**5. BALANCING AND ALLOCATION**

**15.1 General**

15.1.1 The Transporter shall balance the Pipeline on principles of minimal costs, transparency and non-discrimination and in a manner that is efficient and does not impose unnecessary costs for the Users by:

15.1.1.1 entering into Operational Balancing Agreements and procedures with AFO; or

15.1.1.2 using all technical measures including adjustment of Natural Gas flow, requesting the Users to make the Renominations, using the linepack of the Pipeline; or

15.1.1.3 calculating and charging the Users Transmission Imbalance; or if necessary

15.1.1.4 selling or purchasing the Natural Gas for the purpose of balancing.

15.1.2 The User is obliged to ensure for each Gas Day that the quantities of the Natural Gas delivered at the Entry Point Kirevo/Zaječar are equal to the quantities of the Natural Gas taken over at the Exit Point(s).

15.1.3 Transmission Imbalance of the User is the difference between the quantities of the Natural Gas delivered at the Entry Point Kirevo/Zaječar and the quantities of the Natural Gas taken over at the Exit Point(s) for a Gas Day.

15.1.4 Transmission Imbalance for Physical Flow Direction is positive when the TIPFu from the Article 15.3.1 of this Network Code is positive and Transmission Imbalance for Commercial Reverse Capacity is positive when the TICRu from the Article 15.3.2 of this Network Code is positive.

15.1.5 Transmission Imbalance for Physical Flow Direction is negative when the TIPFu from the Article 15.3.1 of this Network Code is negative and Transmission Imbalance for Commercial Reverse Capacity is negative when the TICRu from the Article 15.3.2 of this Network Code is negative.

15.1.6 Transmission Imbalance and Imbalance Charge is calculated for a User in line with this Network Code.

15.1.7 If Operational Balancing Agreement is entered into, User may have Transmission Imbalance only in cases envisaged by Operational Balancing Agreement which cases Transporter publishes on its website.

15.1.8 The Transporter shall apply the Article 15.1.1.4 of this Network Code if it assesses that the transmission imbalance shall occur which shall cause change of the pressure in the Pipeline which is higher than operational acceptable limit. During the assessment it shall be taken into account: i) Nominations/Renominations, ii) operational information obtained from AFOs, and iii) estimation of the Transporter acting as Prudent and Reasonable Operator.

15.1.9 Transporter, for the balancing of system in line with the Article 15.1.1.4 of this Network Code, shall purchase and sell Gas for balancing of system on the Gas Exchange Platform. If Gas Exchange Platform is not available, Transporter shall organise public tender, prior to the Gas Year, for purchasing and selling Gas for balancing for a period of one (1) Gas Year and publish it on its website.

**15.2 Allocation of Gas to Users**

15.2.1 By the usage of an Operational Balancing Agreement, the Transporter shall secure that the Allocated Quantities of User at the relevant Interconnection Point will be equal to the Confirmed Quantities of User and the steering difference between the Allocated Quantities and the Metered Quantities at the relevant Interconnection Point is allocated to an operational balancing account held

between the Transporter and AFO. In cases envisaged by Operational Balancing Agreement, which Transporter publishes on its website, Allocated Quantities of User on the relevant Interconnection Point are calculated in the manner envisaged by Operational Balancing Agreement.

15.2.2 If an Operational Balancing Agreement is not entered into at a particular Interconnection Point, Allocated Quantities for each User for every Gas Day shall be calculated in the following manner:

15.2.2.1 Allocated Quantities for Commercial Reverse Flow for Entry Point Horgoš/Kiškundorožma 1200, Entry Point Serbia and Exit Point Kirevo/Zaječar are equal to the Confirmed Quantities;

15.2.2.2 Allocated Quantities for Physical Flow Direction for Entry Point Kirevo/Zaječar, Entry Point Serbia and Exit Point Horgoš/Kiškundorožma 1200 are equal to the Confirmed Quantities adjusted for the multiplicator of percentage of participation of Confirmed Quantities of User in aggregate Confirmed Quantities of all Users at that Interconnection Point in the Physical Flow Direction and difference between Metered Quantities and all Confirmed Quantities at that Interconnection Point, calculated using the following formula:

**ACu= CCu +(CCu/ΣCC) \* (ΣMQ-ΣCCPF)**

where:

**ACu** are Allocated Quantities for the User *u* for the Gas Day *d* in the Physical Flow Direction for Interconnection Point,

**CCu** are Confirmed Quantities for the User *u* for the Gas Day *d* in Physical Flow Direction for Interconnection Point,

**ΣCC** are Confirmed Quantities for all Users for Gas Day *d* in Physical Flow Direction for Interconnection Point,

**ΣMQ** are Metered Quantities for Gas Day *d* for Interconnection Point,

**ΣCCPF** are Confirmed Quantities of all Users and Transporter in the Physical Flow Direction and in Commercial Reverse Flow for Gas Day *d* for Interconnection Point.

15.2.2.3 Allocated Quantities shall be equal to the Confirmed Quantities in case that AFO at Exit Point Horgoš/Kiškundorožma 1200 does not deliver data on measured quantities until the moment stipulated in the AFO Agreement.

15.2.3 Allocated Quantities at the VTP will be equal to the Confirmed Quantities on VTP and/or Balancing Nominations.

**15.3 Calculation of User’s Transmission Imbalance**

15.3.1 For Physical Flow Direction The Transmission Imbalance for Physical Flow Direction for a Gas Day *d* for a User *u* will be calculated by the Transporter according to the following formula:

***TIPFu=ΣPFENU - ΣPFEXU + ΣVTPBU -ΣVTPSU***

Where:

***TIPFu*** is the Transmission Imbalance for Physical Flow Direction for Gas Day *d* for User *u*,

***PFENu*** are the Allocated Quantities at the Entry Point Kirevo/Zaječar in respect of Physical Flow Direction for Gas Day *d* for User *u*,

***PFEXu*** are the Allocated Quantities at each Contracted Exit Point in respect of Physical Flow Direction for Gas Day *d* for User *u*,

***VTPBu*** are the Allocated Quantities purchased at the VTP by User *u*,

***VTPSu*** are the Allocated Quantities sold at the VTP by User *u*.

15.3.2 For full reverse and half reverse flow The Transmission Imbalance for Full Reverse Flow for a Gas Day *d* for a User *u* is equal to zero (0). For Half Reverse Flow Transporter calculates according to the following formula:

***TICRU = ΣCRENU - ΣCREXU***

Where:

***TICRu*** is the Transmission Imbalance for Half Reverse Flow for Gas Day *d* for User *u*.

***CRENu*** are the Allocated Quantities at each Contracted Entry Point in respect of Half Reverse Flow for Gas Day *d* for User *u*.

***CREXu*** are the Allocated Quantities at each Contracted Exit Point in respect of Half Reverse Flow for Gas Day *d* for User *u.*

15.3.3 User’s Transmission Imbalance

Transmission Imbalance for the Gas Day *d* for User *u* is equal to the sum of imbalances from the Articles 15.3.1 and 15.3.2 of this Network Code.

**15.4 User`s Imbalance Charge**

15.4.1 The Transporter shall calculate the Imbalance Charge for User for each Gas Day on which that User has Allocated Quantities. The Imbalance Charge for each Gas Day in a Gas Month shall be calculated pursuant to the Short-Term GTA or Balancing Agreement.

15.4.2 In case of a positive Transmission Imbalance, Transporter shall notify User on the amount of Imbalance Charge which User shall calculate to Transporter, whereby the Imbalance Charge shall be calculated as follows:

***ICPu = TIu \* GPP***

Where:

***ICPu*** is charge for positive imbalance for Gas Day *d* for User *u,*

***TIu*** is the absolute value of the Transmission Imbalance for Gas Day *d* for User *u* calculated in line with the Article 15.3.3 of this Network Code,

***GPP*** is price for the Natural Gas which is defined as Gas price for Gas Day *d* on the Gas Exchange Platform, and if Gas Exchange Platform is not available GPP is price of Natural Gas against which Transporter sells Natural Gas on Gas Day *d* on the basis of the agreement on purchase and sell of Gas for balancing from the Article 15.1.9 of this Network Code.

15.4.3 In case of a negative Transmission Imbalance, Transporter shall calculate the Imbalance Charge for User, whereby the Imbalance Charge shall be calculated as follows:

***ICNu = TIu \* GPN***

Where:

***ICNu*** is charge for negative imbalance for Gas Day *d* for User *u,*

***TIu*** is the absolute value of the Transmission Imbalance for Gas Day *d* for User *u* calculated in line with the Article 15.3.3 of this Network Code,

***GPN*** is price for the Natural Gas which is defined as Gas price for Gas Day *d* on the Gas Exchange Platform, and if Gas Exchange Platform is not available GPN is price of Natural Gas against which Transporter purchases Natural Gas on Gas Day *d* on the basis of the agreement on purchase and sell of Gas for balancing from the Article 15.1.9 of this Network Code.

15.4.4 GPP and GPN shall have the same value for the Gas Day *d* if the Gas Exchange Platform is available.

15.4.5 Transporter shall publish GPP and GPN for each Gas Day *d* on its website.