



**AUTORITATEA NAȚIONALĂ DE REGLEMENTARE
ÎN DOMENIUL ENERGIEI**



**CONCEPT PAPER
For the Development of the Entry/Exit System in the Romanian Gas Market and Implementation of
the EU Network codes**

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I. INTRODUCTION

This document aims at introducing the principles of the entry-exit system envisaged to be implemented in the Romanian market, and at highlighting the relationship of the transmission system operator with all the gas market participants. Such principles refer to the balancing zone made of the national transmission system and the distribution systems.

In developing these principles, ANRE and Transgaz have envisaged creating a suitable framework for a liquid and functional market that ensures sufficient openness and flexibility to market participants. To achieve this, this document will be made available to all stakeholders and will be submitted to a public debate to provide an opportunity for an exchange of market views and recommendations to improve this concept.

In order to implement the entry-exist system and the provisions of the European codes, the general principles described herein will be transposed in the primary and secondary law¹, as appropriate. Such process shall be conducted in accordance with the legal provisions regarding decisional transparency (public consultations, debates, etc)

II. GENERAL PRESENTATION OF THE ROMANIAN GAS MARKET AND OF THE NATIONAL TRANSMISSION SYSTEM

Romania has been and still is one of the main gas producers in Eastern Europe for the consumption need of the country (about 12 bcm/year) being mainly covered by the domestic production, the rest of it being covered by import gas, mainly from the Russian Federation.

The gas market in Romania is structured into two segments:

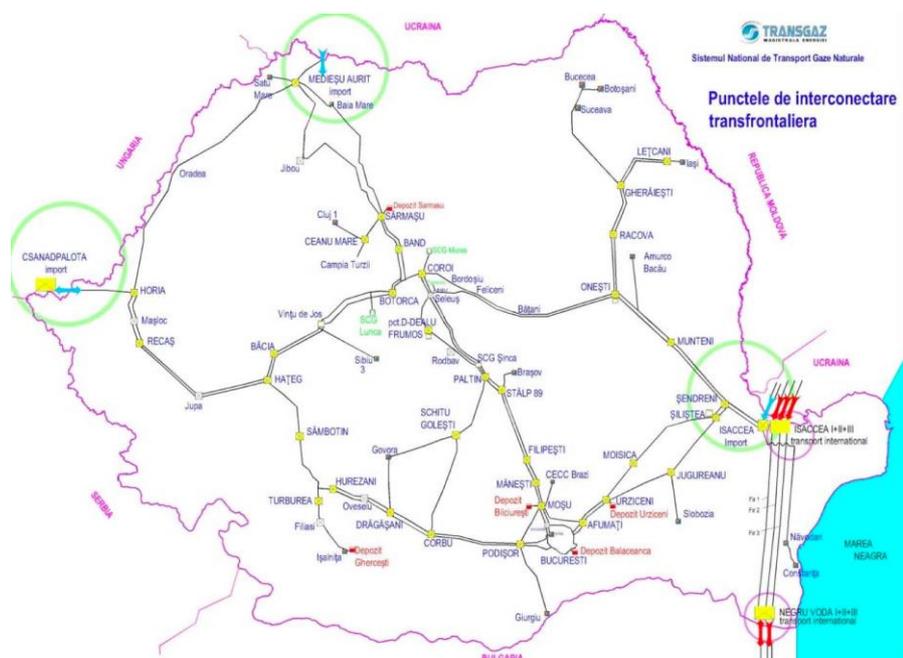
- The competitive segment: including the wholesale and retail markets in which the bilateral contracts providing for negotiated prices, transactions on the centralized platforms, standard offers, etc are operated;
- The regulated segment: including activities related to natural monopolies characterized by regulated contracts, tariffs and regulated prices.

7 gas producers, 2 underground storage operators, 1 transmission system operator, 37 distribution system operators, 138 gas suppliers and 2 centralized gas trading platforms operate on the gas market in Romania.

Romania owns a very complex gas transmission system made up of over 13,000 km pipelines. Such system was conceived and developed mainly during 1960-1980 in order to connect large industrial gas consumers to the gas sources located mostly in the center of the country.

The transmission system is connected to the transmission systems of Ukraine, the Republic of Moldavia, Hungary and Bulgaria. The interconnection points with Ukraine, Isaccea and Mediesu Aurit currently represent Russian gas import points on the Romanian market, while the interconnections with Hungary and Bulgaria are bidirectional and the one with the Republic of Moldova is unidirectional in the RO-MD direction. At present, transmission capacities in the export direction are limited, but the transmission system operator is carrying out development projects designed to increase such capacities. These projects will contribute to the increase of the pressure levels in the Romanian gas system by 2020.

¹ Depending on the outcome of the decision making process



Apart from the abovementioned cross border interconnection points the Romanian transmission system also has 137 entry points from the production fields, 7 interface points with the underground storage facilities, 870 physical exit points to the distribution systems and 232 exit points to the consumers directly connected to the transmission system.

The Romanian gas transmission system is operated by Transgaz.

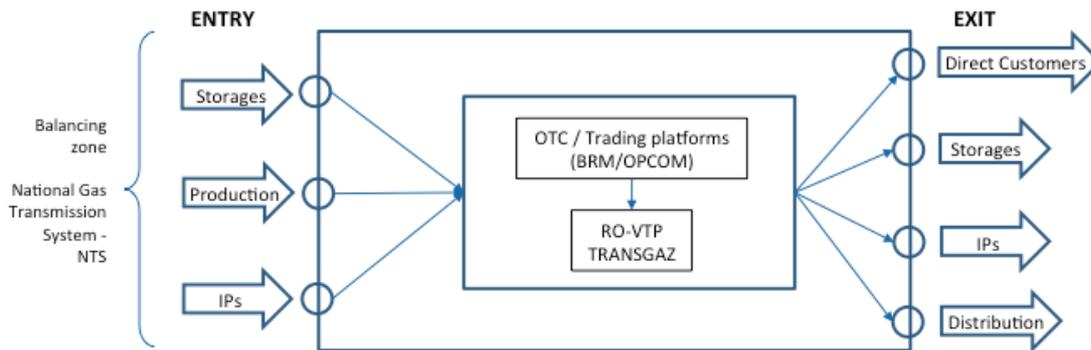
It is worth mentioning that because of the initial concept underlying the development of the gas transmission system, there are certain particularities related to the system (the poor NTS interconnectivity with the neighbouring systems, decreased gas flow rates and delivery pressures from certain production fields as opposed to the period when they started to be operated), which need to be considered in the process of implementing a national network code aligned to the EU regulatory framework.

In this respect Transgaz started the implementation of significant investments in the system development thus allowing for a gradual increase of the regional interconnectivity as of 2019, with positive effects on the evolution of the gas market.

III. GENERAL PRINCIPLES OF THE PROPOSED ENTRY/EXIT SYSTEM

Network users shall be able to book entry capacity and exit capacity independently. A VTP will be established to enable gas title transfers, irrespective of their location in the NTS. At least one trading platform will be connected to the VTP. Not only the signatories of the capacity booking contracts, but also other gas market participants, will have access to the VTP.

The balancing zone covers the national gas transmission system (NTS) and the distribution systems connected to the NTS, including the downstream distribution systems connected to them.



Access to the VTP is unrestricted and shall be granted based on the conclusion of a balancing contract between market participants (including paper traders) and the transmission system operator (TSO).

The proposed system creates the prerequisites for the increase of the gas market liquidity in Romania especially related to short term transactions (daily/ within day). At the same time it facilitates commercial gas trades in the adjacent balancing zones offering NU the necessary mechanisms for an efficient balancing of their own portfolios.

Upon the preparation of this document ANRE and Transgaz envisaged the simplification to the extent possible of the processes carried out, of the way the market participants interact with each other and to create a framework allowing for the safe and efficient operation of the gas infrastructure. This concept was developed in line with the European practices and regulations.

IV. INFORMATION PLATFORM OF THE TSO

The TSO owns and operates an information platform (available 24/7), set up in accordance with the provisions of the Network Code. The TSO envisages the further development of the IT platform thus allowing for the performance of all processes described in this concept paper. Data exchange between the TSO and market participants are performed in a secure manner, in accordance with the relevant provisions of Reg. (EU) no. 2015/703.

The processes carried out within the platform are:

- Capacity booking platform (primary capacity platform - PCP) to be used for domestic points
- The transfer of the rights and obligations related to the booked capacity (secondary capacity platform–SCP)
- VTP operation
- (re)nomination, matching, allocation
- Imbalances calculation
- Information exchange (nominations, allocations, imbalance positions, trade notifications, etc.)

The Network User (NU) is responsible for providing the necessary IT tools to enable it to transmit and receive information using the information platform of the TSO in accordance with the Network Code.

The TSO may request tests to be performed with gas market participants on the bilateral exchange of information through the information platform.

The TSO publishes on its website the technical conditions for using the information platform. If, for technical reasons, the TSO's information platform is not operational, the exchange of information between the TSO and the gas market participants, the operators of the adjacent systems, is carried out through the following alternative communication services:

- a. e-mail, in the format provided for in the technical documentation related to the use of each module of the TSO's information platform;
- b. fax, using the forms provided for in the Network Code if the alternative communication service mentioned at point a) is not available.

V. VIRTUAL TRADING POINT

V.1 Definition. Scope of the virtual trading point

It is an abstract, and unique point of the NTS, in between the NTS entry and exit points, where the transfer of the gas title from one gas market participant to another is enabled.

The VTP is used by the gas market participants both for commercial purposes and for the individual balancing of the NU portfolio, during a gas day, in compliance with the rules on the access to and the use of the VTP.

The VTP enables for gas title transfers independently of their location in the NTS.

The gas transmission system operator, as VTP operator, offers, in the virtual trading point, to market participants the title transfer service for the recording of the gas quantities transactions performed within the NTS.

The VTP may serve as a virtual entry point related to the portfolio of a market participant buying gas on the trading platforms, based on a VTP notification, or may serve as a virtual exit point related to the portfolio of a gas market participant selling gas on the trading platforms, based on a VTP notification.

The transfer of the ownership title in the VTP is made upon the TSO's confirmation of the transaction notification. Such rule will be stipulated both in the national Network Code and in the balancing contract, enabling access to the VTP.

The confirmation by the TSO of the transaction notification will be an electronic message which, according to the Romanian law², may be used as evidence in court (the message will include at least the name of the parties, the quantity, and the date).

V.2 Obligations of the virtual trading point operator

The gas transmission system operator, as VTP operator ensures, the organization and management of the VTP.

The VTP operator has the following tasks and responsibilities:

- a. offers gas market participants title transfer services in the VTP, in a non-discriminatory manner, based on the balancing contract (see VII.2 for more details about the balancing contract);
- b. makes available to the market participants the services mentioned at point a) in a continuous manner, namely 24/7/week, 365 days/year by means of the TSO's information platform;

² According to art. 1678 of the Romanian Civil Code -Selling goods of the same nature - "Where the sale relates to goods of the same nature, including goods of a limited nature, the property shall be transferred to the buyer on the date of their individualization by surrender, counting, weighing, measuring or otherwise agreed or imposed by the nature of the good."

- c. records and processes, permanently, the VTP notifications related to the transactions concluded by the market participants on the gas market registered as VTP users;
- d. ensures the connection of the VTP electronic platform to the gas trading platforms;
- e. collaborates with the trading platforms operators so as to design and promote standardized short term products that would lead to the increase of the liquidity of the short term wholesale gas market;
- f. ensures the protection and keeps confidential information and data supplied or to which it had access throughout its activity, except for the cases provided for explicitly in the laws in force;

V.3 Rules related to VTP access and use

Network users have access rights to title transfer services offered in the VTP based on and throughout the validity of the balancing contracts concluded with the TSO.

Subsequent to having been granted access the NU receives an identification code, electronic access certificate and a user manual related to the secured access to the information platform of the VTP.

All the transactions performed with gas quantities inside the NTS shall be notified in the VTP.

Therefore the operators of the trading platforms will allow the performance of gas quantities transactions inside the NTS only to the participants who have previously concluded a balancing contract with the TSO.

If the gas quantities are traded bilaterally, the parties involved in the transaction are required to send to the VTP operator the notifications related to the transactions regardless of whether they were concluded on a trading platform or not. Exceptions are bilateral transactions concluded on a trading platform if the trading platform operator is mandated by the parties to submit notifications to the VTP operator on their behalf.

If the gas quantities are traded on the trading platforms their operators have to send to the VTP operator the notifications related to the transactions in the following cases:

- In case of trading short term standardized products (for the following day/within day)
- In case of trading non-standardized products with the central counterparty (the platform operators/clearing house)
- For other types of transactions only if the operator of the trading platform is mandated by both parties involved in the transaction.

VTP notification validation process³

If the notification of a transaction is sent by the operator of a trading platform/clearing house, the TSOs confirm within thirty minutes the title transfer to the involved parties and registers in their portfolios the sold or purchased quantities.

If the notification of a bilateral transaction is made by the involved parties the TSO proceeds as follows:

- Compares the quantities notified by the two participants to the transaction and if they are equal it registers the sold or purchased quantities in their portfolios.
- The TSO will confirm to the parties the recording in their portfolios of the sold or purchased quantities.
- If the two quantities are different, the TSO rejects both notifications and informs the involved parties.

³ An use case regarding the VTP notifications validation process can be found in Annex 1 of this document

VI. VIRTUALIZATION OF THE ENTRY/EXIT POINTS

Virtual points have been used so far only for the points of entry from production fields at the interface with the underground storage facilities of the non-EU Member States' neighbouring gas transmission systems.

As far as the points of exit to the distribution systems are concerned, all commercial operations have been conducted by physical points (over 1000 points) which significantly hampers the conduct of this process for the NU.

The new concept also envisages the virtualization of the points of exit to distribution systems in order to simplify the performance of the NU's commercial operations at such points.

Please find below details on how the NTS physical points will be virtualized.

The NTS currently has the following types of physical entry points:

- i. 137 physical entry points from production fields;
- ii. 7 physical entry points from underground storages, for withdrawal of gas from underground storages;
- iii. 2 physical entry points from EU member states neighbouring gas transmission systems;
- iv. 2 physical entry points from non-EU member states neighbouring gas transmission systems.

The creation of an entry-exit system requires the simplification of the network, which will be obtained by grouping several physical points. The NTS virtual entry points are obtained by grouping several NTS physical entry points. Thus:

- a) 6 virtual entry points from the production fields.
For each producer a separate virtual entry point from the production fields is established comprising physical entry points in the NTS it operates.
- b) 2 virtual entry points from underground storages. For each storage operator a virtual entry point from the storages operated by them is established;
- c) 2 virtual entry points from the neighbouring EU member states gas transmission systems.
If there are several physical entry points from the same EU member state gas transmission system neighbouring Romania, a Virtual Interconnection Point (VIP) may be established, according to Art. 19 of Regulation (EU) no 459/2017 on capacity allocation mechanisms;
- d) 1 virtual entry points from non-EU member states neighbouring gas transmission systems.
If there are several physical entry points from the same non-EU member state gas transmission system neighbouring Romania, a virtual entry point may be established.

The technical capacity of each virtual entry point is calculated by summing the technical capacities of the composing physical entry points.

The NTS has the following types of physical exit points:

- i. 870 physical exit points to distribution systems;
- ii. 232 physical exit points to direct clients;
- iii. 7 physical exit points to underground storages;
- iv. 2 physical exit points to EU member states neighbouring gas transmission systems;
- v. 1 physical exit points to non-EU member states neighbouring gas transmission systems;

NTS virtual exit points are obtained by grouping of several NTS physical exit points of the same type. Thus:

Virtual exit points to distribution systems;

- a) For each distribution operator a virtual exit point to distribution systems is established, altogether 37 virtual points are created.
- b) 2 virtual exit points to underground storage systems. For each Storage System Operator a virtual exit point to the storages operated by it, is constituted;
- c) 2 virtual exit points to EU member states neighbouring gas transmission systems.
If there are several points to the same EU member state gas transmission system neighbouring Romania, a virtual interconnection point may be established, according to Regulation (EU) no 459/2017 on capacity allocation mechanisms;;
- d) 1 virtual exit points to non-EU member states neighbouring gas transmission systems.
If there are several physical exit points to the same non-EU member state gas transmission system neighbouring Romania, a virtual exit point may be established.

The technical capacity of each virtual exit point is calculated by summing the technical capacities of the composing physical exit points.

VII. CAPACITY BOOKING – CONTRACTUAL FRAMEWORK

VII.1 General terms and access conditions to the entry-exit system

VII.1.1 Capacity services

In order to provide NTS gas transmission services, the TSO, performs the following main activities:

- a) The TSO offers entry capacity services (EnCS) and exit capacity services (ExCS); such services may be contracted by the NU independently of each other and consist in the capacity booking, respectively the gas delivery/offtake in the points in which the booking was made. The NU does not have the obligation to book at the same time entry capacity and exit capacity.

Based on capacity booking in an NTS entry point, the NU may deliver in the NTS a maximum hourly gas quantity determined by dividing the daily booked capacity to 24.

Based on capacity booking in an NTS exit point, the NU may offtake from the NTS a maximum hourly gas quantity determined by dividing the daily booked capacity to 24.

- b) Establishes contractual relations with the NU for the transmission of gas quantities related to their individual contracts; the NU may own more EnCS and ExCS contracts.

VII.1.2 Preliminary conditions for the conclusion of the entry/exit type contracts

Considering the shipper's obligation to balance its own portfolio and the need to notify trade notifications, a balancing contract shall be concluded between the shipper and the TSO.

Such contract is concluded previous to the EnCS and ExCS contracts, Only the NUs who concluded a balancing contract have the right to book entry/exit capacity in/out of the NTS.

For the daily and within-day capacity products the NU concludes a Frame day-ahead and within day capacity contract⁴ with the TSO. The request for a Frame day-ahead and within day capacity contract for daily and within-day capacity products is sent at least 30 days before the entry into force of the Contract.

In the gas year Y-1 the TSO publishes on its website updated data on the available capacities in the NTS entry points and the capacities available in the NTS exit points for each standard capacity product as follows:

- a) for the gas year Y or multiple gas years (until the year Y+15) - at least 30 days before the beginning of the annual capacity booking period.
- b) for a quarter or multiple quarters (Q1 until Q4) for the next gas year – at least 15 days before the beginning of the quarterly capacity booking period.
- c) for the monthly, daily and within-day products the TSO publishes on its webpage, on a daily basis, updated data on the available capacities.

The gas market participants requesting the TSO to conclude balancing contracts and/or EnCS/ ExCS are required to meet the requirements of the TSO on credit analysis, based on the documents submitted by them.

The credit analysis is performed by the TSO based on the following:

- a) evaluation of the main financial indicators namely: liquidity, solvability, profitability, based on the published rating or on the annual reports related to the previous three years:
- b) determination of the risk category under which the applicants are classified (risk categories: low, medium, high).

Following the credit analysis performed the TSO identifies the risk factors related to the NU's capacity to fulfill its contractual obligations in relation to the TSO and sets the type/level of the financial payment guarantee.

The TSO may request the potential NU the additional documents necessary for the conclusion of the Balancing, EnCS and ExCS contracts.

VII.2 Scope and description of the types of contracts

The following types of contracts will be concluded between the NU and the TSO:

- Entry capacity contract
- Exit capacity contract
- Balancing contract (including access to the VTP)
- Frame day-ahead and within-day capacity Contract for day-ahead and within-day capacity products

Scope of the entry capacity contract

Based on the conclusion of the entry capacity contract, the TSO is obliged to make available to the NU the capacity booked by entry points according to the contracted levels.

Under the entry capacity contract, the NU is entitled to use the capacity booked in the NTS entry point to introduce gas in the NTS in view of trading with a VTP notification and/or transmission from the NTS exit points.

⁴ In order to facilitate the capacity booking process the potential use of a frame contract is to be analyzed for all capacity products.

When using such capacity the NU shall observe the applicable business rules which are published on the Transgaz website.

Scope of the exit capacity contract

Based on the exit capacity contract, the TSO is obliged to make available to the NU the capacity booked by exit points according to the contracted levels.

Under the exit capacity contract, the NU is entitled to use the capacity booked in the NTS exit point to take over gas from the NTS in view of supplying the end customers, for storage and/or transmission to the interconnected transmission systems.

When using such capacity the NU shall observe the applicable business rules which are published on the Transgaz website.

Scope of the balancing contract

The balancing contract sets the rules applicable to NU and TSO related to the main obligation of the NU to balance their portfolio daily.

The TSO has the obligation to establish the imbalance quantity and to apply the imbalance tariff on a daily basis for each NU.

The balancing contract includes provisions regarding:

- Rules related to NU access to the Virtual Trading Point
- Rules related to the notification of gas trades for commercial purposes or for balancing
- Rules related to the determination of the commercial imbalances of the NU
- The imbalances financial settlement procedure
- The setting of the level of the financial guarantees
- Neutrality payments
- Information provision

VII.3 Capacity products

In order to avoid any misunderstanding, please note that for domestic points the capacity is offered on the PCP, based on the „first come-first served” (FCFS) principle and in accordance with the calendar described below.

On the other hand, for the IPs the capacities are booked on the Regional Booking Platform (RBP), through bidding procedures and in accordance with the calendar published by ENTSOG for each gas year (according to Reg. (EU) no. 2017/459).

VII.3.1 Types of standard capacity products

The TSO offers on a firm and/or interruptible basis (only if the firm capacity products are not available) the following capacity products:

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

The annual product

Entry and/or exit services for a gas year signify the contracting of the entry/exit capacity for a period of twelve (12) consecutive months, as of the 1st of October.

The entry and/or exit capacity services for a gas year or multiple gas years may be requested by the NU within 6 working days as of the first Monday of July of each calendar year.

The TSO analyzes the annual capacity products requests sent by the applicants and the result shall be communicated to the NU by an electronic notification. Such result shall be based on the outcome of the allocation procedure. The TSO sends the EnCS/ExCS contracts to the applicants whose requests for annual transmission capacity products were approved in order to sign them.

The daily capacity booked for a gas year will be made available to the NU at a constant level in each day of that gas year.

The capacity remained available after the contracting of the annual product will be offered as quarterly products.

Quarterly product

The entry and/or exit capacity services for a quarter or multiple quarters may be requested by the NU in 6 working days, as of the first day of the months of: August, November, February and May.

The TSO analyses the quarterly capacity products requests sent by the applicants and the result shall be communicated to the NU by electronic notification. Such result shall be based on the outcome of the allocation procedure. The TSO sends the EnCS/ExCS contracts to the applicants whose requests for quarterly transmission capacity products were approved in order to sign them.

The daily capacity booked for a quarter will be made available to the NU at a constant level in each day of that quarter.

The capacity remained available after the contracting of the quarterly product will be offered as monthly products.

Monthly Product

The entry and/or exit capacity services for a month or multiple months may be requested by the NU in 2 working days as of the 3rd Monday of the month M -1.

The TSO analyses the monthly capacity products requests sent by the applicants and the result shall be communicated to the NU by electronic notification. Such result shall be based on the outcome of the allocation procedure.

The TSO sends the EnCS/ExCS contracts to the applicants whose requests for monthly transmission capacity products were approved in order to sign them.

The daily capacity booked for a month will be made available to the NU at a constant level in each day of that month.

The capacity remained available after the contracting of the monthly product will be offered as daily products.

Daily product

The entry and/or exit capacity services for a gas day D may be requested by the NU who concluded a Frame day-ahead and within-day capacity Contract, within 1 hour, as of 05:30⁵ p.m. of the day D-1.

The TSO sends to the NU within 30 minutes from the end of the booking period an electronic notification confirming the booked capacity. The notification is an integral part of the EnCS/ExCS contract.

⁵ All time references in this document refer to Romanian local time. During the implementation of this principles the timeframe will be harmonized in accordance with the gas day definition in CAM NC.

The daily booked capacity shall be made available to the NU at a constant level each hour of the respective day.

Within day product

It is offered in the interconnection points with the neighboring transmission systems at the interface with underground storages and consumers directly connected to the NTS.

The within – day capacity product may be requested each hour by the NUs who concluded the framework contract, as of 03:00 a.m. o'clock of the gas day D-1 and until 02:00 a.m. of the gas day D and is made available to the NU for the rest of the hours remaining of that gas day. The period for the requests is 30 minutes.

The maximum period in which the within-day capacity product may be booked is 24 hours.

The minimum period in which the within-day capacity product is available to the NU is 1 hour respectively the last hour of the gas day D.

The TSO sends to the NU within 15 minutes from the end of the booking period an electronic notification confirming the booked capacity. The notification is integral part of the EnCS/ExCS contract.

VII.3.2 Interruptible capacity

The TSO will provide interruptible capacity at the NTS entry and exit points only if the firm capacity was fully booked.

The interruptible entry capacities and the interruptible exit capacities may be used by the NU if the NU which booked the firm capacity do not intend to fully use it.

At the NTS entry/exit points, other than the Crossborder Interconnection Points, where firm capacities become available, the TSO may convert the contracted interruptible capacities into firm capacities, within the limit of the firm capacity made available. The TSO will amend the capacity contracts accordingly.

The interruptible capacity may be reduced or interrupted temporarily by the TSO on the basis of specific contractual provisions and by prior notice.

Where there are more NUs that operate interruptible capacity contracts at the same entry or exit point into /out of the NTS, interruptible capacity is discontinued in reverse order, starting with the most recently concluded contract.

If, after applying this procedure, two or more nominations are ranked at the same position within the interruption order, a pro rata reduction of these specific nominations shall apply.

VII.4 The secondary market

VII.4.2 The secondary market principles

The NUs are entitled to transfer to other NUs both their rights and obligations under the capacity contract or the right to use the booked capacity. For the IPs such transfer shall be done on the RBP and for domestic points by means of a secondary capacity platform (SCP). Currently the IT platform has a functionality related to capacity transfers between 2 Nus, however such functionality needs to be further developed as a secondary capacity platform.

The secondary market transactions may be made between NUs having ongoing ExCS/EnCS contracts concluded with the TSO.

Trading on the secondary capacity market are independently concluded for the entry or exit points where capacity was booked. The NU who receives the right to use capacity may use such capacity only at the point which constitutes the object of the trading.

The type of the capacity products – firm, interruptible, bundled, unbundled – traded on the primary capacity platform remains unchanged when traded on the SCP.

TSO gives the NU the possibility to publish on the SCP capacity transfer offers.

Where 2 NUs agree to make a capacity transfer, they chose one of the secondary capacity market trading modalities.

The secondary capacity market trading modalities are:

- a) transfer of right to use capacity;
- b) complete transfer of rights and obligations under the contract for the ExCS/EnCS. TSO approves the transfer with the same criteria as used initially for selling capacity.

VII.4.2 Transfer of the right of use the capacity

A NU designated as an initial NU may transfer, without the consent of the TSO, to another NU designated as the beneficiary NU the right to use the entire or part of the booked capacity. The trading modality is applicable for the annual, quarterly and monthly capacity products.

The beneficiary NU undertakes all the obligations and has all the rights emerging from the transfer of the right of use the capacity, except for the obligation to pay the capacity for which it obtained the right of use.

The initial NU undertakes the obligation to pay the capacity which was the object of the transfer of the right to use to the beneficiary NU.

For transferring the right of use the initial NU sends information to the TSO by the SCP, stating:

- a) the data of the contract concluded between the initial NU and the TSO;
- b) the entry and/or exit point;
- c) the beneficiary NU identification data;
- d) the entry and/or exit capacity quantity making the object of the transfer;
- e) the transfer period start and end dates;
- f) the type of capacity product (monthly, quarterly, annually);
- g) the type of capacity (firm or interruptible).

The TSO receives from the NU the information above at least 2 hours before the nomination submission deadline.

Following receipt of information from both partner NUs, the TSO confirms the transaction not later than 1.5 hours from the receipt of information regarding the transactions concluded by both trading parties.

The TSO has the right to reject confirmation of transactions regarding the transfer of the right of use the capacity if:

- a) the information is received from one NU;
- b) the information sent by the NUs are different or incomplete;
- c) the information is sent later than 2 hours before the nomination submission deadline;
- d) the capacity traded makes the object of the surrender of capacity requested by the initial NU.

The TSO communicates on the SCP its decision to reject confirmation of transactions to both NU involved in the transfer of the right of use the capacity. In this situation the transfer is considered null.

The initial NU and the beneficiary NU are entitled to renounce to the confirmed transaction by informing the TSO on SCP of the renunciation to the transaction, not later than the nominations submission deadlines.

The TSO confirms the renunciation of the trading parties only if both NUs which have agreed to initially conclude the transaction informed the TSO on their decision to renounce.

If the information regarding the renunciation decision is sent by one NU participating in the transaction, the TSO considers that the relevant transaction remains valid. In this case the TSO announces its decision both to the initial NU and to the beneficiary NU.

The TSO publishes on its website updated information regarding the total volume of the capacity offered/requested and transferred on the secondary market and other information regarding such transactions (entry/exit point, type of capacity, etc.). The procedures and the SCP manual will be published on the TSO's web site, with sufficient time before the rules applicable to the secondary market come into force thus allowing the stakeholders to test it.

If the initial NU fails to meet its payment obligations, the TSO is entitled to notify both the initial NU and the beneficiary NU on the transfer end date.

VII.4.3 Complete transfer of rights and obligations emerging from the capacity contract

A NU designated as an initial NU may transfer, with the consent of the TSO, to another NU designated as the beneficiary NU the rights and obligations emerging from the capacity contract (firm or interruptible) for the entire or part of the capacity booked. The complete transfer of the rights and obligations is applicable for the annual, quarterly and monthly capacity products contracted by the initial NU.

The beneficiary NU undertakes all the obligations and has all the rights emerging from the transfer, including the obligation to pay the capacity constituting the object of the transfer.

The TSO amends the contracts concluded with the initial NU and with the beneficiary NU accordingly. The amended capacity contracts must be concluded at least 2 working days before the start date of the transfer period.

For the performance of the transfer the initial NU and the beneficiary NU send to the TSO a transfer request stating:

- a) the beneficiary NU/initial NU identification data, as applicable;
- b) the data of the contract concluded between the initial NU and the TSO;
- c) the data of the contract concluded between the beneficiary NU and the TSO;
- d) the entry and/or exit point/points;
- e) the entry and/or exit capacity quantity making the object of the transfer;
- f) the transfer period start and end dates;
- g) the type of capacity product (monthly, quarterly, annually);
- h) the type of capacity (firm, interruptible, bundled, not bundled).

The initial NU and the beneficiary NU send the TSO their request regarding the transfer 3 working days before the actual transfer date.

The TSO notifies the initial NU and the beneficiary NU of its decision regarding the approval/rejection of the transfer within no more than 2 working days.

The TSO may refuse to validate the transfer from the initial NU to the beneficiary NU if the relevant capacity makes the object of the return of capacity requested by the initial NU.

VII.5 Contractual congestion management

In order to avoid any misinterpretation please note that this chapter refers only to domestic points.

Regarding the cross-border interconnection points, the TSO co-operates with the neighbouring systems operators and with ANRE to agree on the congestion management methods applicable at the relevant points.

Contractual congestion occurs if there are requests for a larger firm capacity than available.

In case of a contractual congestion, the TSO may apply the following:

VII.5.1 Capacity Surrender

NU may completely or partly surrender the contracted firm capacity to the TSO.

NU is not entitled to trade on the SCP the capacity constituting the object of the surrender request. A surrender request can be canceled by the NU as long as the capacity was not allocated on the PCP.

The firm bundled capacity may be returned only as bundled firm capacity.

The NU initiates the surrender process using the PCP.

The capacity surrender request receipt confirmation is sent by the TSO through the PCP. This confirmation from the TSO does not exonerate the NU from the obligation to pay the capacity making the object of the return.

The TSO publishes on the PCP the capacity products making the object of the surrender from the NU. These products are entitled `surrender` on the PCP.

Capacity surrender is possible for any day or days following the transmission of the NU request receipt confirmation by the TSO and may be performed for any part of the initially contracted capacity.

The capacity surrendered is offered by the TSO on behalf of the NU by the PCP until day D-1, 12.00 hours.

The NU involved can offer on the secondary market the capacity returned which could not be sold until day D-1, 12.00 hours.

If the capacity was not sold on the secondary market, the NU may request the TSO to present on its behalf the offer for the relevant product on the PCP.

The contracted capacity making the object of the return request from a NU is allocated to other NU by the TSO as follows:

- a) after the allocation of the firm capacity from the portfolio of the TSO, registered as available at the entry and/or exit point where the NU requested the capacity surrender;
- b) before the allocation of the withdrawn capacity according to VII.5.2.

These are applied to the contracts concluded for capacity products of more or equal to a gas month.

The tariff applicable to the NU beneficiary of the capacity which constituted the object of the return by the initiator NU is set in the contract concluded between the TSO and the NU initiator of the capacity return.

The capacity returned is offered by the TSO on the CPP on behalf of and for the period established by the initiator NU.

The initiator NU keeps its contractual rights and obligations until the re-allocation of the returned capacity or part of it to the beneficiary NU.

Following re-allocation to a beneficiary NU, the TSO and the initiator NU amend the initial contract accordingly to reflect the decrease in the capacity it holds at the time of re-allocation with the level of the capacity re-allocated to the beneficiary NU. The beneficiary NU has the obligation to provide the payment guarantees to the TSO, according to Chapter VII of the ExCS and EnCS contracts.

If more NU chose to return capacities at the same entry and/or exit point, the requests are treated by the 'first come, first served' principle.

VII.5.2 The UIOLI withdrawing mechanism regarding the capacity booked and not used by the NU within a significant period of time (LT-UIOLI)

In case of a contractual congestion, ANRE shall require TSO to withdraws the entry and/or exit capacities booked by the NU over a gas year or more gas years if the NU does not use entirely or partly these capacities over a significant period of time.

The capacity booked and not used over a significant period of time is considered to be the remaining permanently unused capacity in a period of at least 90 consecutive gas days preceding the date of congestion in the current gas year.

The maximum level of capacity which can be withdrawn is equal to the difference between the capacity booked by the NU and the maximum level of capacity used by it within the 90-day period. When setting the maximum level of capacity which can be withdrawn by the TSO will take into account:

- any transfer, return or other diminishing of the booked capacity made by the NU within the reference period;
- the existence of several NUs with unused capacities at the same NTS entry or exit points where the TSO records a contractual congestion.

NU keeps its contractual rights and obligations until the re-allocation of the capacity takes place.

VII.5.3 The UIOLI withdrawing mechanism regarding the capacity booked and not used by the NU within a short period of time (FDA-UIOLI)

In case of a contractual congestion the TSO may withdraw the entry and/or exit capacities booked by the NU and not entirely used based on the nominations submitted by the NU for gas day D on gas day D-1.

The capacities withdrawn according to the above are offered by the TSO to the requesting NU for gas day D on gas day D-1.

The application of the FDA UIOLI mechanism by the TSO means applying restrictions to the NU on the possibility to change the nomination by a re-nomination.

The restrictions applied to NU on the possibility to change the initial nomination submitted make the object of specific rules adopted by ANRE.

VIII. DESCRIPTION OF THE COMMERCIAL AND OPERATIONAL PROCESSES AT DIFFERENT ENTRY/EXIT POINTS

VIII.1 ENTRY POINTS FROM PRODUCTION

Currently, the capacity related to the points of entry from production is booked by the NU. Throughout the time, circumstances were found where the capacity bookings were incorrectly sized, thus generating disadvantages for the NU as follows:

- the need for capacity transfers in between the entry points
- additional costs resulted from capacity overrun charges
- the need to book additional capacity in the form of short-term capacity products
- booking of capacities which are higher than as actually needed

The introduction of the principle by means of which only the producer books capacity by points of entry from the production fields removes such disadvantages and offers the possibility that, in respect of the entire gas quantity injected in the NTS by the producer, the title transfers should be notified at the VTP, with positive effects on the increase of the gas market liquidity and on the setting of a reference price (used in the establishment of marginal sale/purchase prices, pursuant to the provisions of Reg. (EU) no. 312/2014) based on market principles.

Moreover, the principle described below entails a new element, i.e. the obligation to have an interconnection agreement concluded between the producer and the TSO contemplating clear-cut rules and responsibilities regarding the operation of the physical points located at the interface between the two systems as well as the related technical parameters (pressure, flow rate, gas quality) significantly beneficial for the NU.

VIII.1.1 Capacity booking

The physical entry points from production are grouped into virtual entry points, one for each producer operating the physical entry points composing the relevant virtual point.

The commercial operations are performed by virtual points.

If a producer operates a single physical entry point, this point is assimilated to a virtual point.

The available capacity of the virtual points is calculated as the sum of the available capacities of the physical points constituting the virtual point, and is published by the TSO on its web site.

This capacity is booked only by the producer holding the virtual point/an entity designated by the producer under a contract concluded with the TSO for ExCS at the virtual point related to its production zones. The producer or the entity designated by the producer must conclude also a balancing contract with the TSO.

The producer/entity designated notifies all the VTP bilateral transactions, including those performed on trading platforms.

In case upstream of an entry point there are more than one producers, those which are not directly connected to the transmission system may inject gas in the system under an agreement with the producer holding the entry point. The agreement contains at least provisions regarding:

- the modality in which the producer holding the virtual entry point recovers the cost related to the booking of the capacity performed for injecting in the NTS the gas which is the property of the third party producer
- the delivery in custody by the third party producer to the producer owning the virtual entry point of the gas quantities to enter the NTS and to be taken over by the third party producer at the VTP
- data exchange

The delivery and NTS taking over of the gas quantity agreed under the abovementioned agreement between the producer owning the virtual entry point and the third party producer is performed by the notification of this quantity at the VTP.

The TSO offers the following capacity products: annual, quarterly, monthly, daily and within-day. For the daily and within-day products the producer/designated entity must conclude an annual frame day ahead and within day capacity contract.

Capacity is booked on the IT platform administered by the TSO, according to the booking calendar at Chapter VII.

If the capacity allocated exceeds the capacity booked, the TSO will charge a capacity overrun fee.

If the TSO does not provide the capacity at the contracted level, it will pay a charge for the non provision of the capacity.

The TSO publishes on its web site updated information on the capacities available at the virtual entry points from production for each type of product.

The physical entry points are operated under an interconnection agreement concluded between the TSO and the producers owning them. The TSO will conclude an agreement with each producer.

The interconnection agreements will contain provisions regarding:

- Metering gas quantities
Gas flow control. The producer has the obligation to control the flows of gas injected in the NTS so that the quantities accounted in the OBA are as close as possible to 0.
- Setting the (OBA) operational balancing account limit. These limits will consider the technical possibilities for flow control, the scale code of the metering systems at the producer/NTS interface and possible measuring corrections.
- Gas quality
- Data exchange
- Emergency procedures
- Details regarding the technical parameters at all physical points (i.e. pressures, flows, etc)

VIII.1.2 Nomination

The producer/single entity designated submits nominations regarding the gas quantity planned to be injected in the NTS, until day D-1 at 2:00 p.m., within the limits of the booked capacity.

The producer/entity designated has the obligation to submit nominations for day D broken down in 24 equal hourly values.

In case the producer fails to submit the nomination broken down hourly, the TSO allocates equally the nominated quantity for gas day D in 24 equal hourly values.

Following receipt of nomination, the TSO will send a message confirming the receipt of such information.

VIII.1.3 Re-nomination

A re-nomination cycle starts every hour between 6:00 p.m. on day D-1 and 03:00 a.m. on day D.

Re-nominations will be made for the remaining hours until the end of the gas day and will be taken into account 2 hours after the end of the hourly re-nomination cycle.

The producer/designated entity may change its nomination by sending a re-nomination to the TSO within the capacity booked.

This means that a re-nomination received for example between 8:00 p.m. and 8:59 p.m. of gas day D will take effect from 11:00 p.m. and only refers to the remaining hours of gas day D (11:00 p.m. - 06:00 a.m.).

For all re-nomination cycles, the TSO accepts only values for the remaining hours, including those made during the gas day. For these, only the values for the remaining hours will be processed.

In case the producer fails to submit the nomination broken down hourly, the TSO will proceed as follows:

- a) on gas day D-1 it allocates equally the nominated quantity for gas day D, in 24 equal hourly values;
- b) on gas day D it allocates equally the quantity resulted from the difference between the quantity re-nominated and the quantity previously nominated pro-rata temporis for gas day D, for each remaining hour of the gas day.

Following receipt of re-nomination, the TSO will send a message confirming its recording on the IT platform of the TSO.

Additional information

For NTS dispatching, the producers have the obligation to submit on day D-1 to the TSO the forecast level of the production for day D, broken down by physical entry points from production. This information will be matched with the value of the nomination made for day D at the virtual point related to the relevant producer.

On day D the producers will make available for the TSO's dispatch centre the hourly values measured in real time for the SCADA equipped stations, and an estimation of the updated hourly values for the other ones.

VIII.1.4 Allocation

The producer sends to the TSO the quantities measured at each NTS physical entry point on day D on the GMOIS platform, on day D+1, until 10:00 a.m.

Between 10:00 a.m. and 10:30 a.m. the TSO:

- will calculate the quantities of gas received in energy units;
- will verify if the difference between the sum of the quantities measured and the nomination related to the relevant virtual point added to the current value of the OBA account do not exceed the OBA limit agreed under the interconnection agreement.
 - o If the OBA limit is not exceeded, the TSO will make the allocation at the level of the nominated quantity. The difference between the nomination and the measuring is accounted in the OBA.
 - o If the OBA limit is exceeded, the OBA procedure is suspended, and the TSO will make the allocation at the level of the measured quantities. The OBA allocation procedure will be resumed starting from the gas day where it is ensured the ranging within the OBA limits.

Until 12:00 p.m., on day D+1 the TSO informs all the producers on the quantity of gas allocated related to day D.

VIII.2 ENTRY/EXIT POINTS AT THE INTERFACE BETWEEN THE NTS AND UNDERGROUND STORAGES

At present, at the interfaces between the transmission system and the storage system there are problems caused by the differences between the nominations of the TSO's and of the SSO's clients and by the lack of clear-cut rules on matching thereof applicable by the operators of the 2 systems.

The advantage of the foregoing principles, mainly in respect of the conclusion of interconnection agreements between the 2 systems, is that by setting commercial and operational rules applicable to such type of points the TSO's and the SSO's clients are provided, in due time, with information on the allocated gas amounts with positive effects on the balancing of their own portfolios.

VIII.2.1 Capacity booking

The physical points at the interface with the storages will be grouped into virtual NTS entry/exit points, one for each storage operator.

The commercial operations are performed by virtual points.

If a storage operator has a single physical point at the interface with the NTS, this point will be assimilated to a virtual point.

The available capacity of the virtual points is calculated as the sum of the available capacities of the physical points constituting the virtual point, and is published by the TSO on its web site.

This capacity is booked by the NU under a NTS entry/exit capacity booking contract with the TSO at the interface with the storage. The NU must conclude also a balancing contract with the TSO.

The TSO offers the following capacity products: annual, quarterly, monthly, daily and within-day. For the daily and within-day products the NU must conclude an annual frame contract.

The capacity is booked on the IT platform administered by the TSO, according to the booking calendar at Chapter VII.

The TSO publishes on its web site updated information on the capacities available at the virtual NTS entry/exit points at the interface with the storage, for each type of product.

Physically, the NTS entry/exit points at the interface with the storage are operated under an interconnection agreement concluded between the SSO and the TSO. The TSO will conclude an agreement with each SSO.

The interconnection agreements will contain provisions regarding:

- the business rules (establishing SSO – TSO client pairs, flow of information regarding (re-) nominations, matching/confirmations, allocation of quantities by NU)
- Gas flow control. The SSO has the obligation to control the flows of gas injected in/withdrawn from the NTS, so that the quantities accounted in the OBA are as close as possible to 0.
- Metering gas quantities
- Setting the (OBA) operational balancing account limit. These limits will consider the technical possibilities for flow control, the scale code of the metering systems at the NTS/storage interface and any possible corrections
- Gas quality
- Data exchange
- Emergency procedures

- Details regarding the technical parameters at all physical points

VIII.2.2 Nomination

Currently and as soon as possible, but not later than 5 working days before the start of each new contract, the SSO and the TSO will send each other the list of their clients' codes, which is permanently updated, and will make it available to their own clients.

Between D-90 and D-1 at 2:00 p.m.:

- the TSO clients will send to it the nominations within the limits of the booked capacity, indicating the pair partner which is a SSO client;
- the SSO will send to the TSO the nominations of its clients broken down by each SSO client – TSO client pair.

On day D-1 between 2:00 p.m. and 2:30 p.m.:

- The TSO verifies the ranging of the nomination within the limits of the capacity booked for day D:
 - If the nomination exceeds the capacity booked, the TSO adjusts the nomination to the capacity booked pro-rata to the nomination related to each TSO client - SSO client pair (given the fact that shippers are allowed to nominate 90 days in advance, such situations may arise when a decrease of the booked capacity occurred in between the moment of sending the nomination and its verification);
- based on this information, the TSO makes the matching, applying the lesser of rule;
- the TSO communicates to the SSO the result of the matching for each SSO client - TSO client pair;
- both the TSO and the SSO sends the matching results to their own clients.

The quantity resulting from the matching becomes a delivery/takeover obligation at the NTS/storage interfaces.

The TSO sends for day D the breaking down of the total matched nomination into 24 hourly values.

In the case of transmission of a within-day nomination, the TSO will process the hourly values related to the remaining hours of the relevant gas day.

VIII.2.3 Re-nomination

A re-nomination cycle starts hourly between 6:00 p.m. of day D-1 and 03:00 a.m. of day D:

- the TSO clients may send to it the re-nominations within the limits of the booked capacity, indicating the pair partner which is a SSO client
- the SSO will send to the TSO the re-nominations of its clients broken down by each SSO client – TSO client pair.

Re-nominations will be made for the remaining hours until the end of the gas day and will be taken into account 2 hours after the end of the hourly re-nomination cycle.

Within 30 minutes from the end of each re-nomination cycle:

- based on the information received, the TSO makes the matching, applying the lesser rule;
- the TSO communicates to the SSO the result of the matching for each SSO client - TSO client pair;
- both the TSO and the SSO sends the matching results to their own clients.

This means that a re-nomination received for example between 8:00 p.m. and 8:59 p.m. of gas day D will be matched and communicated until 9:30 p.m., will take effect from 11:00 p.m. and only refers to the remaining hours of gas day D (11:00 p.m. - 06:00 a.m.).

For all re-nomination cycles, the TSO accepts only values for the remaining hours, including those made during the gas day. For these, only the values for the remaining hours will be processed.

On day D, the SSOs will make available for the TSO's dispatch centre the hourly values measured in real time for the SCADA equipped stations, and an estimation of the updated hourly values for the other ones.

The SSO has the obligation to control the flows of gas injected in the NTS so that the difference between the physical flow and the (re)nominations confirmed is as close as possible to 0.

VIII.2.4 Allocation

The SSO sends to the TSO the volumes and GCV related to the quantities measured at each NTS physical entry/exit point on the IT platform on day D+1, until 10:00 a.m.

Between 10:00 a.m. and 10:30 a.m. the TSO:

- ✓ calculates the quantities of gas received in energy units;
- ✓ verifies if the difference between the sum of the quantities measured and the nomination related to the relevant virtual point added to the current value of the OBA account do not exceed the OBA limit agreed under the interconnection agreement.
 - If the OBA limit is not exceeded, the TSO will make the allocation at the level of the nominated quantity. The difference between the nomination and the measuring is accounted in the OBA.
 - If the OBA limit is exceeded, the difference between the quantity measured and the quantity nominated will be allocated to a NU responsible for the balancing, designated by the SSO;
 - If the OBA limit is exceeded from technical reasons (e.g. high pressures in the NTS than agreed between the TSO and the SSO), the difference between the quantity measured and the quantity nominated will represent an adjustment of the TSO's quantities stored in the storage.

Until 12:00 p.m., on day D+1 the TSO informs SSO and the NU on the quantity of gas allocated related to day D.

VIII.3 EXIT POINTS TO THE DISTRIBUTION SYSTEMS

VIII.3.1 Capacity booking

The exit points to the distribution system will be grouped in virtual exit points, one for each DSO (37 points). The trading operations are carried out at this type of points.

If a distribution system is connected to another distribution system connected to the NTS, the capacity at the virtual point related to the DS connected to the NTS includes also the capacity of the downstream DS.

The NU concludes a balancing contract with the TSO.

The capacity is booked under exit capacity booking contracts concluded between the TSO and each NU having under their portfolio end clients connected to the DS for the supplying of which it has concluded a distribution contract.

The capacity is booked annually for a quantity which should cover the peak consumption of all end clients connected to the distribution system.

The total capacities booked by virtual point of each DSO are calculated based on an algorithm defined under the Network Code (it will consider the actually used capacity by virtual points of each DSO).

The capacity booked by each NU is calculated by the dividing by the DSO of the quantity established as mentioned above, depending on the share of the capacity used by the end clients under the portfolio of the relevant NU in the previous calendar year, at the date of the beginning of the booking period, by the total capacity used at the virtual point regarding the relevant DSO in the same period.

The DSO notifies the TSO of any change of supplier (NU) to the end clients connected to the DS, submitting in due time the re-calculated capacity for each supplier (NU) involved and the information at the basis of this calculation, according to the `backpack` principle.

If, following the capacity booking period a distribution contract is concluded for a new consumption place, the DSO notifies the TSO by submitting in due time the calculated/additional capacity booked by the supplier (NU) for supplying the relevant consumption place and the information at the basis of this calculation. The tariff for the additional capacity is the annual tariff.

The capacity is booked on the IT platform administered by the TSO, according to the annual booking calendar at Chapter VII.

The capacity available at the virtual points is set as a sum of the capacities available at the physical points composing the relevant virtual points.

The NTS/DS interface gas delivery points are operated by the TSO and completely equipped with fiscal metering systems. They are 84 % equipped with a SCADA system, the total quantity delivered at these points being 96.6 % covered.

Regarding metering, two types of clients are connected in the distribution systems: clients with consumption monitored through the SCADA system and clients with consumption estimated based on profiles.

The TSO and the DSO connected to the NTS conclude an Interconnection Agreement establishing the rules regarding:

- o Metering of quantities
- o Gas quality specifications
- o Data exchange procedures
- o Emergency procedures

VIII.3.2 Nomination

The NU send nominations for day D, by virtual exit points to the DS, on the GMOIS platform, until day D-1, 02:00 p.m., recording separately the nomination for the end clients where the metering is made on a daily basis.

VIII.3.3 Re-nomination

A re-nomination cycle starts hourly between 06:00 p.m. and day D 03:00 a.m.

The re-nominations will be made for all of the remaining hours until the end of the gas day and will be considered 2 hours after the end of the hourly re-nomination cycle.

This means that a re-nomination received for example between 8:00 p.m. and 8:59 p.m. of gas day D will take effect from 11:00 p.m. and only refers to the remaining hours of gas day D (11:00 p.m. - 06:00 a.m.).

For all re-nomination cycles, the TSO accepts only values for the remaining hours, including those made during the gas day. For these, only the values for the remaining hours will be processed.

Following receipt of (re-)nomination, the TSO will send a message confirming the recording of the notification on the IT platform of the TSO.

For the purpose of providing data on the NU inputs and offtakes during 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 at the NTS/DS interface on day D, at 11:30 and at 19:30. The data is sent in energy units and the latest GCV valid on the GMOIS platform is used at its calculation (D-1 or D-2).

Within 1 hour from the receiving of the data the DSO connected to the NTS sends to the TSO the breaking down of these quantities by NU, using the following information:

- The quantities metered regarding the end clients where the metering is made on a daily basis, aggregated for each NU.
- Quantities the DSO estimated to be consumed by the end clients under the portfolio of each DSO NU client where the metering is non-within day. The estimation is made for each NU separately, based on the following elements:
 - consumption profiles specific to each end client category;
 - the portfolio structure of each NU's end client.

If a distribution system is connected to another distribution system connected to the NTS, the downstream DS operator sends to the DS operator connected to the NTS the same type of information, according to the above.

Twice a day, at 13:00 and 21:00 the TSO makes the data available for the NU through the IT platform.

VIII.3.4 Allocation

The allocation is made by the TSO based on the data received from the DSO connected to the NTS.

On day D+1, at 12:00 the TSO sends to the DSO connected to the NTS the quantities metered on day D at the physical points of the NTS/DS interface.

Within 2 hours from the receiving of the data the DSO sends to the TSO the breaking down of these quantities by NU, using the following information:

- The quantities metered regarding the end clients where the metering is made on a daily basis, aggregated for each DSO NU client.
- Quantities the DSO estimated to be consumed by the end clients under the portfolio of each NU where the metering is non-daily. The estimation is made for each NU separately, based on the following elements:
 - consumption profiles specific to each end client category;
 - the portfolio structure of each NU's end client;

Until day 8 of the month M+1, the TSO sends to the DSO connected to the NTS the corrections of the quantities metered daily at the NTS/DS interface.

Within 2 days, the DSO connected to the NTS sends to the TSO the final data on the breaking down of the differences resulted from the corrections of the gas quantities metred daily at the NTS/DS interface by NU..

The TSO makes the final daily allocation and sends it to the NU until day 12 of month M+1 the latest.

The DSO directly connected to the NTS is responsible for sending to the TSO the data on the breaking down of the gas quantities metered at the NTS/DS interface by NU.

Nominations/re-nominations are used in the NTS/DS interface points metered quantities initial allocation process (pro rata with the nomination) when, from objective reasons, the DSO connected to the NTS does not send the allocations by NU.

Within 30 minutes from the receiving of the data, the TSO makes it available for the NU through the GMOIS platform.

VIII.4 EXIT POINTS TO DIRECT CUSTOMERS (DC)

VIII.4.1 Capacity booking

The commercial operations are performed by physical exit points to the DC connected to the NTS.

The available capacity of the physical exit points to the DC and is published by the TSO on its web site.

This capacity is booked by the NU under a contract concluded with the TSO for the booking of NTS exit capacity at the interface with the DC. The NU must conclude also a balancing contract with the TSO.

If the allocated quantity exceeds the booked capacity, the TSO will charge a capacity overrun fee.

The TSO offers the following capacity products: annual, quarterly, monthly, daily and within-day. For the daily and within-day products the NU must conclude an annual frame contract.

Capacity is booked on the IT platform administered by the TSO, according to the booking calendar at Chapter VII.

The TSO publishes on its web site updated information on the capacities available at the at the NTS physical exit points at the interface with the DC, for each type of product.

The TSO and the DC conclude an agreement containing provisions regarding:

- the technical parameters of the physical points;
- data exchange between the parties.

VIII.4.2 Nomination

Between D-90 and D-1 at 2:00 p.m. the NUs submit nominations for day D, by exit points to the DC, on the GMOIS platform.

In case the NU fail to submit nominations for day D, the TSO considers the nomination being equal to 0 and will cease gas deliveries for the NTS exit point at the interface with the DC. The TSO communicates to the level of the nominations confirmed.

The nominations are ranged within the booked capacity. The TSO confirms the receiving of the nominations.

On day D-1 between 2:00 p.m. and 2:30 p.m.:

- The TSO verifies the ranging of the nominations within the limits of the capacity booked for day D:
 - If the nomination exceeds the capacity booked, the TSO adjusts the nomination to the capacity booked by each NU (such situations may arise when the capacity booked was diminished from the nomination transmission until the verification);
- In this case the TSO communicates the adjusted nomination to the NU.

VIII.4.3 Re-nomination

A re-nomination cycle starts hourly between 6:00 p.m. of day D-1 and 03:00 a.m. of day D.

Re-nominations will be made for the remaining hours until the end of the gas day and will be taken into account 2 hours after the end of the hourly re-nomination cycle.

This means that a re-nomination received for example between 8:00 p.m. and 8:59 p.m. of gas day D will take effect from 11:00 p.m. and only refers to the remaining hours of gas day D (11:00 p.m. - 06:00 a.m.).

For all re-nomination cycles, the TSO accepts only values for the remaining hours, including those made during the gas day. For these, only the values for the remaining hours will be processed.

The DC will send for day D the breaking down of the total (re-)nomination into 24 hourly values. In the case of transmission of a within-day nomination, the TSO will process the hourly values related to the remaining hours of the relevant gas day.

If several NUs deliver gas through the same exit point to a DC, for the purpose of providing information regarding the NU's quantities entered and exiting during the day, the TSO provides the quantities measured at 11:00 a.m. and 7:00 p.m. at the physical points at the NTS/DC interface, by NU, based on the information received from the DC.

The TSO sends the DC in this respect the quantities measured at 11:00 a.m. and at 07:00 p.m. at the physical points at the NTS/DS interface on day D, at 11:30 a.m. and at 07:30 p.m. The data is sent in energy units and at its calculation the latest GCV valid on the IT platform is used (D-1 or D-2).

Within 1 hour from information receipt the DC sends to the TSO the breaking down of these quantities by NU.

If the information is lacking, the TSO allocates the quantity measured directly proportional with the confirmed nomination.

Within 30 minutes from the receiving of the data, the TSO makes it available for the NU through the IT platform.

VIII.4.4 Allocation

The TSO makes the allocation on day D+1 until 2:00 a.m. as follows:

- a) If a single NU booked capacity at the exit point at the NTC/DC interface, the entire quantity measured at the relevant point is allocated to it.
- b) If more than one NUs deliver gas through the same exit point at the NTS/DC interface, the measured quantity is allocated by NU on the basis of the information received from the DC. If the information is lacking, the TSO allocates the quantity measured directly proportional with the confirmed nomination.

The TSO makes the final daily allocation and communicates it to the NU until day 12 of month M+1 the latest, using the methods described above, taking into account the possible corrections of the quantities measured daily.

VIII.5 CROSS-BORDER INTERCONNECTION POINTS

At the interconnection points between the NTS and the neighbouring transmission systems capacity is booked by the NU on a capacity booking platform, according to Regulation (EU) 459/2017.

The TSO offers annual, quarterly, monthly, daily and within-day capacity products by auctions held according to the calendar published by ENTSOG.

The rules on (re-)nomination, matching, allocation of the quantities measured are foreseen under the interconnection agreements concluded with the adjacent system operators, compliant with the applicable European regulations.

These agreements also contain provisions on the technical operation conditions, gas quality, measuring of gas quantities, data exchange, emergency procedures, etc.

There are interconnection points with non-EU countries (e.g. Ukraine) for which at present there are no interconnection agreements concluded. Negotiations for interconnection agreements are in progress.

IX. INFORMATION PROVISION

TSO publishes on its webpage information about the following:

1. the gas quantity (linepack) in the NTS at the beginning of each gas day and the gas quantity forecasted to be in the NTS at the end of the gas day

At present the TSO publishes information on the hourly updated gas quantity in the NTS.

In order to be able to publish information about the gas amount forecasted at the end of day D, a project for the preparation of such forecasts was initiated.

The project envisages the following stages: IT market consultations, tender book preparation, procurement, implementation, testing and calibration.

Currently, the IT market consultation process is in progress and is estimated to last for 6 weeks. Based on such process, the detailed project implementation plan will result.

By the time the project has been completed, TSO will evaluate the forecast on the gas quantity into the NTS, at the end of the gas day based on the NU nominations.

2. the balancing actions which were taken by the TSO

3. NTS inputs/off-takes for each NU balancing portfolio within a gas day

Information will be published twice within day D.

For the NTS entry/exit points where the allocation rule is allocation = nomination (applicable for production entry points, UGS points and IPs) the information is available for the NU.

For the exit points to NTS connected direct consumers:

➤ the quantities measured at 11:00 and at 19:00 at the physical points at the NTS/DS interface, by NU, based on the information received from the DC. In this respect the TSO sends the DC, on day D, at 11:30 and at 19:30, the quantities measured at 11:00 a.m. and 7:00 p.m. at the physical points at the NTS/DS interface. The data is sent in energy units and the latest GCV valid on the IT platform is used at its calculation (D-1 or D-2). Within 1 hour from the receiving of the data the DC sends to the TSO the breaking down of these quantities by NU. If the information is lacking, the TSO allocates the quantity measured directly proportional with the confirmed nomination.

➤ If a single NU delivers gas through the exit point to a DC, the TSO provides to the NU information on the quantity of gas measured at the exit point twice a day on day D.

For the exit points to the distribution systems:

For the purpose of providing information on NU's exiting quantities during the day, the TSO sends to the DSO connected to the NTS on day D, 11:30 a.m. and 7:30 p.m., the quantities measured at 11:00 a.m. and at 07:00 p.m. at the physical points at the NTS/DS interface. The data is sent in energy units and at its calculation the latest GCV valid on the IT platform is used (D-1 or D-2).

Within 1 hour from information receipt the DSO connected to the NTS sends to the TSO the breaking down of these quantities by NU using the following information:

- a. The quantities metered regarding the end clients where the metering is made on a within-day basis, aggregated for each NU.
- b. Quantities the DSO estimated to be consumed by the end clients under the portfolio of each DSO NU client where the metering is non-within day. The estimation is made for each NU separately, based on the following elements:
 - consumption profiles specific to each end client category;
 - the portfolio structure of each NU's end client.

If a distribution system is connected to another distribution system connected to the NTS, the downstream DS operator sends to the DS operator connected to the NTS the same type of information, according to the above.

If the DSO connected to the NTS fails to send the breaking down by NU of the measured quantities, the TSO breaks down the relevant quantities directly proportional with the NU (re-)nominations.

Following receipt of information regarding the breaking down by NU of the delivered quantities, the TSO processes the entire information on each of the NUs' entering and exiting quantities and make it available for them within 30 minutes through the IT platform.

For publishing information on the quantities exiting from the NTS and metered non-daily the base case is used. They consist in estimations of the quantities exiting from the NTS through this type of points.

X. BALANCING

The NU has the main obligation to balance its quantities entering and exiting from the system until the end of the balancing period (gas day).

Therefore the TSO publishes the following information on:

- the forecasted linepack at the beginning and end of the day D, in the day D-1, after the completion of the nomination cycle
- the linepack forecast in the end of day D is updated hourly
- NUs' quantities entering and exiting during the gas day D, twice a day
- the balancing actions carried out by the TSO so that the line pack forecasted for the end of day D may be within the NTS optimum condition limits .

In order to balance its own portfolio the NU may renominate gas quantities to be injected/taken over in/from the NTS until the end of the gas day D and/or to bilaterally trade standardized short term products made available on the trading platforms by notifying such transactions in the VTP

The operational balancing represents the actions the TSO has to take so as the forecasted linepack for the end of the gas day D to be within the limits of the optimum condition of the NTS (the dark green area).

To this end the TSO permanently monitors and controls the gas flow, pressure and calorific value parameters in the entry and exit points and in the technological nodes of the NTS.

The operational limits of the NTS are set by the TSO depending on the value of the line pack as follows:

- **Optimum condition of the NTS**
- **Normal condition of the NTS**
- **Imbalance condition of the NTS**
- **Risk condition of the NTS**



The limits of the line pack defining the above mentioned conditions differ depending on the season (winter/summer)

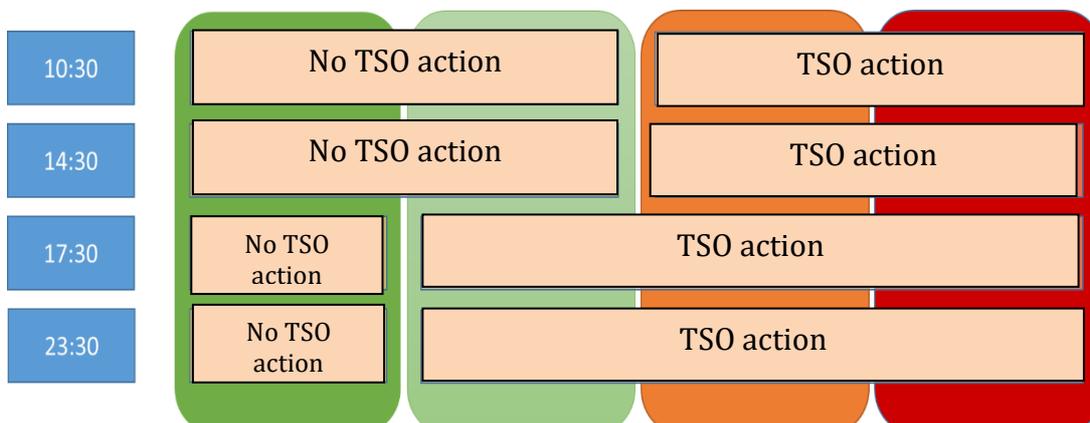
The TSO publishes the linepack forecasted in the beginning and end of day D and in day D-1 after the completion of the nomination cycle.

The forecast of the linepack in the end of day D is updated on an hourly basis.

Depending on the position of the linepack forecasted for the end of day D, 4 hourly intervals are available to the TSO within the day D to take balancing actions by trading short term standardized products made available on the trading platforms.

The hourly intervals end at 10:30 a.m, 02:30 p.m, 05:30 p.m and 11:30 p.m.

The balancing actions are taken by the TSO gradually depending on the position of the line pack forecasted for the end of day D and on the moment of the day in which the action is taken.



The farther the balancing actions of the TSO refer to a larger tradable quantity, the more may the price at which the TSO traded deviate significantly from the average price of the transactions carried out on the trading platform on day D.

If the transaction initiated by the TSO is not concluded it will resort to the balancing actions procured by a transparent and non-discriminatory public procurement procedure. Before concluding a balancing services contract the TSO will publish a bid request indicating the purpose, the scope and the instructions.

X.1 Calculation of the NU's daily imbalance and Daily imbalance charge

X.1.1 Calculation of the NU's daily imbalance

On day D+1 the TSO calculates an initial daily imbalance quantity for the NU's balancing portfolio according to the following formula:

Imbalance quantity = (total allocation entry + total purchases VTP) – (total allocations exit + total sales VTP)

The TSO informs the NU on the imbalance registered in the day D, in the day D+1, 02:15 p.m.

The final daily imbalance quantity is set on the 12th day of the month M+1 based on the final daily allocations.

X.1.2 Daily imbalance charge

The daily imbalance charge is determined as follows:

In case of a negative imbalance quantity– Imbalance charge = the negative quantity of daily imbalance* the marginal buy price,

In case of a positive imbalance quantity– Imbalance charge = the positive quantity of daily imbalance* the marginal sell price.

The marginal sell/buy price is set in line with the provisions of art 22 of Regulation (EU) no 312/2014

If for a certain gas day there are no transactions concluded on the trading platforms the marginal sell/buy price is determined by means of the methodology, approved by ANRE.

X.1.3 Neutrality

The *Methodology for the calculation of the neutrality arrangement*, including its distribution among network users of the gas transmission network, is approved by ANRE and considers the following main general principles:

- The transmission system operator cannot gain or lose as a result of the actions taken to balance the transmission system;
- The transmission system operator will transfer to network users the difference between the revenues and costs directly connected to the balancing actions performed;
- The costs and revenues directly connected to the balancing actions related to the transmission system will be included in the neutrality arrangement and will not be part of the gas transmission tariffs;

- The neutrality tariffs paid by or to network users are proportional to the quantity of gas transmitted in the settlement period by the network users;
- The settlement period is the calendar month.

V.4 Use case on VTP

- **Transactions made on the trading platform TP1**
 - VTP trade notifications submitted by the trading platform operator if the trading platform operator is a counterparty;
 - VTP trade notifications submitted by the parties (bilateral) for trade made on the trading platform
- **Over the counter transactions (bilateral)**
 - Parties' trade notification

VTP trade Notification of the trading platform operator or of the Clearing House

The operator of the trading platform TP1 is part of each selling-buying transaction.

Example:

Tag no	Market ID	NU/Pure Trader	Amount sold for day D	Amount bought for day D	Counterparty	Gas Day
1.	e.g. day ahead market (DAM)	VTPu1	50		TP1	01.10.2017
2.	e.g. day ahead market (DAM)	VTPu2	40		TP1	01.10.2017
3.	e.g. DAM-Day Ahead Market	VTPu3		70	TP1	01.10.2017
4.	e.g. DAM-Day Ahead Market	VTPu4		20	TP1	01.10.2017
		Total	90	90		

Transactions 1 and 2 are deemed notified as a VTP exit for VTPu1 and VTPu2.

Transactions 3 and 4 are deemed notified as a VTPentry for VTPu3 and VTPu4.

The TSO platform checks if the sum of the quantities sold is equal with the sum of the quantities bought under the submitted message. TP1 should be balanced, neutral, sold quantities = bought quantities. If not, all the transactions in the message are rejected.

The XML message contemplating such transactions will be submitted by means of a secure protocol agreed with the trading platform operator.

The trading platform will also provide Transgaz with the marginal selling/buying price and with the total amount for the purpose of calculating the marginal price for imbalance invoicing.

VTP trade notification of the bilateral transactions made between two VTPu (VTP users) on a trading platform or over-the-counter

The notifications may be submitted directly to the portal of the VTP related platform or by XML secure message.

Each VTPu submits notifications to the TSO's VTP-related platform, consisting of at least the following:

- The bought or sold, delivered/received amount
- Counterpart
- Gas day D for which the gas is delivered
- Trading market, if the transaction was made on the trading platform referred to in the transaction.

The notifications may be submitted at most 30 days before, but they are aggregated to the portfolio of the VTPuser only if they are validated by the validation processes related to D-1 or D according to the set schedule.

The VTP notification validation process:

- The TSO compares the amounts notified by the two VTPus and, if they are equal, the sold or bought amounts are registered with the portfolio of the VTPus.
- If the two amounts are different, the notification is disregarded

No validations are made with respect to a VTPu's booked capacity or with respect to the compliance of the VTPu sold amounts with the VTPu's amount bought or injected into the NTS.

In the case below, the transaction between the VTPu1 and VTPu2 is accepted and the portfolios of the 2 VTPus is adjusted accordingly.

The transaction between the VTPu3 and the VTPu4 is rejected.

If a transaction is validated by the TSO, it can no longer be cancelled. For cancelling the transaction, an inverse transaction with the same amount and subject to the same validation process will be made.

No.	Seller/ Buyer Pure trader/NU (who notifies)	Sold/delivered amount for day D	Bought / received amount for day D	Counterparty	Gas day D	Checking outcome
1.	VTPu1	50		VTPu2	01.10.2017	Accepted
2.	VTPu2		50	VTPu1	01.10.2017	Accepted
3.	VTPu3	50		VTPu4	01.10.2017	Rejected
4.	VTPu4		45	VTPu3	01.10.2017	Rejected

All valid notifications will supplement the portfolio of the parties and will be taken into account for the calculation of the imbalance.

The trading platform may deliver notifications to the VTP for bilateral transactions concluded between two VTPus within the platform, the notifications will include the same information as point 1.

Supplementation of the portfolios:

Following the above-mentioned transactions made on the trading platform or over-the-counter, the portfolios will be supplemented as follows:

VTPu1

VTPVTP Entry	VTP Exit	
	50	TP
	50	OTC

VTPu2

VTP Entry	VTP Exit	
	40	TP
50		OTC

VTPu3

VTP Entry	VTP Exit	
70		TP

VTPu4

VTP Entry	VTP Exit	
20		TP