;

(3) To deliver gas into the NTS only in those points where the NU has booked capacity;

(4) To notify the TSO, as soon as possible, on the occurrence of any damages affecting the NTS technological regime, as well as on the the measures taken on order to remedy such situations.

B. The TSO has following duties related to the NU and its partners:

(1) To notify the NU and its partners – producers, importers, SSO – with at least 24 hours in advance, on the alteration of the technological regime of gas taken-off for transmission purposes;

(2) To notify the producer, the importer, the SO, as applicable, as soon as possible on the occurrence of special situations in the functioning of the NTS which affects the technological regime, as well as on the measures taken in order to remedy such situations;

(3) To allow access to the NU and/or their partners, upon their written requeston the premises of the technological installations for the check-up of the metering systems and the metrological control of their components, in the presence of the TSO representatives.

(4) To install one-way flow dampers in the upstream of the metering systems, in all cases where the two-way gas flow is possible and affects the metering.

2.5. For the operation the metering points for natural gas amounts in NTS exit points, the TSO, the NU and the NU partners have the following specific duties:

A. The TSO has the following duties related to the NU and its partners – DSO, SSO, DC:

(1) To allow acces of the designated representatives of the NU and/or their partners, upon their written request, on the premises of the technological installations for the check-up of the metering systems and the metrological control of their components, in the presence of TSO representatives;

(2) To notify NU and its partners on the scheduled alteration of the technological regimes for gas delivery, with at least 24 hours in advance;

(3) To notify the NU and its partners, as soon as possible, on the occurrence of damages affecting the technological regime in the NTS, as well as on the measures taken in order to remedy such situations.

B. With regard to the TSO, the NU and its partners are bound to notify the TSO, as soon as possible, on special situations occurred in the functioning of adjacent systems connected to the NTS, affecting the technological regime and on the measures taken in order to remedy such situations.

2.6. NTS entry/exit points shall be technically equipped by their owner/operator, on its own expense, in compliance with the requirements stipulated in the *Regulation for metering the gas amounts traded in Romania* and in Chapter 3 of the **Technical Requirements**.

2.7. NTS exit points shall be operated only by the TSO, regardless of their owner, based on the license to operate the natural gas transmission system and the related authorization.

Chapter 3. Metering and determining the gas amounts

3.1. (1) The commercial metering of gas amounts is performed by the owner/operator of the NTS entry/exit points, by means of metering systems hereinafter referred to as the basic metering systems.

(2) The basic metering systems used must comply with the requirements set forth in the *Regulation for metering the gas amounts traded in Romania*.

3.2. (1) The owner/operator of the basic metering systems, upon the request of the counterpart, shall allow the latter to install its own metering systems, hereinafter referred to as control systems, with an accuracy class comparable to the one of the basic metering systems. Such control systems shall be installed in a way that they do not influence each other.

(2) The control metering systems shall be installed according to the provisions of the *Regulation for metering the gas amounts traded in Romania*.

(3) Metering performed based on the control systems shall not be effective against metering with the basic systems.

3.3. The data collection based on which the the gas amounts taken in/off the NTS are determined is performed for all the delivery/take over entry and, respectively exit points, as well as for all the metering systems, at 6^{00} a.m. of gas day *n* for the gas day *n-1*..

3.4. (1) The amounts determined by metering based on basic systems shall be registered in minutes, according to the templates in Annexes no 2.1 ... 2.7, and shall be communicated to the parties, namely to TSO, NU and its partners, on a daily basis.
(2) For the NTS entry/exit points for which there is no control metering system, the operator of the basic metering system will male available the data and/or diagrams to the other party, upon its request, until latest the closure of the weekly minutes of gas take-ins/take-offs according to Annexes no 2.1 ... 2.6.
3.5. In case the parties, due to objective and legitimate reasons, are unable to agree upon the obtained values, the metering systems shall be verified according to Chapter 4 of the **Technical Requirements**.
3.6. (1) The owner/operator of the metering systems, located at NTS entry points, shall compare the amounts metered by the basic and the control metering systems (where such systems are installed) on a daily basis.
(2) Provisionally, in case of discovering differences between the amounts metered by the basic meter and those metered by the control meter, the parties agree upon reporting the value indicated by the basic meter.
(3) After determining the causes which generated the difference, provided the error is owed to the basic metering system, the reported value according to paragraph (2) are amicably corrected within 3 working days. In this case, the corrections shall be applied as of the date the differences were detected.
(4) In case the time when the difference has occurred can not be determined or the counterparties fail to agree upon it, the correction shall be carried out for a period equal to half of the period which passed since the last check-out, but no longer than 30 days.
3.7. (1) Producers/SSO, as applicable, shall submit to the TSO the following information related to the NTS entry points:

a) the recorded gas amount, on a daily basis, until 10.00 a.m.;
b) a copy of the *monthly register* of the electronic flow computer, on a monthly basis, until latest the third working day of the month following the delivery month.

(2) *The monthly register* of the electronic flow computer shall represent the basic document used to determin the gas amounts delivered into the NTS.
(3) A copy of the *configuration log* of the electronic flow computer shall be sent to the TSO together with the *monthly register* of the gas flow.
(4) The configuration data of the electronic flow computer shall be entered in the presence of the parties' representatives.

3.8. (1) The turbine or turning piston meters, used in NTS exit points shall be equipped with PTZ gas volume correctors, according to the technical requirements stipulated in the *Regulation for metering the gas amounts traded in Romania*.
(2) The PTZ correctors, mentioned in paragraph (1), shall be set up in the presence of the parties.
(3) When installing the turbine or turning piston meters, the lengths of the upstream and downstream sections must comply with those provided for by the *Regulation for metering the gas amounts traded in Romania*.
3.9. In case the basic systems fail to comply with the conditions set forth for the metering of gas amounts due to objective causes, the parties shall mutually agree upon performing the commercial metering using the control systems (where such systems are installed), until the said causes are remedied, according to the provisions related to access to metering information stipulated in Art. 3.4.
3.10. (1) The alteration of the configuration of the basic metering system is performed in the presence of the parties, at a date mutually agreed upon, with at least one day in advance.
(2) The alterations under paragraph (1) shall be proven by the parties' signing of the minutes regarding the alteration of the configuration of the basic metering system, drawn up according to the model provided in Annex no 3.1, respectively Annex no 3.2. Depending on the performed alterations of the configuration of the basic metering system, the values for determining the gas amounts shall be adjusted accordingly.
(3) The alteration of the configuration shall be updated in the technical book of the technological installation, stipulated by Art 2.1. letter f).
3.11. (1) It is forbidden to use mechanical recorders in commercial transactions in NTS entry/exit points.
(2) The operators of the NTS entry/exit points are bound to replace the existing mechanical recorders used in commercial transactions within maximum 18 months upon the enforcement of the *Network Code*.
(3) As an exception from the provisions of paragraph (1), the existing mechanical recorders used in commercial transactions shall be allowed for the time-frame stipulated in paragraph (2).
(4) Until the decommissioning of the mechanical recorders, the provisions of Annex no 5 "Calculation methodology for the mechanical system` shall apply for determining the gas amounts by means of such devices.

Chapter 4. The check-up of gas metering systems

4.1. The metrological supervision and regular metrological control of the metering systems shall be performed according to the specific applicable regulations and the presence at the regular metrological control is the owner's responsibility.
4.2. (1) In case of disputes related to the metered gas quantities, the parties can request a metrological control of the used systems, in addition to the regular metrological control.
(2) If it is established that the equipments are operating within the allowed range as per accuracy class, the control costs shall be covered by the claimant, whereas the owner of the equipment shall cover such costs in the opposite case.
4.3. The results of the controls performed based on the provisions of point 4.2 shall be recorded in control minutes signed by both parties, according to the models in Annexes no 4.1 … 4.4.
4.4. Prior to the re-commissioning of the metering system, the compliance with the installation requirements related to all metering equipments subject to control and the restoration of tightness of the mechanical joints shall be checked.
4.5. (1) If, during the control of the basic or control metering systems, one of the devices shows an error above the value accepted or specified in the certificate for the approval of the model, such device shall be immediately recalibrated or replaced.
(2) The basic or control metering devices shall be repaired according to the applicable legal metrology regulations and such actions are the owner's responsibility.

Chapter 5 Gas quality

5.1. (1) The gas traded in NTS entry/exit points must comply with the minimum quality requirements established by the valid legislation.
(2) The TSO is entitled to charge penalties for the failure to comply with the quality of gas delivered in the NTS.
5.2. (1) The appraisal of the gas quality is performed based on their chemical structure and on the following physical characteristics:

a) gross calorific power and net calorific power;
b) Wobbe index;
c) density;
d) relative density;
d) compressibility factor;
e) water dew point;
d) liquid hydrocarbons dew point;

(2) The content of mechanical impurities, as well as the minimum quality requirements of gas accepted for trading are stipulated in the *Regulation for metering the gas amounts traded in Romania*.

5.3. (1) The sampling points required to establish the gas quality shall be those located on the metering system.
(2) The sampling for analysis shall be performed according to standard SR ISO 10715 – Natural gas. Sampling methods.
(3) If the sampling is conducted for the purpose of dispute settlement, the sampling shall be performed in the presence of the parties and with the notification ofthe NU.
5.4. (1) The chemical structure of natural gas, respectively the physical properties listed in Art. 5.2, shall be determined by means of a lab gas-chromatograph and/or regular gas-chromatographs, according to the provisions of the *Regulation for metering the gas amounts traded in Romania* and to the valid legal provisions.
(2) The gas-chromatographs shall be calibrated using benchmark gas, according to the calibration specifications/procedures set forth by the chromatograph manufacturer.
(3) The time-frames for the determination are established by the *Regulation for metering the gas amounts traded in Romania*, in case the parties don't agree otherwise.
5.5. The determination of the liquid hydrocarbon dew point, of the hydrogen sulphide, of the mercaptan sulphur and, implicitly, of the total sulphure shall be performed using gas-chromatographs or specific analysis equipments.
5.6. (1) The determination of the water and liquid hydrocarbon dew point shall be performed under the pressure and at the temperature existing in the NTS entry point.
(2) The NU and/or its partners – the producer, importer, SSO – shall ensure in the NTS entry points:

a) a water dew point of at least –15 °C at the delivery pressure of the NTS entry point;

b) a liquid hydrocarbon dew point of at least 0 °C at the delivery pressure of the NTS entry point.

(3) The determinations under paragraph (1) shall be performed on a monthly or quarterly basis, if the parties don't agree otherwise.
5.7. (1) The regularly determined quality parametersare considered to be valid until the next determination.
(2) In case of automatic determination of qualitaty parameters, the daily average values shall represent the base used to determine the deviations from the allowed limits.
5.8. (1) The parties' claims related to the traded energy amounts shall be settled according to the provisions of the *Regulation for metering the gas amounts traded in Romania*.
(2) In case of disputes related to quality, the parties shall take samples for the arbitrage procedure, samples which shall be kept until the dispute settlement.
(3) In case an amicable settlement is not reached, the litigation shall be solved according to the legal provisions.

5.9 With regard to the exit points, the TSO is bound to provide data related to the values of the qualitative parameters within the time frame agreed upon with the NU.

Chapter 6 Provision of data required to operate and use the NTS

6.1. The IT platform set up by TSO shall ensure the data exchange between TSO, NU and NU partners, exchange required to safely and efficiently operate and use the NTS.

6.2. (1) The TSO is bound to keep record of the metered gas amounts in the physical entry/exit points of the NTS, by means of weekly (gas week) and monthly (calendar month) minutes, concluded with the producers, SSO, DO and importers, according to the templates provided for in the Technical Requirements.

(2) Upon the implementing of the SCADA programme and upon request, the TSO shall enable the access to its own data: flows, pressures, temperatures, etc.

6.3. The producer is bound to provide the TSO with the following data related to each physical NTS entry point:

a) the volumes and gross calorific power for the previous gas day, on a daily basis, until 10.00 a.m.;
b) the allocation per NU of the gas amounts metered for the previous gas day, on a daily basis, until 14.00 p.m.;
c) the metered gas amounts, the gross calorific power and related energy recorded by weekly (gas week) and monthly (calendar month) minutes concluded by the parties, according to the template in Annex no 2.1;
d) hourly pressures – communicated by phone or e-mail;
e) upon the request of the TSO, the flow impulses of the metering systems for the purpose of adequate odorization;
f) upon implementing the SCADA profeams, to allow access of the TSO to its own SCADA data: flows, pressures, temperatures, etc..

6.4. The SSO is bound to submit to the TSO the following data, for each physical entry/exit point of the storage facility:

a) the injection schedule for the time-frame between April – September, until March the 15th;
b) the withdrawal schedule for the time-frame between October – March, until September the 15th;
c) the monthly injection/withdrawal schedule, at latest 5 days prior to the beginning of the delivery month;
d) the nominations/re-nominations for each NU, according to the provisions of the Network Code;

e) the volumes and gross calorific power, on a daily basis, until 10.00 a.m.;
f) the allocation per NU of gas amounts metered for the previous gas day, on a daily basis, until 14.00 p.m.;
g) the final data – volumes and gross calorific power – for all relevant points with allocation per each NU, upon the end of the calendar month;
h) for each entry/exit point of the storage facility, SSO shall provide TSO with the following data:
   - the metered gas amounts, gross calorific power and related energy recorded by means of weekly (gas week) and monthly (calendar month) minutes concluded by the parties, according to the template in Annex no 2.3;
   - hourly flows and pressures – communicated by phone or e-mail.
i) Upon the request of the TSO, the flow impulses of the metering systems for the purpose of adequate odorization;
j) Upon implementing the SCADA programmes, to allow access to the TSO to its own SCADA data: flows, pressures, temperatures, etc..

6.5. The distribution operators shall communicate to TSO the following data:
a. the distribution schedule in the NTS exit points:
   – per gas year split on each month (until May 15th);
   – per calendar year split on each month (until October 15th);
   – monthly (within maximum 5 days prior to the beginning of the delivery month).
b. the quantities allocated per each NU in the NTS exit points for the previous gas day, on a daily basis, until 14.00 p.m., according to the provisions of the *Network Code*;
c. the final volumes allocated per NU in all NTS exit points, upon the end of the calendar month.
d. Within maximum 2 days, to keep record of the gas amounts metered in the NTS physical exit points in weekly (gas week) and monthly (calendar month) minutes concluded with the TSO, according to the template in Annexes no 2.4 and 2.5.

6.6. The importer shall communicate to the TSO the following data:
a) the import schedule for the NTS entry points;
   – per gas year split on each month (until May 15th);
   – per calendar year split on each month (until October 15th);
   – monthly (within maximum 5 days prior to the beginning of the delivery month).
b) the nominations/re-nominations for each NU, according to the provisions of the Network Code.

c) the amounts allocated per NU for the previous gas day, on a daily basis, until 14.00 p.m., according to the provisions of the Network Code.
d) the final volumes allocated per NU in all NTS entry points, upon the end of the calendar month.
e) To keep record of the gas quantities metered in the NTS physical entry points in weekly (gas week) and monthly (calendar month) minutes concluded with the TSO, according to the template in Annex no 2.2.

Annex no 1

(to the Technical Requirements)

Conversion formulas. Equivalence to other frequently used measure units.

When applying the provisions of these **Technical Requirements,** other measure units are also allowed as follows:

1) For pressure.

In IS, the measure unit for pressure is the Pascal (*Pa*) 1 *Pa* = 1 N/m^2

The conversion formulas when using other allowed measure units are indicated by the table below

Pressure MU	*Pa* (N/m^2)	*bar*	*mm Hg* (1 *Torr*)	*mm* H_2O	*at (technical atmosphere), Kgf/cm²*	*atm (standard atmosphere)*
Pa (N/m^2)	1	10^{-5}	7.50064 x 10^{-3}	0.101972	1.01972 x 10^{-5}	0.98692 x 10^{-5}
Bar	10^5	1	750.064	1.01972 x10^4	1.01972	0.98692
mm Hg (1 *Torr*)	133.322	1.33322 x 10^{-3}	1	13.5951	13.5951 x 10^{-4}	1.31579 x 10^{-3}
mm H_2O	9.80665	9.80665 x 0^{-5}	0.073556	1	10^{-4}	9.67837x10^{-5}
at (technical atmosphere), Kgf/cm²	9.80665 x 10^4	0.98066	735.559	10^4	1	0.967841
atm (standard atmosphere)	10.1325 x 10^4	1.01325	760	1.03323 x 10^4	1.03323	1

2) For temperature

In IS, the measure unit for temperature is the *Kelvin* (K)

The conversion formulas when using other allowed measure units:
a) from *Centigrades* (°C): $T(K) = t(°C) + \mathbf{273.15}$
b) from degrees *Fahrenheit* (°F): $T(K) = [t(°F) + \mathbf{459.67}]\mathbf{/1.8}$

3) For volume.
In IS, the measure unit for volume is m^3.
Based on these **Technical Requirements**, one cubic meter m^3 represents the amount of gas occupying the volume of a cube with a 1 m side under basic conditions, determined by the CA regulations.

Gross calorific power.
The gross calorific power shall be expressed in MWh/m^3 or GJ/m^3.
The combustion temperature is specified by CA regulations.
The calorific power shall be converted according to Standard SR ISO 13443.

Standard state.
The state of gas under operating conditions is characterized by state parameters P and T, as well as by the compressibility factor Z.

The universal law of gas is: $PV = \nu RTZ$
where P- absolute gas pressure, expressed in N/m^2
V- gas volume, expressed in m^3
ν- amount of substance, expressed in *kmol*
R- universal gas constant, expressed in *J/kmol K*
T- absolute gas temperature, expressed in *K*
Z- compressibility coefficient (adimensional)

To convert a gas volume V, under certain pressure and temperature conditions, into the characteristic state of the cubic meter as defined by these **Technical Requirements,** the following formula shall be used:

$$V_r = V \cdot \frac{P}{P_r} \cdot \frac{T_r}{T} \cdot \frac{Z_r}{Z}$$

Annex no 2.1

(to the Technical Requirements)

GAS DELIVERY/TAKE-OFF PROTOCOL (GDTOP) NO .....
(for the gas amounts delivered into the NTS)

Concluded this day ..... month ..... year .....between:

....., as ***PRODUCER***

and

SNTGN TRANSGAZ SA MEDIAŞ, as ***LICENSED OPERATOR OF THE NATIONAL GAS TRANSMISSION SYSTEM (TSO)***.

It is hereby confirmed that in the time-frame between ..... a total amount of gas of ..... cm, respectively of ..... Mwh was delivered, respectively taken-off via meter boards, according to the specifications in the Annex (... page).

Based on a mutual agreement, the parties are recording the following:

- the gas amounts have been delivered – taken off into – out of the NTS in compliance with the provisions of the Technical Requirements.
- the gas amounts mentioned in the Annex are those acknowledged by the NU.

REMARKS .....

DELIVERED,
SUBUNIT ...
.....
PRODUCER'S REPRESENTATIVE
Surname .....
Name .....
Signature

TAKEN-OFF,
SUBUNIT ...
.....
TSO REPRESENTATIVE
Surname .....
Name .....
Signature

This Protocol was drawn up in 2 counterparts, one for each party.

ANNEX TO GDTOPno ...

No	MP Name	TOTAL AMOUNT			TOTAL AMOUNT SPLIT PER GAS BENEFICIARIES	
			PCS	ENERGY		AMOUNT

		VOLUME [m^3]	[MWh/m^3]	[MWh]	GAS BENEFICIARY NAME	VOLUME [m^3]	ENERGY [MWh]
1					1.1. …		
					1.2. …		
					1.n. …		
2					2.1. …		
					2.2. …		
					2.n. …		
…							
n.					n.1. …		
					n.2. …		
					n.3. …		

DELIVERED, **TAKEN-OFF ,**
SUBUNIT … **SUBUNIT …**
PRODUCER'S REPRESENTATIVE TSO REPRESENTATIVE

Signature Signature

…… ……

Annex no 2.2

(to the Technical Requirements)

GAS DELIVERY/TAKE-OFF PTOTOCOL (GDTOP) NO .....

Concluded this day ..... month ..... year .....between:

....., as ***IMPORTER***[1]

and

SNTGN TRANSGAZ SA MEDIAŞ, as ***LICENSED OPERATOR OF THE NATIONAL GAS TRANSMISSION SYSTEM (TSO)***.

It is hereby confirmed that in the time-frame between ..... a total amount of gas of ..... cm, respectively of ..... Mwh was delivered, respectively taken-off via gas metering station, according to the specifications of the Annex (... page).

Based on mutual agreement, the parties are recording the following:

- the gas quantities have been delivered – taken - off into – out of the NTS in compliance with the provisions of the Technical Requirements.
- the gas amounts mentioned by the Annex are those acknowledged by the NU.

REMARKS

.....

.....

DELIVERED,	**TAKEN-OFF,**
IMPORTER REPRESENTATIVE	**TSO REPRESENTATIVE**
Surname	Surname .....

[1] In case of several importers:

- the Protocol shall be signed by the importer mandated by the other importers, or

- the Protocol, drawn up in 2 counterparts, shall be signed with each importer.

Name ..... Name .....
Signature Signature

This Protocol was drawn up in 2 counterparts, one for each party.

Pcs is $t_{standard\ metering}$ = 15°C and $t_{standard\ burning}$ = 15°C
The volume is at 15°C and the pressure at 1.01325 bar

ANNEX TO GDTOPno ...

No	GMS Name	TOTAL AMOUNT			TOTAL AMOUNT SPLIT PER GAS BENEFICIARIES		
		VOLUME [m^3]	PCS [MWh/m^3]	ENERGY [MWh]	GAS BENEFICIARY NAME	AMOUNT	
						VOLUME [m^3]	ENERGY [MWh]
1					1.1. ...		
					1.2. ...		
					1.n. ...		

DELIVERED,
IMPORTER REPRESENTATIVE

Signature

.....

TAKEN-OFF,
TSO REPRESENTATIVE

Signature

.....

Annex no 2.3

(to the Technical Requirements)

GAS DELIVERY/TAKE-OFF PROTOCOL (GDTOP) NO .....
(for gas intakes/off-takes into/out of the NTS)

Concluded this day ..... month ..... year .....between:

SNTGN TRANSGAZ SA MEDIAŞ, as ***LICENSED OPERATOR OF THE NATIONAL GAS TRANSMISSION SYSTEM (TSO)***

and

....., as ***LICENSED OPERATOR OF THE STORAGE SYSTEM (SO)***

It is hereby confirmed that in the time-frame between ..... a total gas amount of ..... cm, respectively of ..... Mwh was delivered, respectively taken-off via metering board, for the purpose of injection/withdrawal into/out of the storage facility, according to the specifications in Annex (... page).

Based on mutual agreement, the parties are recording the following:

- the gas amounts have been delivered – taken off into – out of the NTS in compliance with the provisions of the Technical Requirements.
- the gas amounts mentioned in the Annex are those acknowledged by the NU.

REMARKS.....

DELIVERED,	**TAKEN-OFF,**
SUBUNIT ...	**SUBUNIT ...**
.....	**.....**
TSO REPRESENTATIVE[2] /	**SO REPRESENTATIVE[4]/**
SO REPRESENTATIVE[3]	**TSO REPRESENTATIVE[5]**
Surname	Surname .....
Name	Name .....

[2] For the injection cycle
[4] For the withdrawal cycle
[3] For the injection cycle
[5] For the withdrawal cycle

Signature Signature

This Protocol was drawn up in 2 counterparts, one for each party.

Pcs is at $t_{standard\ metering}$ = 15°C and $t_{standard\ burning}$ = 15°C
The volume is at 15°C and the pressure at 1.01325 bar

ANNEX TO GDTOPno …

No	MP/STORAGE Name	TOTAL AMOUNT			TOTAL AMOUNT SPLIT PER NU		
		VOLUME [m^3]	PCS [MWh/m^3]	ENERGY [MWh]	NU NAME	AMOUNT	
						VOLUME [m^3]	ENERGY [MWh]
1					1.1. …		
					1.2. …		
					1.n. …		

DELIVERED, **TAKEN-OFF,**
SUBUNIT … **SUBUNIT …**
…… **……**

TSO REPRESENTATIVE[6] / SO REPRESENTATIVE[8]/
SO REPRESENTATIVE[7] TSO REPRESENTATIVE[9]

Signature Signature

[6] For the injection cycle
[8] For the withdrawal cycle
[7] For the injection cycle
[9] For the withdrawal cycle

Annex no 2.4

(to the Technical Requirements)

GAS DELIVERY/TAKE-OFF PROTOCOL (GDTOP) NO .....
(total)
(only for gas amounts taken into the distribution systems)

Concluded this day ..... month ..... year .....between:

SNTGN TRANSGAZ SA MEDIAŞ, as ***LICENSED OPERATOR OF THE NATIONAL GAS TRANSMISSION SYSTEM (TSO)***
and
....., as ***LICENSED OPERATOR OF THE DISTRIBUTION SYSTEM (DO)***

It is hereby confirmed that in the time-frame between ..... a total gas amount of ..... cm, respectively of ..... Mwh was taken in, respectively taken-of in the gas-metering station, according to the specifications in the Annex (... page).

Based on mutual agreement, the parties are recording the following:

- the gas amounts have been taken in – taken off into – out of the NTS in compliance with the provisions of the Technical Requirements.
- the delivered gas was odorized according to the valid regulations and had a noticeable odor allowing an easy detection of emission.

REMARKS.....

DELIVERED,	**TAKEN-OFF,**
SUBUNIT ...	**SUBUNIT ...**
.....	**.....**
TSO REPRESENTATIVE	**DO REPRESENTATIVE**
Surname	Surname .....
Name	Name .....
Signature	Signature

This Protocol was drawn up in 2 counterparts, one for each party.

Pcs is at $t_{standard\ metering}$ = 15°C and $t_{standard\ burning}$ = 15°C
The volume is at 15°C and the pressure at 1.01325 bar

ANNEX TO GDTOPno …

NO	**GMS DENOMINATION**	**INDEX VALUE OF METER/CORRECTOR**		**TOTAL AMOUNT**		
		OLD INDEX	**NEW INDEX**	**VOLUME [m^3]**	**PCS [MWh /m^3]**	**ENERGY [MWh]**
1						
2						
…						
n						

DELIVERED,
SUBUNIT …
……
TSO REPRESENTATIVE
Signature

……

TAKEN-OFF,
SUBUNIT …
……
DO REPRESENTATIVE
Signature

……

Annex no 2.5

(to the Technical Requirements)

GAS DELIVERY/TAKE-OFF PROTOCOL related to the GMS (GDTOP) NO...
(split per supplier)
(only for gas AMOUNTS taken into the distribution systems)

Concluded this day ..... month ..... year .....between:

SNTGN TRANSGAZ SA MEDIAŞ, as ***LICENSED OPERATOR OF THE NATIONAL GAS TRANSMISSION SYSTEM (TSO)***

and

....., as ***LICENSED OPERATOR OF THE DISTRIBUTION SYSTEM (DO)***

It is hereby confirmed that, according the Gas Delivery/Take-Off Protocol (**GDTOP**), in the time-frame between ..... a total gas amount of ..... cm, respectively of ..... Mwh was delivered, respectively taken-of in the gas-metering station, according to the specifications in Annex (... page).

Based on mutual agreement, the parties are recording the following:

- the gas amounts have been taken in – taken off into – out of the NTS in compliance with the provisions of the Technical Requirements.
- the gas amounts specified in the Annex are those acknowledged by the suppliers.
- the delivered gas was odorized according to the valid regulations and had a noticeable odor allowing an easy detection of emissions.

REMARKS

.....

.....

DELIVERED, **TAKEN-OFF,**
TSO **DO**
Director ... Director ...
....

This Protocol was drawn up in 2 counterparts, one for each party.

NO	**GMS NAME**	**TOTAL AMOUNT**			**TOTAL AMOUNT SPLIT PER SUPPLIERS**	
			PCS	ENERGY		**AMOUNT**

		VOLUME [m^3]	[MWh/m^3]	[MWh]	**SUPPLIER NAME**	VOLUME [m^3]	ENERGY [MWh]
1					1.1. ...		
					1.2. ...		
					1.n. ...		
2					2.1. ...		
					2.2. ...		
					2.n. ...		
...							
n.					n.1. ...		
					n.2. ...		
					n.3. ...		

DELIVERED,
TSO
Director ...
.....

TAKEN-OFF,
DO
Director ...
.....

Annex no 2.6

(to the Technical Requirements)

GAS DELIVERY/TAKE-OFF PROTOCOL related to the GMS (GDTOP) NO ……
(only for the gas amounts delivered to the DC)

Concluded this day ..... month ..... year .....between:

SNTGN TRANSGAZ SA MEDIAŞ, as ***LICENSED OPERATOR OF THE NATIONAL GAS TRANSMISSION SYSTEM (TSO)***

and

……, as ***LICENSED SUPPLIER(S)***

It is hereby confirmed that in the time-frame between ..... a total gas amount of ..... cm, respectively of ..... Mwh was delivered, respectively taken-off via GMS, according to the specifications in Annex (… page).

Based on mutual agreement, the parties are recording the following:

- the gas amounts have been taken in – taken off into – out of the NTS in compliance with the provisions of the Technical Requirements.

REMARKS

……

……

DELIVERED,
SUBUNIT …
……

TAKEN-OFF,

TSO REPRESENTATIVE

Surname ……
Name ……
Signature

SUPPLIER(S) REPRESENTATIVE(S)

Surname ……
Name ……
Signature

This Protocol was drawn up in … counterparts, one for each party.

Pcs is at $t_{standard\ metering}$ = 15°C and $t_{standard\ burning}$ = 15°C
The volume is at 15°C and the pressure at 1.01325 bar

ANNEX TO GDTOPno …

NO	gms NAME	TOTAL AMOUNT			TOTAL AMOUNT SPLIT PER SUPPLIERS	
			PCS	ENERGY		AMOUNT

		VOLUME [m^3]	[MWh/m^3]	[MWh]	SUPPLIER NAME	VOLUME [m^3]	ENERGY [MWh]
1					1.1. …		
					1.2. …		
					1.n. …		

DELIVERED,
SUBUNIT …
TSO REPRESENTATIVE

Signature

……

TAKEN-OFF,
SUBUNIT …
SUPPLIER(S) REPRESENTATIVE(S)

Signature

……

Annex no 2.7

(to the Technical Requirements)

GAS DELIVERY/TAKE-OFF PROTOCOL (GDTOP) NO...
(for the total transmitted gas amount)

Concluded this day ..... month ..... year .....between:

SNTGN TRANSGAZ SA MEDIAŞ, as ***LICENSED OPERATOR OF THE NATIONAL GAS TRANSMISSION SYSTEM (TSO)***
and

....., as ***NETWORK USER (NU)***

It is hereby confirmed that, according the Gas Delivery/Take-Off Protocols (**GDTOP**_1, **GDTOP**_2, **GDTOP**), in the time-frame between ..... the total transmitted gas amount of ..... cm, respectively of ..... Mwh was delivered, respectively taken-off via gas-metering stations, according to the specifications in Annex (... page).

Based on mutual agreement, the parties are recording the following:

- the gas amounts have been delivered – taken off into – out of the NTS in compliance with the provisions of the Technical Requirements.
- the delivered gas was odorized according to the valid regulations and had a noticeable odor allowing an easy detection of emissions.

REMARKS

.....
.....

On behalf of,
SNTGN TRANSGAZ SA MEDIAŞ
Director ...
.....

on behalf of,
S.C. .....
Director ...
.....

This Protocol was drawn up in 2 counterparts, one for each party.

NO	**GMS Name**	**TOTAL AMOUNT**		
		VOLUME	PCS	ENERGY

		[m^3]	[MWh /m^3]	[MWh]
1				
2				
...				
n.				

SNTGN TRANSGAZ SA MEDIAŞ **S.C. .....**

Director ... **Director ...**

....

Annex no 3.1

(*to the Technical Requirements*)

Protocol regarding the Altering of the Mechanical Metering Installation of ... (date)

Metering point name.....

Alteration of the diaphragm **(Yes/No).....**

Type..... Series.....Inner diameter d_{20}.....mm
Material..... Linear expansion coefficient λ_d..... K^{-1}

Other remarks:

Participants on behalf of .....

on behalf of TSO .....

Signature ..... **TSO**

Annex no 3.2

(*to the Technical Requirements*)

Protocol regarding the Altering of the Electronic Metering Installation of ... (date)

Metering point name.....

Alteration of the diaphragm **(Yes/No).....**

Type..... Series.....Inner diameter d_{20}.....mm
Material..... Linear expansion coefficient λ_d..... K^{-1}

Alteration of the electronic metering computer **(Yes/No).....**

- Alteration of the absolute pressure transducer **(Yes/No).....**
Type..... Series ..... Inspection Note no .....
Operating range ..... bar, Allowed error .....
- Alteration of the differential pressure transducer 1 **(Yes/No).....**
Type..... Series ..... Inspection Note no.....
Operating range..... mmH_2O, Allowed error .....
- Alteration of the differential pressure transducer 2 **(Yes/No).....**
Type..... Series ..... Inspection Note no .....
Operating range..... mmH_2O, Allowed error.....
- Alteration of the temperature transducer **(Yes/No).....**
Type..... Series ..... Inspection Note no .....
Operating range ..... °C, Allowed error .....
Other remarks:
Participants on behalf of .....

on behalf of TSO .....

Annex no 4.1

(*to the Technical Requirements*)

Protocol regarding the Inspection of the Electronic Gas Metering System

Concluded this day .....at the metering point..... upon the inspection of the electronic system withthe following components:

Absolute pressure transducer..... error.....
Differential pressure transducer 1..... error .....
Differential pressure transducer 2..... error .....
Temperature transducer..... error .....

The components of this installation are not compliant with the accuracy rating

Other remarks:
Participants on behalf of .....

on behalf of TSO .....

Annex no 4.2

(*to the Technical Requirements*)

CARD

containing the results of the inspection of the absolute pressure transducer

Transducer location .....

Type ..... Series ..... Accuracy rating.....Allowed error.....

Calibrator type ..... Series..... Accuracy rating.....Calibration Certificate No.....

Inspector – Metrology Engineer..... Inspection date.....

Obtained values

Simulated value		Exit signal calculated Ic	Exit signal calculated Ie		Error		Remarks
			U	C	U	C	
%	KPaA	mA	mA	mA			
0							
10							
20							
30							
40							
50							
60							
70							
80							
90							
100							

Annex no 4.3

(*to the Technical Requirements*)

CARD

containing the results of the inspection of the differential pressure transducer

Transducer location .....

Type ..... Series ..... Accuracy rating.....Allowed error.....

Calibrator type ..... Series..... Accuracy rating.....Calibration Certificate No.....

Inspector – Metrology Engineer..... Inspection date.....

Obtained values

Simulated value		Exit signal calculated Ic	Exit signal calculated Ie		Error		Remarks
			U	C	U	C	
%	mmH_2O	mA	mA	mA			
0							
10							
20							
30							
40							
50							
60							
70							
80							
90							
100							

Annex no 4.4

(*to the Technical Requirements*)

CARD

containing the results of the inspection of the temperature transducer

Transducer location .....

Type ..... Series ..... Accuracy rating.....Allowed error.....

Calibrator type ..... Series..... Accuracy rating.....Calibration Certificate No.....

Inspector – Metrology Engineer..... Inspection date.....

Obtained values

Simulated value		Maximum allowed deviations		Exit signal calculated Rtm (Ω)		Error		Remarks
						U	C	
T(°C)	Rt (Ω)	(Ω)	(°C)	U	C			

Annex no 5

(*to the Technical Requirements*)

Gas metering using mechanical recording systems

In case the determination of the natural gas amounts is performed using a mechanical metering system, on a daily basis, following data will be registered on the diagram: the values obtained by means of planimetry, the planimetric or mean temperature of gas, the barometric pressure, the characteristics of the contraction element and of the metering device, as well as the resulted gas amount, values which are certified by the signature of the person who performed their determination. The used diagrams shall be previously reviewed and accepted by both parties and are kept for a period of 5 years.

If the differential pressure is specified in the diagram as band, according to the bandwidth, the following shall apply:

- in case of a 1-3 mm width, the planimetry shall apply on the middle of the band;
- in case of a 3-5 mm width, the planimetry shall apply on the lower side of the band (Ih_1) and on the upper side of the band (Ih_2), and the determination shall consider the value: $Ih=Ih_1 + 1/3 (Ih_2-Ih_1)$;
- in case of a width equal to or higher than 5 mm, the planimetry shall apply on the lower side of the band.

Determination method for the mechanical system

Upon the metering carried out with a mechanical recorder for differential pressure, in order to determin the natural gas amounts transiting the specific flow section, it is imperative to apply an algorithm according to the standard prescriptions substantiating the metering procedure, respectively ISO 5167. Hereinafter is presented the format of this algorithm implemented on the electronic computer.

1. Entering the initial data

- the characteristics of the metering point (point definition, technical characteristics of the lines and metering devices);
- the daily values of the parameters and physical parameters interfering in the calculation and resulted upon the metering procedure (planimetry)

2. Storing the initial data used for the calculation of the flow

3. Determining the daily gas flow

3.1. Values initially established for Q_1 and RE

In order to determine the gas flow, the first approximation establishes the initial values for Q_1 and RE:

$Q_1 = 0$

$RE = 10^6$

3.2. Values initially determined based on the daily readings and fixed data

3.2.1. Average gas temperature t :

if the temperature is determined with a thermometer installed on the board:

t = the arithmetic average of gas temperature during the day [1]

if the temperature is entered into the circular diagram:

$$t = I_t^2 \cdot \frac{(t_{max} - t_{min})}{25} + t_{min} \quad [2]$$

3.2.2. Ratio of β diameters:

$$\beta = \frac{d_e}{D} \quad [3]$$

3.2.3. Correction factor for pressure f_p:

$$f_p = 1, \frac{5647}{1,608 - 0,0722 \cdot dens + 0,01 \cdot co2 - 0,00392 \cdot n2} \quad [4]$$

where co2 and n2 represent the molar percentages of the carbon dioxide, respectively, of the nitrogen

3.2.4. Partial formula f_{px} :

$$f_{px} = 0.01450376 \cdot f_p \quad [5]$$

3.2.5. Correction factor for temperature f_t:

$$f_t = 2, \frac{2629}{0,9915 + 2,119 \cdot dens - 0,01 \cdot co2 - 0,01681 \cdot n2} \quad [6]$$

3.2.6. Gas density ρ_S at 15°C:

$$\rho_s \left[\frac{kg}{m^3} \right] = dens \cdot 1,225442 \quad [7]$$

where :
1.225442 = ρ_{air} at 15°C

3.2.7. Pseudocritical temperature T_{pc} expressed in [°K] :

$$T_{pc}[°K] = 88,25 \cdot [1,7591 \cdot (0,56364 + \rho_s) - 0,01 \cdot (co2 + 1,681 \cdot n2)]$$

[8]

3.2.8. Pseudocritical pressure Ppc expressed in [bar]:

$$P_{pc}[bar] = 30,168 \cdot 0,980665 \cdot [0,05993 \cdot (26,831 - \rho_s) + 0,01 \cdot (co2 - 0,392 \cdot n2)]$$

[9]

3.2.9. Determining the α_{ij} coefficients included in the calculation formula for α flow coefficient (where i=type of primary element).

The formula of α_{ij} coefficients varies depending on the type of primary element used.
As such:
if te=1:

$$\alpha_{11} = (0,99 - 0,2262 \cdot \beta^{4,1}) \cdot \frac{1}{(1-\beta^4)^{0,5}}$$

[10]

$$\alpha_{12} = (0,00175 \cdot \beta^2 - 0,0033 \cdot \beta^{4,15}) \cdot \frac{1}{(1-\beta^4)^{0,5}}$$

[11]

if te=2 :

$$\alpha_{21} = 0,9965 \cdot \frac{1}{(1-\beta^4)^{0,5}}$$

[12]

$$\alpha_{22} = 0,00653 \cdot \beta^{0,5} \cdot \frac{1}{(1-\beta^4)^{0,5}}$$

[13]

if te=3 :

$$\alpha_{31} = (0,5959 + 0,0312 \cdot \beta^{2,1} - 0,184 \cdot \beta^8) \cdot \frac{1}{(1-\beta^4)^{0,5}}$$

[14]

$$\alpha_{32} = 0{,}0029 \cdot \beta^{2,5} \cdot \frac{1}{(1-\beta^4)^{0,5}}$$

[15]

The α_{33} coefficient is calculated differently, depending on the value of D diameter, as follows :

a) if $D \leq 58.62$ mm:

$$\alpha_{33} = 0{,}9906 \cdot \frac{\beta^4}{D \cdot (1-\beta^4)} \cdot \frac{1}{(1-\beta^4)^{0}},5$$

[16]

b) if $D > 58.62$ mm :

$$\alpha_{33} = 2{,}286 \cdot \frac{\beta^4}{D \cdot (1-\beta^4)} \cdot \frac{1}{(1-\beta^4)^{0}},5$$

[17]

$$\alpha_{34} = 0{,}85598 \cdot \frac{\beta^3}{D} \cdot \frac{1}{(1-\beta^4)^{0}},5$$

[18]

if te=4:

$$\alpha_{41} = (0{,}5959 + 0{,}0312 \cdot \beta^{2,1} - 0{,}184 \cdot \beta^8) \cdot \frac{1}{(1-\beta^4)^{0,5}}$$

[19]

$$\alpha_{42} = 0{,}0029 \cdot \beta^{2,5} \cdot \frac{1}{(1-\beta^4)^{0,5}}$$

[20]

if te=5:

$$\alpha_{51} = (0{,}5959 + 0{,}0312 \cdot \beta^{2,1} - 0{,}184 \cdot \beta^8) \cdot \frac{1}{(1-\beta^4)^{0,5}}$$

[21]

$$\alpha_{52} = 0{,}0029 \cdot \beta^{2,5} \cdot \frac{1}{(1-\beta^4)^{0,5}}$$

[22]

$$\alpha_{53} = \left(0{,}039 \cdot \frac{\beta^4}{(1-\beta^4)} - 0{,}01584 \cdot \beta^3\right) \cdot \frac{1}{(1-\beta^4)^{0,5}}$$

[23]

3.2.10. Relative static pressure E:

$$E[bar] = I_p^2 \cdot \frac{P_{max[bar]}}{25}$$

[24]

3.2.11. Absolute static pressure P:

It is determined using 2 formulas, depending on the type of measurement unit of the barometric pressure:

a) if barometric measurement unit = 1:

$$P[bar] = E[bar] + \frac{B[mmHg]}{750},062$$

[25]

b) if barometric measurement unit = 2:

$$P[bar] = E[bar] + B[bar]$$

[26]

3.2.12. Differential pressure H:

$$H[mmH2O] = I_h^2 \cdot \frac{H_{max[mmH2O]}}{25}$$

[27]

3.2.13. Relative temperature in relation to T_{pc}:

$$T_r = \frac{t + 273,155}{T_{pc}}$$

[28]

3.2.14. Relative pressure in relation to P_{pc}:

$$P_r = \frac{P}{P_{pc}}$$

[29]

3.2.15. Gas dynamic viscosity μ expressed in [cP]:

$$\mu[cP] = 3,24 \cdot 0,001 \cdot \left[\frac{(t + 273,155)^0,5 + 1,37 - 9,09 \cdot \rho_s^{0,125}}{\rho_s^{0,5} + 2,08 - 1,5 \cdot 0,01 \cdot (co2 + n2)}\right] \cdot \left[1 + \frac{P_r^2}{30 \cdot (T_r - 1)}\right]$$

[30]

3.2.16. RE_{fix} formula:

Starting from the formula for the Reynolds number:

$$\mathbf{RE} = \frac{\mathbf{4 \cdot q_m}}{\boldsymbol{\pi} \cdot \boldsymbol{\mu} \cdot \mathbf{D}}$$

[31]

where :

q_m = mass flow rate of gas expressed in [kg/s]

μ = dynamic viscosity of gas expressed in [Pa∗s]

D = diameter of the metering board expressed in [m]

and considering the connection between the mass flow rate and the volumetric flow rate:

$$\mathbf{q_m = q_v \cdot \rho_s}$$

[32]

where :

q_v = volumetric flow rate of gas [m^3/s]

ρ_S = gas density [kg/m^3]

hence, RE can also be written as follows:

$$\mathbf{RE} = \frac{\mathbf{4 \cdot q_v \cdot \rho_s}}{\boldsymbol{\pi} \cdot \boldsymbol{\mu} \cdot \mathbf{D}}$$

[33]

where:

q_v = volumetric flow rate of gas expressed in [m^3/s]

ρ = gas density expressed in [kg/m^3]

μ = dynamic viscosity of gas expressed in [Pa∗s]

D = diameter of the metering board expressed in [m]

Because:

1 [m^3/h] = 3600 [m^3/s]

1 [m] = 1000 [mm]

1 [Pa∗s] = 1000 [cP]

Therefore:

$$\mathbf{q_v}\left[\mathbf{m^3/_s}\right] = \frac{\mathbf{q_{vh}}\left[\mathbf{m^3/_h}\right]}{\mathbf{3600}}$$

[34]

$$\mathbf{D[m]} = \frac{\mathbf{D[mm]}}{\mathbf{1000}}$$

[35]

$$\mu[\mathbf{Pa}\cdot\mathbf{s}] = \frac{\mu[\mathbf{cP}]}{1000}$$

[36]

If q_v [m^3/s], D[m], μ [Pa∗s] are replaced by the above equivalent expressions, RE formula can be represented as follows:

$$\mathbf{RE} = \frac{4\cdot \mathbf{q_{vh}}\left[\mathbf{m^3/h}\right]\cdot \rho_s\left[\mathbf{kg/m^3}\right]}{\pi\cdot 3600\cdot \mu[\mathbf{cP}]\cdot \mathbf{D[m]}\cdot 10^{-3}}\cdot 1000$$

[37]

If the hourly volumetric flow rate is marked with Q_h, and if the calculations of the above formula are performed, RE can also be written as follows:

$$\mathbf{RE} = 0,353677\cdot 1000\cdot \frac{\rho_s\left[\mathbf{kg/m^3}\right]}{\mu[\mathbf{cP}]\cdot \mathbf{D[m]}}\cdot \mathbf{Q_h}$$

[38]

If the expression multiplied by the volumetric flow rate Qh is marked with RE_{fix}:

$$\mathbf{RE_{fix}} = 0,353677\cdot 1000\cdot \frac{\rho_s\left[\mathbf{kg/m^3}\right]}{\mu[\mathbf{cP}]\cdot \mathbf{D[mm]}}$$

[39]

RE becomes:

$$\mathbf{RE} = \mathbf{RE_{fix}}\cdot \mathbf{Q_h}$$

[40]

3.2.17. Adiabatic exponent K:

$$\mathbf{K} = 1,29 + 0,704\cdot 10^{-6}\cdot\left[2575 + (73,045 - \mathbf{t})^2\right]\cdot \mathbf{P}\cdot 1,01972$$

[41]

3.2.18. The ratio of static pressures downstream and upstream of the primary element:

$$\tau = \frac{(\mathbf{P} - \Delta\mathbf{P})}{\mathbf{P_:}}$$

$$\tau = \frac{\mathbf{P} - \mathbf{H}\cdot 9,80665\cdot 10^{-5}}{\mathbf{P}}$$

[42]

3.2.19. X =ΔP / (P∗K) ratio:

$$X = \frac{H \cdot 9,80665 \cdot 10^{-5}}{P \cdot K}$$

[43]

3.2.20. Q_{fix} formula:

$$Q_{fix} = 0,21116526 \cdot de^2 \cdot \frac{1}{\sqrt{\rho_s}} \cdot \sqrt{\frac{P \cdot H}{t + 273,155}}$$

[44]

3.2.21. ε expansion coefficient:

$$\varepsilon = \left[\left(\frac{\kappa \cdot \tau^{\frac{2}{\kappa}}}{\kappa - 1}\right) \cdot \left(\frac{1 - \beta^4}{1 - \beta^4 \cdot \tau^{\frac{2}{\kappa}}}\right) \cdot \left(\frac{1 - \tau^{\frac{\kappa-1}{\kappa}}}{1 - \tau}\right)\right]^{0,5}$$

[45]

a) if te = 1 or 2 :

b) if te = 3, 4 or 5 :

$$\varepsilon = 1 - (0,41 + 0,35 \cdot \beta^4) \cdot X$$

[46]

3.2.22. α flow coefficient:

if te = 1:

$$\alpha = \alpha_{11} - \alpha_{12} \cdot \left(\frac{10^6}{RE}\right)^{1},15$$

[47]

if te = 2:

$$\alpha = \alpha_{21} - \alpha_{22} \cdot \left(\frac{10^6}{RE}\right)^{0},5$$

[48]

if te = 3:

$$\alpha = \alpha_{31} + \alpha_{32} \cdot \left(\frac{10^6}{RE}\right)^{0},75 + \alpha_{33} - \alpha_{34}$$

[49]

if te = 4:

$$\alpha = \alpha_{41} + \alpha_{42} \cdot \left(\frac{10^6}{RE}\right)^{0,75}$$

[50]

if te = 5:

$$\alpha = \alpha_{51} + \alpha_{52} \cdot \left(\frac{10^6}{RE}\right)^{0,75} + \alpha_{53}$$

[51]

3.3. Determining the compressibility factor Z for the measured state and the standard state

In order to determine the relative compressibility factor Z_r used in the calculation of the flow, the successive calculation of the compressibility factor is needed for the two states:

a) Z = compressibility factor for measured state (operating condition) (P,t)
b) Z_{aga} = compressibility factor for standard state (p_{st}, t_{st})
where: $p_{st}=p_N$ =1.01325 [bar] and t_{st}=15°C

In order to determine the Z and Z_{aga} compressibility factor, the same formulas and symbols will be used as for the partial determination expressions, whereas the formulas will have to be applied twice, but with different values of the parameters P and t.

The alteration of the values of the parameters P,t shall be performed by means of a flag, which can present two values:

flag = 0 for measured state
flag = 1 for standard state

First of all the flag value = 0 shall be determined. With the values of the parameters P and t for the measured state (obtained as specified under point 3.2.1 and 3.2.11), the following values and expressions shall be calculated:

3.3.1. f_{p1} altered pressure:

$$f_{p1} = f_{px} \cdot P + 0,0147$$

[52]

3.3.2. f_{t1} altered temperature:

$$f_{t1} = (0,0036 \cdot t + 0,984) \cdot f_t$$

[53]

3.3.3. f_{tx} formula:

$$f_{tx} = |1,09 - f_{t1}|$$

[54]

3.3.4. f_{t2} formula:

$$f_{t2} = f_{t1}^2$$

[55]

3.3.5. f_{p2} formula:

$$f_{p2} = f_{p1}^2$$

[56]

3.3.6. Formula of correction coefficient w:

The w correction coefficient shall be calculated differently, depending on the limits of f_{p1} and f_{t1} values, namely:

a) if: $0 < f_{p1} \leq 2$ and $1.09 \leq f_{t1} \leq 1.4$

$$w = 1 - 0,00075 \cdot f_{p1}^2,3 \cdot e^{-20 \cdot f_{tx}} - 0,0011 \cdot w_h \cdot f_{p1}^2 \cdot (2,17 + 1,4 \cdot w_h - f_{p1})^2$$

[57]

where the symbol w_h was assigned to the following expression:

$$w_h = \sqrt{f_{tx}}$$

[58]

b) if : $0 < f_{p1} \leq 1.3$ and $0.84 \leq f_{t1} < 1.09$

$$w = 1 - 0,00075 \cdot f_{p1}^2,3 \cdot (2 - e^{-20 \cdot f_{tx}}) - 1,317 \cdot f_{tx}^4 \cdot f_{p1} \cdot (1,69 - f_{p2})$$

[59]

c) if: $1.3 < f_{p1} \leq 2$ and $0.88 \leq f_{t1} < 1.09$

$$w = 1 - 0,00075 \cdot f_{p1}^2,3 \cdot (2 - e^{-20 \cdot f_{tx}}) + 0,455 \cdot (200 \cdot f_{tx}^6 - 0,03249 \cdot f_{tx} + 2,0167 \cdot f_{tx}^2 - 18,028 \cdot f_{tx}^3 + 42,844 \cdot f_{tx}^4) \cdot (f_{p1} - 1,3) \cdot (1,692 \cdot 2^1,25 - f_{p2})$$

[60]

3.3.7. m formula:

$$m = \frac{1}{f_{t2}} \cdot \left[0,0330378 - \frac{1}{f_{t1}} \cdot \left(0,0221323 - 0,\frac{0161353}{f_{t2}}\right)\right]$$

[61]

3.3.8. f_{pm2} formula:

$$f_{pm2} = m \cdot f_{p2}$$

[62]

3.3.9. n formula:

$$n = \frac{1}{m} \cdot \left[\frac{1}{f_{t2}} \cdot \left(0,265827 + 0,\frac{0457697}{f_{t2}}\right) - 0,\frac{133185}{f_{t1}}\right]$$

[63]

3.3.10. b_w formula:

$$b_w = \frac{9 \cdot n - 2 \cdot m \cdot n^3}{54 \cdot f_{pm2} \cdot f_{p1}} - \frac{w}{2 \cdot f_{pm2}}$$

[64]

3.3.11. c formula:

$$c = \frac{3 - m \cdot n^2}{9 \cdot f_{pm2}}$$

[65]

3.3.12. d_w formula:

$$d_w = \left(b_w + \sqrt{b_w^2 + c^3}\right)^{\frac{1}{3}}$$

[66]

3.3.13. z_{rt} formula:

$$z_{rt} = 0,\frac{00132}{f_{t1}^3,25} + 1$$

[67]

3.3.14. Z_{aga} compressibility factor:

$$z_{aga} = \frac{z_{rt}^2}{\frac{c}{d_w} - d_w + \frac{n}{3 \cdot f_{p1}}}$$

[68]

After applying the string of formulas specified under points (3.3.1) to (3.3.14), the flag value shall be tested and, depending on such value, the following operations shall be performed:

a) if flag = 0 after calculating the Z_{aga} compressibility factor for measured state:
- its value is stored in a memory variable Z: $Z = Z_{aga}$
- the values for standard state: P=1.01325 [bar] and t=15 [°C] are assigned to P, t parameters
- value 1 is assigned to the flag: flag = 1
- the operations specified under points (3.3.1) to (3.3.14) are applied again in order to determine the Z_{aga} compressibility factor corresponding to the standard state.

b) if flag = 1 after calculating the Z_{aga} compressibility factor for standard state:
- the following point (3.4) is applied to calculate the relative compressibility factor.

3.4. Calculation of Z_r relative compressibility factor

3.4.1. Z_r relative compressibility factor:

$$z_r = \frac{1}{\sqrt{\frac{z}{z_{aga}}}} = \sqrt{\frac{z_{aga}}{z}}$$

[69]

where:
z = compressibility factor for measured state
Z_{aga} = compressibility factor for standard state

3.5. Calculation of Q_h hourly flow

3.5.1. Method used to determine the hourly flow

To determine the hourly flow, the following formula shall be used:

$$Q_h = 0{,}21116526 \cdot \alpha \cdot \varepsilon \cdot de^2 \cdot \frac{1}{\sqrt{\rho_s}} \cdot z_r \cdot \sqrt{\frac{P \cdot H}{t + 273{,}155}}$$

[70]

If we are to consider the partial expression [44], marked by Q_{fix} symbol, which was already calculated at point (3.2.20), the calculation formula [70] for hourly flow can also be expressed as follows:

$$\mathbf{Q_h = Q_{fix} \cdot \varepsilon \cdot z_r \cdot \alpha}$$

[71]

If the following notation is added:

$$\mathbf{Q_{fx} = Q_{fix} \cdot \varepsilon \cdot z_r}$$

[72]

the hourly flow formula shall be the following:

$$\mathbf{Q_h = Q_{fx} \cdot \alpha}$$

[73]

Due to the fact that the Q_h hourly flow is calculated depending on α, and α depends on RE which, in return, is function of Q_h, the hourly flow can not be determined directly, but by successive approximations. Using an iterative calculation, performed under several steps (i =1,2,..,n), a string of Q_h hourly flow values shall be assessed, successively applying the related approximation operations, by calculating the error until its value lies within the limit specified and preset at the beginning of the iterative calculation.

For a higher accuracy of the flow calculation, a very low value shall be initially determined for the maximum allowed error:

$$\mathbf{\delta Q_{prest.} = 10^{-5}[Sm^3] = 0{,}00001[Sm^3]}$$

[74]

3.5.2. Determining the hourly flow by successive approximation

The first approximation (step 1) assesses the Q_{fx} expression and the Q_h hourly flow is calculated by applying the [70] formula, where α has the value determined by point (3.2.22) corresponding to RE = 10^6, as initially determined at the beginning of the calculations under point (3.1), assigning to Q_1 and RE the initial values (Q_1 = 0 and RE = 10^6)

3.5.2.1. Assessment of Q_{fx} formula:

$$Q_{fx} = Q_{fix} \cdot \varepsilon \cdot z_r$$

[75]

3.5.2.2. Calculation of Q_h hourly flow:

$$Q_h = Q_{fx} \cdot \alpha$$

[76]

3.5.2.3. Determining the error of ΔQ calculated flow:

The ΔQ error represents the absolute difference between the two successive flow values, obtained in the iterative calculation, by comparison with the previous approximation step:

$$\Delta Q = |Q_h - Q_1|$$

[77]

3.5.2.4. Compliance check-up with preset accuracy limits:

The calculated flow error, ΔQ, shall be compared with the maximum preset error, δQ_{prest} . Depending on the result of this comparison, the following operations shall be performed:

a) if $\Delta Q < \delta Q_{prest}$:

the approximation operation is finished, the last Q_h calculated value being the final one and complying with the preset calculation accuracy. Then, point (3.6.) shall be applied to determine the daily flow.

b) if $\Delta Q > \delta Q_{prest}$:

the approximation operation is continued, going to the next step and performing the following operations:

3.5.2.5. Replacing Q_1 with Q_h value:

$$Q_1 = Q_h$$

[78]

3.5.2.6. Re-calculating the value of RE :

$$RE = Q_1 \cdot RE_{fix}$$

[79]

3.5.2.7. Correcting the α flow coefficient depending on RE new re-calculated value:

The α flow coefficient shall be re-calculated depending on the type of the primary element (te), by applying the above-mentioned formulas under point (3.2.22)

3.5.2.8. Resuming the operations as of point (3.5.2.2), using the new recalculated value of α flow coefficient.

3.6. Calculation of the daily flow

The daily flow shall be assessed on the last stage of the calculation, depending on the type of daily metering and based on the hourly flow, separately determined for each set of devices used, as well as based on the duration of the measurements performed with the relevant set of metering devices.

If we are to take into account the most complex case (timz=3), where the daily measurements have been performed with two different sets of devices (1st Set of Devices and 2nd Set of Devices), during two time intervals of a day ($oref_1$ and $oref_2$) then, based on the two hourly flows (Q_{h1} and Q_{h2}), separately calculated for each set of devices used, the partial daily flows (Q_{z1} and Q_{z2}) for the two time intervals shall be calculated, followed by the calculation of total daily flow - Q_{ztot} – obtained by adding up the two partial daily flows.

3.6.1. Partial daily flow determined for the measurements performed on f_1 time interval with the 1st Set of Devices:

$$Q_{z1} = Q_{h1} \cdot oref_1$$

[80]

3.6.2. Partial daily flow determined for the measurements performed on f_2 time interval with the 2nd Set of Devices:

$$Q_{z2} = Q_{h2} \cdot oref_2$$

[81]

3.6.3. The total daily flow is obtained by adding up the two partial daily flows:

$$Q_{ztot} = Q_{z1} + Q_{z2}$$

[82]

4. Storage of daily calculated flows

The calculated daily flows are separately stored in 12 monthly folders: DGAZ01,...DGAZ12 . For each metering point there will be an entry in each monthly folder, entry which, by its field structure, ensures the separate storage of the daily flows, determined for

each day of the relevant month, as well as the storage of corresponding aggregated flows. The entry includes 31 distinct fields designed to store the daily flows of a month and 31 distinct fields designed to store the aggregated flows of a month, thus ensuring the storage space of daily and aggregated flows for one year.

ANNEX no 10 Repealed

ANNEX No. 11

(to the Network Code for the National Gas Transmission System)

List of virtual points and of composing physical points

According to Annex No. 2 to Order No. 53/26.06.2014 of the President of NRAE for the amending and supplementing the Network Code for the National Gas Transmission System, approved by Order No. 16/2013 of the President of NRAE.

ANNEX No. 12

(to the Network Code for the National Gas Transmission System)

List of physical points, unbundled as virtual points

According to Annex No. 3 to Order No. 53/26.06.2014 of the President of NRAE for the amending and supplementing the Network Code for the National Gas Transmission System, approved by Order No. 16/2013 of the President of NRAE.

ANNEX no 13

(to the Network Code for the National Gas Transmission System)

Trading notification in the VTP

The undersigned..... [name and identification data of the NU], party in the transmission contract no. [ ] concluded between .....[name of the NU], and .....[name of the TSO], on ..... [fill out the date], as gas selling NU and,
The undersigned..... [name and identification data of the NU], party in the transmission contract no. [ ] concluded between .....[name of the NU], and .....[name of the TSO], on ..... [fill out the date], as gas buying NU ,
hereby notify the performance of the transaction related to the sale-purchase of the gas amount of.....MWh on .....[fill out the date] for the price of ..... Lei [fill out the price].

Selling NU
Date .....

Authorized representative
Signature .....

BuyingNU
Date .....

Authorized representative
Signature .....

ANNEX no 14 Repealed