

**PROPOSAL**

**for the Implementation Model of the COMMISSION REGULATION (EU) No 312/2014 of 26  
March 2014, establishing a Network Code on Gas Balancing of Transmission Networks**

Energy Regulatory Office

Prague, 9 March 2015

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## BASIC TERMS

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Balancing	Model of gas balancing in the gas system
Clearing C	Settlement, carried out by the market operator, of the difference between the consumption of gas determined by means of synthetic load profiles and the actual value of consumption determined through reading at the customer's supply point
Solely transit participant	Natural person or a legal entity which is not a cleared entity and which contracts the transmission of gas for the border point or for the virtual gas storage facility point
Energy Act	Act No 458/2000 Coll., on business conditions and public administration in the energy sectors and on amendment to other laws (Energy Act), as amended
Flexibility	Flexibility provided through linepack flexibility service
Concept	Proposed Concept for implementation of the COMMISSION REGULATION (EU) No 312/2014 of 26 March 2014, establishing a Network Code on Gas Balancing of Transmission Networks which the Energy Regulatory Office published on 1 December 2014
Regulation	Commission Regulation (EU) No 312/2014 of 26 March 2014, establishing a Network Code on Gas Balancing of Transmission Networks
Market Operator	Company OTE, a.s.
Gas Market Rules	Public Notice No 365/2009 Coll., on Gas Market Rules, as amended
Operational imbalance	Sum of the system and technical imbalance
Transmission System Operator	NET4GAS, s.r.o.
Cleared entity	Natural person or a legal entity for whom, upon the contract on imbalance clearing, the market operator carries out the evaluation, clearing and settlement of imbalances
System imbalance	Sum of the positive and negative market imbalances of all cleared entities on the gas day adjusted with the use of balancing service
Technical imbalance	Imbalance caused by an influence other than the nominations of the cleared entities
Market imbalance	Imbalance of the cleared entity
Type of metering	Type of metering is determined in accordance with the Public Notice No 108/2011 Coll., as amended
Synthetic load profile	Profile characterising the annual course of gas consumption in the supply point which is used for evaluation of imbalances; substitute method for determining the consumption for customers not continuously metered
The Office	Energy Regulatory Office
Balancing service	Flexibility service pursuant to provision of Section 2, Paragraph 2 d of the Gas Market Rules

## LIST OF ABBREVIATIONS

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CZ	Czech Republic
ČHMÚ	Czech Hydrometeorological Institute
DA	Day-ahead
DSO	Distribution System Operator
ERO	Energy Regulatory Office
EA	Energy Act
ID	Intraday
OTE	Market Operator
PO	Operational imbalance
GMR	Gas Market Rules
SI	System imbalance
SSO	Storage System Operator
CE	Cleared entity
SLP	Synthetic load profile
TSO	Transmission System Operator
TI	Technical imbalance
ÚTP	Gas market participant
VTP	Virtual trading point

# 1. INTRODUCTION

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On 27 March 2014, the Commission Regulation (EU) No 312/2014 of 26 March 2014, establishing a Network Code on Gas Balancing of Transmission Networks was published in the Official Journal of the European Union.

The Regulation defines individual harmonised rules of balancing valid across the entire European Union in order to enable deeper integration of the market.

Based on the Energy Regulatory Office empowerment ensuing from the provision of Section 98a, Paragraph 2i), Point 4 of the Energy Act, the ERO is obliged to determine the scope and time limit for handing over data for evaluation of imbalances and billing of gas supplies and other services, procedures for evaluation, settlement and balancing of imbalances as well as for clearing and settlement of the balancing gas in states of emergency and prevention thereof. Within the scope of this empowerment it is necessary to modify the time limits and processes for implementation of the Regulation into the model of gas market in the Czech Republic. Transposition of the Regulation will be thus performed through modification of the Gas Market Rules, as the implementing public notice to the Energy Act.

Through this document the Energy Regulatory Office submits to the gas market participants the proposal of basic principles for the new model of gas balancing in the transmission system that will be applied in the Czech Republic. This document is based on the trading part of the new balancing rule in the CZ which was submitted to the Energy Regulatory Office by OTE, a.s., on 24 February 2014. The Office has been informed about the conceptual direction of this model on the ongoing basis and this model satisfies the key prerequisites which the Office declared in the Concept. When formulating individual rules the Office keeps taking into consideration the instigations and comments that result from the public consultation process.

This document describes the proposal for new basic principles of balancing for the conditions of gas market model in the Czech Republic, which strive not only to fulfil the requirements set in the Regulation but also not to build barriers preventing small traders from participation in the gas market in the Czech Republic and not to increase risks for Transmission System Operator and the market operator while, to the utmost extent, trying to support trading on the short-term gas market in the Czech Republic and to utilise as much as possible the already built IT systems of the gas market participants.

Having regard to the results of public consultation process and considering the time exigency related to preparation of changes in balancing, the Office hereby confirms that the time limit for implementation of the Regulation as at 1 October 2015 will not be met. The Office presumes that new balancing model will be activated as at 1 July 2016. In view of such implementation date and bearing in mind that conditions pursuant to the Article 46, Paragraph 3 the Regulation were not fulfilled, the interim measures specified in Chapter X of the Regulation will not be applied.

## 2. BASIC PRINCIPLES

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Existing model of gas system balancing enables utilisation of tolerances for every entry and exit point of the gas system a settlement in kind ex-post. The Office considers these features as being the most beneficial characteristics of the model for settlement of imbalances for gas traders. Therefore the new model is designed in such a manner that would, to certain extent, allow for existence of “charge-free” imbalances of the cleared entity, hence the gas traders thus will not incur additional costs of balancing their portfolios which they potentially might compensate in prices for the end customers. This approach thus takes into consideration the accepted information model according to the basic scenario when the gas traders experience imbalances that cannot be influenced despite the application of sophisticated prediction mechanisms.

Within the new rules of gas system balancing there will be utilised flexibility through accumulation (“linepack flexibility service”) provided in compliance with Article 43 of the Regulation which will facilitate creation of the “flexibility account” and “balance-sheet account of imbalances” for every cleared entity. These accounts will enable the trading position of cleared entities to oscillate within the defined amount of flexibility in such a manner that if such bounds are not exceeded then the additional costs of balancing will not be generated. Flexibility accounts and balance accounts of imbalances for individual cleared entities will be recorded in the systems of the market operator who will every day set the current balances of these accounts in accordance with principles specified in the below-stated chapters of this document.

Linepack flexibility service is the only instrument specified in the Regulation that enables the cleared entities to utilise the natural characteristics of the gas system, i.e. the change of accumulation that does not influence the smooth and secure operation of the gas system. The already existing and functioning model of balancing in the Czech Republic utilises the so-called linepack and the Office is not aware of any facts that would indicate requirements for abolishing this instrument, therefore it can be assumed that the gas market participants presume the same instrument will continue to be applied also in the new balancing model.

The Office has repeatedly declared that while seeking the optimum model for implementation of the Regulation the Office will pursue such solution that will reflect requirements of the Regulation and simultaneously will ensure that advantages which the gas system brings due to its physical nature are not lost. Different solutions were analysed where the new suitable model of balancing was examined, however none of the solutions was of such kind that its benefits would outweigh the negative aspects when the cleared entities would lose the possibility to utilise the available linepack.

The most significant change in the model of system balancing shall be seen in the fact that all imbalances and determining of daily balancing quantities will be carried out already on the basis of daily allocation values (preliminary allocations of gas supplies according to the existing terminology of the GMR) and not by the monthly allocation values (actual allocations of gas supplies according to the existing terminology of the GMR).

In general terms one can imagine also such solution that would not allow the cleared entities to work with the unused tolerance by means of linepack in the ex-post mode. Nevertheless, the allocation of end customers’ consumption is a random variable that can be estimated to a certain extent by means of statistical methods which are then reflected in prediction tools of gas traders. Therefore in the Office’s view the systemic solution shall be the one where the cleared entities will have an instrument at their disposal which will allow for minimising the level of uncertainty related to the random variable.

In principle, it is impossible to ensure within any balancing model of the gas industry that potential metering errors, once they are detected, would be retrogradely compensated to the market participants in historical gas prices corresponding with the time when the errors occurred. In contrast to the electricity market where the amount of regulatory energy can be ascertained at any time, in the gas industry it is not possible to establish the precise energy (gas calorific value, changes in linepack, losses, etc. are calculated ex-post) which caters for the needs of balancing, regardless whether the Transmission System Operator procures the energy on the market or whether it is part of the available linepack or change in the provided linepack flexibility. Even if due to the metering error the cleared entity buys the unused flexibility on the market with unused flexibility and subsequently the metering error is ascertained which would have not instigate the requirement for purchase on the unused flexibility market and hence the costs incurred, it is possible to consider that such risk is outweighed by the benefits which the proposed flexibility model will provide to the cleared entities.

### 3. COMPETENCES AND OBLIGATIONS PURSUANT TO THE REGULATION

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The Regulation is primarily focused and its modifications are particularly applied to the Transmission System Operators whom the Regulation obliges and whose conduct is stipulated by the Regulation.

The Energy Act regulates the rights and obligations of the Transmission System Operators within the conditions of the gas market model. These rights and obligations are stipulated in the provisions of Section 58 of the Energy Act, based on which the Transmission System Operator is obliged to ensure secure and reliable operation, upgrade and development of the transmission system and also to establish and operate technical dispatching through which the TSO provides for dispatching control of the transmission system, hence its secure and reliable operation; here it is necessary to bear in mind that operational management of the operations represents inseparable part of the dispatching operation, which, *inter alia* encompasses securing of physical balance between the quantity of gas which is input into the transmission system and the quantity of gas which is exiting the system. Hence, under the Energy Act the Transmission System Operator provides for physical balancing of the system.

Relevant provisions of the Energy Act regulate the commercial balancing of the transmission system. This balancing ensues from the provision of Section 20a, Paragraph 4, pursuant to which the obligation to provide for clearing and settling the balancing gas based on data provided by the Transmission System Operator is assigned to the market operator, it means that physical and commercial balancing are carried out by different entities. Market operator is obliged, *inter alia*, to evaluate imbalances for the whole CZ territory and to hand over this evaluation to individual cleared entities and to the Transmission System Operator, based on the imbalance evaluation to provide for clearing and settlement of imbalances pertaining to the cleared entities, which are obliged to pay for the imbalances.

In view of the above stated facts, the Office notes that considering the settings of the existing gas market model in the Czech Republic that differs from the model ensuing from the Regulation, the market operator is also affected by this Regulation and therefore it is logical, in accordance with the gas market model and for the sake of maintaining continuity, to transfer to the market operator number of competences and obligations that the Regulation stipulates for the Transmission System Operator. For this reason, the market operator is the subject of rights and obligations ensuing from the pertaining provisions of the Regulation, as if such rights and regulations were assigned to the Transmission System Operator. This transfer of competences fully complies with the Article 4, Paragraph 4 of the Regulation.

### 4. PROVISION OF INFORMATION

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The Regulation provides possibility to select the information scenario which is necessary to provide information in accordance with Chapter VIII of the Regulation.

Energy Regulatory Office considers the obligations that ensue from information duties of the Transmission System Operators and parties that perform forecasting towards the Transmission System Operator as being complex issue that cannot be satisfactorily set up without active cooperation and participation of entities involved.

Considering the complexity of the implemented changes the Office accepts the use of the basic information scenario. Nevertheless, the Office considers essential to state that it does not

perceive this solution as the ultimate one and when analysing the balancing model functioning the Office will strive for making the information flows improvement one of the key parameters of evaluating the execution of licensed activity, which, according to the provision of Section 3, Paragraph 2 of the EA is carried out in public interest, and to reflect this evaluation into the settings of regulatory period parameters.

The Office invited the operators of distribution systems to submit, in accordance with Chapter VIII of the Regulation, their proposal for fulfilling their information duties and to submit drafts of methodology and principles for providing data, in order to meet the obligations pursuant Articles 39 to 42 of the Regulation. Within this step the Office has strived to ensure that at least twice a day there will be provided relevant information on the consumption quantity for the supply points that are not measured on daily basis. At the same time the Office has intended to address issues of the type B metering. Distribution System Operators has proposed that information on the anticipated quantity of the off-takes not measured on daily basis shall be provided through update of the temperature, or as the case may be, through updated value of the recalculated type profile of supplies. Distribution System Operators have not addressed the issues of the type B metering and related obligation to update also the anticipated consumption for these supply points twice during the day and the Office at the moment does not have any information that the Distribution System Operators would be currently preparing any measures for minimising the number of supply points with the type B metering.

## 5. LINEPACK FLEXIBILITY

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Proposed model thus anticipates provision of linepack flexibility to every cleared entity. This flexibility is provided free-of-charge and it will be recorded in the system of the market operator for every cleared entity. Users of the system pay for the flexibility through the payments of capacity booking and it is provided to these cleared entities that have the capacity booked at border points or at gas storage facility points (unless the “OBA” rule is introduced), and to cleared entities that are responsible for imbalances at individual supply points. Size of the provided flexibility is derived from the size of booked capacity and its utilisation, or through a substitute manner for the type C metering. Calculation method will be specified in the Gas Market Rules, values of individual coefficients will be part of the appendix to the GMR. Nevertheless, the Office presumes that the size of the provided linepack flexibility will have approximately the same scope as the tolerance which is currently provided.

In accordance with provisions of Article 43, Paragraph 7 of the Regulation the cleared entities do not nominate the use of the flexibility service. Precisely determined value of the automatic flexibility nomination will always exist within specification of the size for the daily balancing amount of the cleared entity.

## 6. UNUSED FLEXIBILITY MARKET

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First, it needs to be stated that the Regulation does not define rules for handling of unused tolerance. Proposed model anticipates establishing of the unused flexibility market in the system of the market operator denominated in CZK. Therefore this will be a platform that will enable individual cleared entities to use the market approach for settling imbalances directly between them, whereas this approach will cater for such imbalances that exceed the flexibility of the cleared entity, however within the overall position of the gas system they do not represent

situation that would require balancing action of the TSO<sup>1</sup>. Proposed principles are intended for contributing to the increase of liquidity of the organised intraday market in such a manner that there will be several positions of individual cleared entities, instead of one aggregated trading position of the TSO.

In addition the cleared entity, which has its trading position above its flexibility, will try to level the position via this market, so that the cleared entity will not get beyond its flexibility on the next trading day (which is the current gas day). If there is such a system imbalance (sum of all daily imbalances of the cleared entities) that might cause the status of the system requiring the balancing action of TSO then the principles of unused flexibility market ensure that it will be impossible to apply such imbalance on the unused flexibility market (i.e. it will not be possible to obtain the unused flexibility of other cleared entities to cover the imbalance) and the cleared entity will thus pay for such imbalance that exceeds its flexibility the market (applicable) price.

Existing IT solution which is run by the market operator in the existing balancing model as the unused tolerance market will be utilised for this unused flexibility market to the largest possible extent. Unused flexibility market will be thus based on the principle of matching the offer and demand curves, with the only difference that the market will be executed every gas day for the previous gas day, and not after the end of the relevant month. Cleared entity will be able to enter the offer or demand on unused flexibility from the moment of evaluation of the daily imbalances of cleared entities until the market closure at 14:30. In case the claims on the imbalances are applied the closure of this market will be adequately postponed, whilst the rules for submitting claims will have the scope within the current wording of the Gas Market Rules. Sale and purchase of all matched trades with unused flexibility will be made for the unified market price set by this auction market.

Unused flexibility of every cleared entity is determined for the relevant gas day as the difference between the current status of the flexibility account pertaining to such cleared entity (prior to the “opening” of the unused flexibility market) and the size of the flexibility provided for the relevant day to this cleared entity, while respecting the direction of the purchased and sold flexibility.

If there are cleared entities which will, in relation to the prediction of system imbalance, modify their behaviour so that their daily imbalance would be in the opposite direction to the prediction of system imbalance, one can expect that such behaviour will help the system. Still, such cleared entity faces a risk that it will have the imbalance with the same direction as the system imbalance if more cleared entities decide to adjust their positions in the same way.

## 7. BALANCE ACCOUNT OF IMBALANCES AND DAILY BALANCING AMOUNT

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Together with the flexibility account, as stated in the previous chapter, **the balance account of imbalances** is simultaneously maintained for each cleared entity in the system of market operator. Initial status of the balance account for cleared entity imbalances will be set to zero value<sup>2</sup> for every new cleared entity upon its registration. Imbalances for 29<sup>th</sup> and 30<sup>th</sup> June 2015 will be settled in accordance with the rules valid as at the date when the imbalance occurred.

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<sup>1</sup> In accordance with Article 4 of the Regulation the balancing rules have to reflect real needs of the system.

<sup>2</sup> On the day of transition to the new balancing this account will be set to zero also for all the existing cleared entities.

Initial status of the account of cleared entity imbalances for the given gas day of supply is then represented by the status of the account of cleared entity imbalances after the previous gas day. Status of the account of cleared entity imbalances can be best compared to the situation where such status corresponds with the amount of gas which the cleared entity should supply or take from the system, so that the cleared entity's balance in the gas system would be equal to zero.

Final status of the balance account of cleared entity imbalances at the end of the gas day is determined as the sum of the initial status of the account of cleared entity imbalances at the start of the gas day and the imbalance of the cleared entity, if such sum falls within the flexibility of the cleared entity.

In case the status of the balance account of cleared entity imbalances is beyond the cleared entity flexibility even after the end of the unused flexibility market, the value of this exceeding is equal to the daily balancing amount of the cleared entity (within the meaning of the Regulation this is the final daily balancing amount) and this amount is balanced by the gas in accordance with the provisions of Article 23, Paragraph 2 of the Regulation for the unit price which will be determined through procedure pursuant to Chapter 10 of this document.

Final status of the balance account of cleared entity imbalances is hence the sum of the initial status of the account of cleared entity imbalances at the start of the gas day, daily imbalance of the cleared entity and the daily balancing amount of the cleared entity, while respecting the convention for positive/negative signs.

Sample calculation of imbalances and the daily balancing amount is stated in the Appendix No 1.

## **8. TRADING PLATFORM**

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In order to procure short-term standardised products the Transmission System Operator utilises the short-term gas market organised by the market operator in accordance with the provision of Section 20a, Paragraph 4 a) of the Energy Act. Pursuant to the provision of Section 58, Paragraph 1 j) of the EA, the purchase or sale of gas for the purpose of ensuring balance of transmission system is not considered trading in gas.

Transmission System Operator can already avail the gas purchase and sale through organised short-term gas market in accordance with provision of the Section 43 of the GMR as one of the tools for physical balancing of the system. The TSO has never contested this tool and never submitted any proposal to remove it. Based on the analysis of this organised short-term gas market, the Office unambiguously concluded that the market is sufficiently liquid and always able to facilitate sufficient volumes of gas for the gas market participants. At the same time the Office states that this is the only market which is subject to the Energy Act that defines the basic framework of relationships among the gas market participants. In view of the above stated facts related to the balancing model setting the Office envisages further use of this market also in the future as it complies with the Regulation and the Energy Act.

Of course, this is without prejudice to the right (in fact, the obligation) of the TSO to use also other platforms for handling such gas system statuses which require immediate solution (balancing action performed by the TSO) that are connected with imbalances during the gas day in progress, outside the usual operational and pressure statuses of the system. In case the TSO utilises an alternative platform, such balancing action must be substantiated by the report that will clearly demonstrate that the TSO adequately in advance took all the steps to provide for balancing action on the organised short-term gas market. In the event that such report is not

corroborated then the costs related to the relevant action will not be accepted for the Neutrality Account.

## 9. TSO ACCOUNT

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TSO should not be forced to address also small quantities of daily balancing amount therefore the so-called TSO Account will be established at the market operator and such insignificant amounts will be handled by charging this account. Introduction of the TSO Account is also necessary to deal with the situation when there may exist daily balancing amount that would be so small that it could not be traded in any organised market.

Part of the available linepack of the system is designated for the TSO Account. In case of the TSO balancing action, this action serves as means for solving the system status (as specified in the Regulation) and it is charged to the TSO Account, so that the TSO Account reaches the defined bounds.

There will be established the basic limit for the TSO Account below which the TSO will not perform any balancing action. Above the basic limit the TSO has the option to sell/buy the gas for the TSO Account purposes on the intraday gas market for the following day – and that is within the defined time and following the previous notice specifying the quantity that will be subject to the balancing action.

In addition the increased limit will be defined. If this limit is reached or exceeded, the TSO will be allowed to buy/sell the gas for the TSO Account purposes also in the intraday gas market for the gas day in progress. Prior to this the TSO always has to issue a notice specifying the quantity and the market that will be subject to the balancing action.

The values for the basic limit for the TSO Account below which the TSO will not perform any balancing action, and the increased limit above which the TSO can utilise also the intraday gas market for the day in progress and, in case the request to trade gas for balancing purposes is not successful, to utilise also another market or a bilateral trade or a flexible contract (if the TSO has such contract available) will be determined during the meeting between ERO and TSO, while considering the linepack of the gas system which will be available to the TSO.

Of course, this is without prejudice to the right (in fact, the obligation) of the TSO to use primarily the OTE market but later also other platforms for handling such gas system statuses which require immediate solution (balancing action performed by the TSO) related to the imbalances during the gas day in progress that are beyond the usual operational and pressure statuses of the system

After the end of the unused flexibility (at 14:30) the OTE will publish the size of the TSO Account in such a way that the original (initial) value of the TSO Account will be adjusted with the sum of daily balancing amounts of individual cleared entities. Based on the size of the TSO Account and the gas system status, while respecting the limitations pursuant to previous paragraphs, the TSO will decide on the sale/purchase of gas for the TSO Account purpose and will publish this information at the latest within one hour after the closure of the unused flexibility market, along with timestamp indicating from when the gas will be offered/demanded on the OTE market.

Principles for determining the initial price of the offer/demand and its potential incrementation/decrementation in case the deal is not executed will be specified for submissions of the offers/demands for the TSO Account purposes. The principles will ensue from the current legislation described in the Schedule No 6 to the Public Notice on the GMR.

In accordance with the neutrality principles of the Regulation the potential additional costs/surplus revenues related to the balancing actions (gas for the TSO Account will be procured for higher price than the corresponding price of the daily balancing amount of the CE) will be included into to adjusted allowed revenues of the regulated. (See point 18).

Transmission System Operator trades the amount of gas that is transferred to/obtained from all the cleared entities in compliance with the provision of the Article 23, Paragraph 2 of the Regulation according to the following rules:

- Amount of gas is accumulated to the so-called **TSO Account**, for which part of the linepack of TSO is set apart.
- When the limit of available linepack designated for the TSO Account based on the sum of daily balancing amounts of cleared entities is exceeded the TSO buys/sells the gas in such a way so that the TSO Account is supplemented to the limit which was exceeded, while respecting the minimum quantity traded at:
  - Intraday market run by the market operator for the current gas day, or
  - Intraday market run by the market operator for the following gas day
- In standard cases the TSO Account will be supplemented in the intraday market run by the market operator for the following gas day. Only in the event that the total linepack of the gas system is reaching the boundary values then there will be utilised the market run by the market operator for the gas day in progress.

The objective of introducing the TSO Account is not to apply market method for resolving imbalances that do not have a negative impact on the transmission system and thus restrict the need for balancing actions of TSO.

Method and mechanism of supplementing the TSO Account as well as the responsibility for recording and administration of the gas quantity on the TSO Account will be defined in the Gas Market Rules.

## 10. RECONCILIATION PRICE OF THE DAILY BALANCING AMOUNT (“APPLICABLE PRICE”)

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OTE Index calculated through procedure specified in Chapter 12 is utilised for determining the amount of **unit price for reconciliation of the daily balancing of cleared entity** (applicable price according to Article 22) – pursuant to the following rule:

- For **negative daily balancing amount** the higher of these two prices will be applied:
  - If there exist prices of gas purchase in the market where the TSO participated due to balancing action then the TSO price exists as the highest price of the relevant purchase (relevant shall mean the TSO purchase of gas in organised markets, which is connected with the balancing action)
  - Weighted average daily price for the gas day according to the OTE Index for the relevant day which is increased by small price adjustment that represents the function of system imbalance – according to the principle published in the GMR (amount of price adjustment does not exceed 3%)
- For **positive daily balancing amount** the lower of these two prices will be applied:
  - If there exist prices of gas sale in the market where the TSO participated due to balancing action then the TSO price exists as the lowest price of the relevant sale (relevant shall mean the TSO sale of gas in organised markets, which is connected with the balancing action )

- Weighted average daily price for the gas day according to the OTE Index for the relevant day which is decreased by small price adjustment that represents the function of system imbalance – according to the principle published in the GMR (amount of price adjustment does not exceed 3%)
- If the TSO buys or sell gas in another organised gas market which is run by the market operator specified in Chapter 8 the TSO will immediately inform the market operator on the quantity and price of the sold or purchased gas connected with the balancing action.

For the purpose of balancing actions it will be necessary to distinguish in the system of market operator the TSO purchases and sales of gas from other trades – with a special attribute or a different labelling of the TSO.

## 11. INFORMATION ON BALANCING ACTIONS OF TSO

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With regard to the transparency of costs and revenues related to the balancing model, it is necessary to ensure that the TSO will publish all its trades connected with the balancing action, with the minimum scope for every individual trade:

- Volume of gas within the realised balancing action
- Price of gas within the realised balancing action
- Identification of the market type where the balancing action was realised, operator of such market
- Type of requested product (DA, ID)
- Place of delivery (VTP, Border Point, NCG, etc.)
- Timestamp of the offer/demand submission
- Timestamp of the offer/demand acceptance
- Substantiation of the need for balancing action and justification for the market selection

## 12. OTE INDEX

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Considering the necessity to have applicable price for every day specified according to Article 22 of the Regulation, the available weighted average price for the given gas day has to exist. For this reason there will be introduced the OTE Index which will be determined according to the current published information on the weighted average price of the intraday gas market run by the market operator, whereas a substitute method for determining the average price will be in place if sufficient number and volume of trades are not realised.

Detailed procedure for determining the OTE Index is specified in the Appendix No 2 and it stems from the principles which are commonly used by other public commodity markets.

## 13. INFORMATION PUBLISHED DAILY

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New balancing model assumes that in the system of market operator the following values will be determined for every individual cleared entity and every gas day:

- **Daily imbalance of the cleared entity** (in accordance with existing principles in the EA and GMR ),
- **Initial status of the account for cleared entity imbalances,**

- Size of the **cleared entity flexibility** (based on the amounts of booked capacity and their utilisation, see Chapter 3),
- **Daily balancing amount of the cleared entity** (in accordance with the above-stated principles) **and the final status of the account for cleared entity imbalances** (after inclusion of the daily balancing amount of the cleared entity).

All these details are anonymous; they can be accessed only by the cleared entity to which they are related, and by also the market operator who determines them.

Every day the market operator also publishes the size of the system imbalance, i.e. the sum of all imbalances of the cleared entities. Additional selected details in aggregated form will be also published; their scope will be specified by the Gas Market Rules.

Every day the market operator publishes the total size of the provided linepack flexibility and its utilisation.

## 14. SETTLEMENT OF DIFFERENCES AND SETTLEMENT CURRENCY

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Price related to the balancing of the daily balancing amount will correspond with the Applicable Price described in Chapter 10. For the financial settlement of daily balancing amount the Applicable Price will be recalculated to CZK with the daily EUR/CZK rate announced by the Czech Central Bank ČNB for the given day (i.e. for the day when this price emerged).

All prices for settlement of differences between allocations (resolving errors of metering, including the errors at the entry to the distribution zones), including settlement of differences between the actual and allocated consumption values for the type C metering will correspond with the OTE Index, as this is an relocation of already delivered and utilised gas between the cleared entities. In contrast to the current balancing model, where the differences between the sum of daily allocations for calendar month and the sum of monthly allocations for the calendar months are settled in kind in the following month, now also this difference will be newly resolved through financial settlement. For the purpose of financial settlement the price of OTE Index will be recalculated to CZK with the ČNB rate for the given day. Hence all the financial settlements will be carried out in CZK.

## 15. ISSUES OF THE TYPE B AND TYPE CM METERING

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In the event the existence of supply points with the type B metering still needs to be considered the Distribution System Operator will assign to every such supply point the class of SLP and the planned annual consumption (determined according to the Gas Market Rules for the type C metering). Similarly as in case of the type C metering the SLP will be utilised, the temperature dependency will be defined, recalculated SLP will be specified based on the real temperature.

For the purpose of daily allocations to these supply points the value will be set using the same principle as the one which is currently used for the supply points with the type C metering. Daily allocation will be thus the product of:

- (i) value of the recalculated SLP of the relevant class for the given day,
- (ii) size of the residual profile coefficient for the given zone of SLP,
- (iii) planned annual consumption.

Market price defined by the OTE Index will be applied for the settlement of differences in the actual consumption values (data from monthly clearing) and the daily allocations. Therefore the procedure applied will be the same as for settlement of differences between the daily allocation and monthly allocation for the type A metering (as if a metering error occurred).

Current principle of the CM allocation to days based on the recalculated SLP will be cancelled. The same principle as for the type C metering will be applied for the type C metering with the monthly frequency of reading, it means the allocation based on the recalculated adjusted SLP, for the daily allocations and also monthly allocations and closing monthly allocations. Actual data from the type CM metering will be thus reflected only in the clearing type C, where the differences between the allocation and the actual value will be settled according to the existing principles.

## **16. SETTLEMENT OF DIFFERENCES**

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Market operator will apply the market price derived from the OTE Index to settle the differences between the sum of allocations 0 (daily allocation) and 1 (monthly clearing) of the cleared entity (similar to the existing settlement of differences between the actual and corrective allocations (data from monthly and closing monthly settlements)). At the same time the principle for settlement of differences between the adjustment and actual allocations will be retained, again as the settlement using the market price of the relevant day determined according to the OTE Index.

## **17. SOLELY TRANSIT PARTICIPANTS**

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The same setting as the one currently valid will apply to the solely transit participants. It means that for solely transit participants who are not the cleared entity the TSO performs registration of all such entities in the system of the market operator. In contrast to the current rules the registration and settlement of imbalances will be carried out individually for every solely transit participant.

## **18. NEUTRALITY ACCOUNT**

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Neutrality Account is maintained and administered by the TSO in its system as the sum of incomes and costs related to the balancing actions. Balance of the Neutrality Account will be reflected in the regulated prices of gas transmission after the end of the calendar year.

## **19. FLEXIBILITY SERVICE FOR 2016**

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In accordance with the Article 8 of the Regulation the Transmission System Operator is authorised to procure the balancing services to cater for the situations when the short-term standardised products will not be able to ensure response necessary for maintaining the operation level of the transmission system or when there is a lack of liquidity for trading in short-term standardised products.

Even in the period from January to June 2016 prior to the balancing principles change, the Office presumes that the TSO will utilise the market solutions to the maximum possible extent, with the emphasis on using the short-term markets according to the Section 43 of the GMR. The Office will rigorously require substantiating the necessity to use the flexibility service for the CZ needs,

and even based on the utilisation of this service in the past. The Office expects that within 30 days from publishing of this document the TSO will submit a proposal specifying how the physical balancing of the system will be carried out in the period January to June 2016, including potential setting of parameters for the required flexibility service. Such proposal will also contain detailed analysis of needs and utilisation of the flexibility service for 2013 and 2014, with the minimum scope pursuant to point f) of the Concept.

The Office presumes that commencing 1 July 2016, the flexibility service (balancing service) will be applied only as the last resort solution, once all other market-oriented instruments are exhausted. This assumption will be reflected also in the size of the balancing service in the period after 1 July 2016 which the Office will accept for the formula for determining the adjusted allowed revenues.

## 20. NEXT STEPS AND TIME SCHEDULE

ERO anticipates implementation of the Regulation pursuant to the framework time schedule specified in Table 1. At the same time the Office reserves the right to specify or modify individual deadlines based on the comments submitted after the finalisation and evaluation of each project phase.

TABLE 1: TIME SCHEDULE FOR IMPLEMENTATION OF THE REGULATION

<b>Deadline</b>	<b>Phase</b>
4 January 2015	Sending of comments and instigations by the market participants
31 January 2015	Clearing of comments submitted by market participants
9 March 2015	Publishing the final version draft for the balancing model
31 March 2015	Comments of market participants on the final version of the balancing model
15 May 2015	Draft of amendment for the Gas Market Rules
31 May 2015	Comments of gas market participants on the draft amendment of the Gas Market Rules
15 June 2015	Clearing of comments of gas market participants on the draft amendment of the Gas Market Rules
30 June 2015	Submitting of the draft amendment for the Gas Market Rules to the inter-ministerial comments procedure

Energy Regulatory Office is fully aware of the importance of change in the gas market model which will result from the obligation to implement the Regulation. When implementing the Regulation it is necessary to reflect the needs and interests of all concerned groups of market participants. Resultant model will then represent the balanced and non-discriminatory compromise, whereas its main purpose encompass development of gas market in the Czech Republic and setting of such conditions that will ensure security of gas supply for customers in the Czech Republic and at the same time avert increase of prices for customers resulting from adoption of solutions that incur unsubstantiated costs. The Office strongly believes that the experience and feedback from gas market participants will contribute to ensuring that the implementation model will correspond with the concept of rules harmonisation at the European level and at the same time it will motivate the gas traders to actively operate on the Czech gas market.

Therefore the Energy Regulatory Office invites all the entities concerned to submit to the Office within the specified deadline their substantiated comments, instigations, proposals for supplementing the presented proposal for the model of gas system balancing which will be

activated from 1 July 2016. In case of disagreement with some of the proposed theses the Office invites the gas market participants to submit comprehensive alternative option to address the given issues.

## 21. RULES OF CONSULTATION PROCESS

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1. Comments, instigations, proposals for add-ons to the presented model of gas system balancing can be presented to the Office via the e-mail address [plyn@eru.cz](mailto:plyn@eru.cz) , while stating the subject

### **“NC BAL – Consultation Process”**

2. All the comments and instigations sent pursuant to point 1 have to be submitted in the following form: a comment, rationale for the comment and the alternative proposal as such.
3. Comments and instigations will be processed through update of this document which will be published on the website of the Office.
4. Comments, instigations and standpoints regarding the submitted questions can be sent by **31 March 2015** to the e-mail address stated above.

## APPENDIX NO 1: SAMPLE CALCULATION OF DAILY BALANCING AMOUNT

Day 1	Size of the CE flexibility	Initial status of the CE imbalances	Sum of entry- CE	Sum of exit- CE	Daily imbalance of CE	System imbalance	Intermediate status of imbalances account before flexibility trading	Unused flexibility - positive	Unused flexibility - negative	flexibility market ex post - purchase	flexibility market ex post - sale	flexibility market ex post - sum	Limit of flexibility CE -	Limit of flexibility CE +	Daily balancing amount - CE	Initial status of the imbalance account - CE	
A	300	0	5000	4800	200	<b>200</b>	200	100	-500		-100	100	-200	400	0	200	
B	100	0	2000	1900	100		100	0	-200			0	-100	100	0	100	
C	10	0	1000	1100	-100		-100	110	0	-100		-100	-100	-110	-90	0	-100
										<b>0</b>							

Day 2	Size of the CE flexibility	Initial status of the CE imbalances account	Sum of entry- CE	Sum of exit- CE	Daily imbalance of CE	System imbalance	Intermediate status of imbalances account before flexibility trading	Unused flexibility - positive	Unused flexibility - negative	flexibility market ex post - purchase	flexibility market ex post - sale	flexibility market ex post - sum	Limit of flexibility CE -	Limit of flexibility CE +	Daily balancing amount - CE	Initial status of the imbalance account - CE	
A	300	200	5000	5300	-300	<b>-900</b>	-100	400	-200		-200	200	-100	500	0	-100	
B	100	100	2000	2300	-300		-200	300	0	-100		-100	-100	-200	0	0	-200
C	10	-100	1000	1300	-300		-400	410	0	-100		-100	-100	-110	-90	-290	-110
										<b>0</b>							

Day 3	Size of the CE flexibility	Initial status of the CE imbalances	Sum of entry- CE	Sum of exit- CE	Daily imbalance of CE	System imbalance	Intermediate status of imbalances account before flexibility trading	Unused flexibility - positive	Unused flexibility - negative	flexibility market ex post - purchase	flexibility market ex post - sale	flexibility market ex post - sum	Limit of flexibility CE -	Limit of flexibility CE +	Daily balancing amount - CE	Initial status of the imbalance account - CE	
A	300	-100	5000	5100	-100	<b>-160</b>	-200	500	-100		-100	100	-200	400	0	-200	
B	100	-200	2000	2050	-50		-250	350	0	-50			-50	-150	50	-100	-150
C	10	-110	1000	1010	-10		-120	130	0	-50		-50	-50	-60	-40	-60	-60
										<b>0</b>							

Day 4	Size of the CE flexibility	Initial status of the CE imbalances	Sum of entry- CE	Sum of exit- CE	Daily imbalance of CE	System imbalance	Intermediate status of imbalances account before flexibility trading	Unused flexibility - positive	Unused flexibility - negative	flexibility market ex post - purchase	flexibility market ex post - sale	flexibility market ex post - sum	Limit of flexibility CE -	Limit of flexibility CE +	Daily balancing amount - CE	Initial status of the imbalance account - CE	
A	300	-200	5400	4500	900	<b>850</b>	700	0	-1000	370		370	70	670	30	670	
B	100	-150	2000	2050	-50		-200	300	0		300	-300	-400	-200	0	0	-200
C	10	-60	1000	1000	0		-60	70	0		70	-70	-80	-60	0	0	-60
										<b>0</b>							

Day 5	Size of the CE flexibility	the CE imbalances account	Sum of entry- CE	Sum of exit- CE	Daily imbalance of CE	System imbalance	Intermediate status of imbalances account before flexibility trading	Unused flexibility - positive	Unused flexibility - negative	flexibility market ex post - purchase	flexibility market ex post - sale	flexibility market ex post - sum	Limit of flexibility CE -	Limit of flexibility CE +	Daily balancing amount - CE	Initial status of the imbalance account - CE	
A	300	670	4500	4500	0	<b>160</b>	670	0	-970	210		210	-90	510	160	510	
B	100	-200	2000	1900	100		-100	200	0		200	-200	-300	-100	0	0	-100
C	10	-60	120	60	60		0	10	-10		10	-10	-20	0	0	0	0
										<b>0</b>							

Sign for the flexibility market does not describe the direction of transaction (sale/purchase). Positive flexibility is marked as “+”, the negative flexibility is marked as “-”.

## APPENDIX NO 2: OTE INDEX

Situation on the intraday market organised by the market operator	Calculation of price INDEX OTE $P_{OTE}$ (€/MWh)
1. There exists more than one executed trade, whereas the total volume of traded gas exceeded 100 MWh.	Weighted average of all trades on the intraday market
2. There exists just one executed trade or the total volume of traded gas did not exceed 100 MWh.	<p>If at the same time on the market existed (and that is for the minimum duration of 5 minutes) the offer as well as the demand with the spread that is equal to or lower than 2 €/MWh and with the volume exceeding 50 MWh in both directions, then</p> $P_{OTE} = 0,5 * \frac{\sum_{i=1}^N (Vi * Pi)}{\sum_{i=1}^N Vi} + 0,5 * P_{\phi Or}$ <p><math>P_{\phi Or}</math> is the arithmetic average of all pairs of the maximum bidding price for the purchase and the minimum bidding price for the sale that satisfy the condition of being available together for at least 5 minutes, the volume of both is higher than 50 MWh and the difference between them does not exceed 2 €/MWh</p> <p>If at the same time on the market did not exist (and that is for the minimum duration of 5 minutes) the offer as well as the demand with the spread that is equal to or lower than 2 €/MWh and with the volume exceeding 5 MWh in both directions, then</p> $P_{OTE} = 0,5 * \frac{\sum_{i=1}^N (Vi * Pi)}{\sum_{i=1}^N Vi} + 0,5 * P_{NCG*}$ <p><math>P_{NCG*}</math> is the adjusted price of Daily Reference Price (<a href="http://www.eex.com/en/market-data/natural-gas/spot-market/daily-reference-price#!/2015/01/29">http://www.eex.com/en/market-data/natural-gas/spot-market/daily-reference-price#!/2015/01/29</a>) for the relevant delivery day from the EEX exchange for the NCG band increased/decreased by the value of the difference between the last known value of <math>P_{OTE}</math> pursuant to point 1, and the Daily Reference Price for the same gas day; if this price is unavailable or impossible to use, the value from the OTE Index from the previous day will be used for <math>P_{NCG*}</math></p>

Situation on the intraday market organised by the market operator	Calculation of price INDEX OTE $P_{OTE}$ (€/MWh)
3. Not a single trade was executed	<p>If at the same time on the market existed (and for the minimum duration of 5 minutes) the offer as well as the demand with the spread that is equal to or lower than 2 €/MWh and with the volume exceeding 5 MWh in both directions, then</p> $P_{OTE} = P_{\phi Or}$ <p><math>P_{\phi Or}</math> is the arithmetic average of all pairs of the maximum bidding price for the purchase and the minimum bidding price for the sale that satisfy the condition of being available together for at least 5 minutes, the volume of both is higher than 50 MWh and the difference between them does not exceed 2 €/MWh</p>
	<p>If at the same time on the market did not exist (and and that is for the minimum duration of 5 minutes) the offer as well as the demand with the spread that is equal to or lower than 2 €/MWh and with the volume exceeding 5 MWh in both directions, then</p> $P_{OTE} = P_{NCG*}$ <p><math>P_{NCG*}</math> is the adjusted price of Daily Reference Price (<a href="http://www.eex.com/en/market-data/natural-gas/spot-market/daily-reference-price#!/2015/01/29">http://www.eex.com/en/market-data/natural-gas/spot-market/daily-reference-price#!/2015/01/29</a>) for the relevant delivery day from the EEX exchange for the NCG band increased/decreased by the value of the difference between the last known value of <math>P_{OTE}</math> pursuant to point 1, and the Daily Reference Price for the same gas day; if this price is unavailable or impossible to use, the value from the OTE Index from the previous day will be used for <math>P_{NCG*}</math></p>