



## **ACCESS CODE FOR TRANSMISSION**

**Attachment A:**

**Transmission Model**

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## 1 Definitions

Unless the context requires otherwise, the definitions set out in the Attachment 3 of the STA apply to this Attachment A. Capitalized words and expressions used in this Attachment A which are not defined in the Attachment 3 of the STA shall have the following meaning:

### 1.1 Naming conventions

The variables and parameters used in this Attachment are named according to the following naming conventions, unless indicated otherwise:

- indices to *sum* function (e.g.  $\sum_{indice} variable_i$ ), *max* and *min* functions :
  - *d* = sum of values per hour of Gas Day *d*
  - *m* = sum of values per Gas Day *d* of Gas Month *m*
  - *zone* = sum of values of all Connection Points of the Zone, as specified
  - (*all*) *Network Users* = sum of values for all Network Users
- indices : *h* = hourly; *d* = daily; *m* = monthly; *y* = yearly
- indices : *f* = forecast; *r* = real (actual)
- index: *a* = auction
- prefix (tariffs) : *T* = Regulated Tariff
- prefix : *E* = Entry; *X* = Exit
- prefix (nominations, allocations) : *E* = Energy
- suffix : *M* = Metering; *N* = Nomination; *A* = Allocation
- suffix prime (') = final (allocation) or last (nomination); no quote means provisional (allocation) or initial (nomination)
- suffix m = matched
- suffix \* = before settlement; no suffix means after settlement
- indices (exceedings) : *p* = peak; *np* = non-peak
- prefix (incentives) : *E* = Excess or Exceeding; *S* = Shortfall; *I* = Incentives
- indices (capacity services): *e* = Entry; *x* = Exit, *dl* = Direct Line
- indices (capacity type): *f* = Firm; *b* = Backhaul; *i* = Interruptible; *io* = Operational Interruptible
- indices (rate type): *y* = Yearly; *s* = Seasonal; *st* = Short Term; *ff* = Fix/Flex

- indices (Point): IP = Interconnection Point or Installation Point; XP = Domestic Point, z = Zone
- indices ts = Transmission Service; ct = Capacity Type; rt = Rate Type
- indices (market): 1m = Primary Market; 2m = Secondary Market,
- indices (Network User): g = Network User (formally known as Grid User),
- indices qcs = Quality Conversion Service; bl = base load; pl = peak load; sl = seasonal load; pr = producer,-
- indices (implicit allocation): ia = implicit allocation; h-n = a previous hour in the same Gas Day; shortfall = shortfall transfer service charge; excess = excess transfer service charge

## 1.2 List of definitions

The following term is defined as:

The variables and parameters used in this Agreement are listed hereunder:

$AS_{d,z,g}$  Allocation Settlement – daily value per Network User per Zone, compensating the difference between allocations based on provisional data and allocations based on final data, expressed in kWh, as provided for in section [5.45.4](#).

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$ASGP_{d,z,g}$  Allocation Settlement Network User Purchase – daily value per Network User per Zone, purchase compensating a negative Allocation Settlement ( $AS_{d,z,g}$ ), expressed in €, as provided for in section [5.45.4](#).

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$ASGS_{d,z,g}$  Allocation Settlement Network User Sale – daily value per Network User per Zone, sale compensating a positive Allocation Settlement ( $AS_{d,z,g}$ ), expressed in €, as provided for in section [5.45.4](#).

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$CE_{d,g}$  Confirmed Energy – daily value in MWh per Network User which is the nominated energy for ZTP Trading Services as provided for in section 6.2.11.2.

$CGCV_z$  Conversion Gross Calorific Value – fix conversion factor per Zone z, expressed in kWh/m<sup>3</sup>(n) for conversion of a MTSR subscribed in m<sup>3</sup>(h)/h towards kWh/h, which is equal to 11.3 for H calorific gas and to 9.8 for L calorific gas.

$D_{dl}$  Distance of Direct Line – expressed in km; as provided for in section [6.2.1.3](#)~~6.2.1.3~~.

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$DPRS_{XP}$  Dedicated Pressure Reduction Station – value per Domestic Point; physical characteristic of a Domestic Point; equals 1 if the

Domestic Point is equipped with a DPRS, and 0 otherwise, may be any value between 0 and 1 for Distribution Domestic Points; as provided for in section [6.2.1.26-2.1.2](#).

*EBP<sub>d,z</sub>*

Excess Balancing Price ( $EBP_{d,z}$ ) – daily value per Zone; the lowest price of any sales in which the TSO is involved in respect of the Gas Day; for the considered Zone z; expressed in €/kWh.

In case the TSO has not been able to totally or partially sell the Natural Gas compensating for the considered Market Excess ( $ME_{d,z}$ ) in L-Zone, it will do so in the H-zone. In case of a quantity sold in H-Zone for compensating a Market Excess ( $ME_{d,z}$ ) in the L-Zone, the price at which the TSO has sold the gas in the H-Zone in respect of the Gas Day will be decreased with a corresponding conversion fee in accordance with the applicable regulated tariff for a daily Firm Peak Load Gas Quality Conversion Service L→H offered by Fluxys Belgium, corresponding to the Firm capacity needed to convert such quantity in one hour.

*EBP<sub>h,z</sub>*

Excess Balancing Price ( $EBP_{h,z}$ ) – hourly value per Zone; the lowest price of any sales in which the TSO is involved in respect of the gas hour; for the considered Zone z; expressed in €/kWh.

In case the TSO has not been able to totally or partially sell the Natural Gas compensating for the considered Market Excess ( $ME_{h,z}$ ) in L-Zone, it will do so in the H-zone. In case of a quantity sold in H-Zone for compensating a Market Excess ( $ME_{h,z}$ ) in the L-Zone, the Excess Balancing Price ( $EBP_{h,z}$ ) will be decreased with a corresponding conversion fee in accordance with the applicable regulated tariff for a daily Firm Peak Load Gas Quality Conversion Service L->H, corresponding to the Firm capacity needed to convert such quantity in one hour.

The Balancing Price for each Market Excess shall be published on the Electronic Data Platform.

*EBSP<sub>d,z</sub>*

Excess Balancing Settlement Price ( $EBSP_{d,z}$ ) – daily value per Zone z; determined in accordance with [5.3.75-3.7](#) and [5.3.85-3.8](#); expressed in €/kWh. The Excess Balancing Settlement Price ( $EBSP_{d,z}$ ) will be published on the Electronic Data Platform for each End-of-Day Market Excess.

*EBSP<sub>h,z</sub>*

Excess Balancing Settlement Price ( $EBSP_{h,z}$ ) – hourly value per Zone z; determined in accordance with [5.3.35-3.3](#); expressed in €/kWh. The Excess Balancing Settlement Price ( $EBSP_{h,z}$ ) will be published on the Electronic Data Platform for each Within-day Market Excess.

$ECG_{h,z}$	Excess Causing Network Users – hourly list of Network Users causing the Market Excess for the considered hour $h$ , for the considered Zone $z$ , as set out in <a href="#">5.3.35.3.3</a> .
$EA'_h$	Energy (final) Allocation – hourly value per Network User and per Connection Point; expressed in kWh; as provided for in section 4.1.
$EEA'_h$	Entry Energy (final) Allocation – hourly value per Network User and per Connection Point; positive value expressed in kWh; as provided for in section 4.1.
$EEA_h$	Entry Energy (provisional) Allocation – hourly value per Network User and per Connection Point; positive value expressed in kWh; as provided for in section 4.1.
$EEE_d$	Exceeding of Entry Energy – daily value per Network User and per Connection Point; expressed in kWh/h; daily maximum of exceeding of entry energy, as provided for in section <a href="#">Error! Reference source not found.3.1.3.1</a> .
$EEE_{m,np}$	Non-Peak Exceeding of Entry Energy – monthly value per Network User and per Connection Point; expressed in kWh/h; sum of $EEE_d$ over Month $m$ , less $EEE_{m,p}$ , as provided for in section <a href="#">Error! Reference source not found.3.1.3.1</a> .
$EEE_{m,p}$	Peak Exceeding of Entry Energy – monthly value per Network User and per Connection Point; expressed in kWh/h; maximum of $EEE_d$ over Month $m$ , as provided for in section <a href="#">Error! Reference source not found.3.1.3.1</a> .
$EEN'_h$	Entry Energy (last) Nomination – hourly value per Network User and per Connection Point; positive value expressed in kWh; last nomination accepted by the TSO, as provided for in section 4.1.
$EEN'^m_h$	Entry Energy (last) Nomination – matched - hourly value per Network User and per Connection Point; positive value expressed in kWh; last nomination confirmed by the TSO, as provided for in section 4.1.
$EIMTSR_h$	Energy Interrupted Maximum Transmission Services Right – hourly value per Network User and per Connection Point; expressed in kWh; the part of $MTSR_i$ and/or $MTSR_{io}$ and/or $MTSR_b$ that is interrupted at hour $h$ , as provided for in section <a href="#">3.1.13.1.1</a> .
$EM'_h$	Energy (final) Measurement – hourly value per Connection Point; expressed in kWh; as provided for in section 4.1.

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$EM_h$	Energy (provisional) Measurement – hourly value per Connection Point; expressed in kWh; as provided for in section 4.1.
$EMTSR_d$	Energy MTSR – daily value per Connection Point; expressed in kWh/h; as provided for in section <a href="#">3.1.23.1.2</a> .
$EXE_d$	Exceeding of Exit Energy – daily value per Network User and per Domestic Point; expressed in kWh/h, daily maximum of exceeding of hourly exit energy, as provided for in section <a href="#">3.1.33.1.3</a> .
$EXE_{m,np}$	Non-Peak Exceeding of Exit Energy – monthly value per Network User and per Domestic Point; expressed in kWh/h; sum of $EXE_d$ over Month $m$ , less $EXE_{m,p}$ , as provided for in section <a href="#">3.1.33.1.3</a> .
$EXE_{m,p}$	Peak Exceeding of Exit Energy – monthly value per Network User and per Domestic Point; expressed in kWh/h; maximum of $EXE_d$ over Month $m$ , as provided for in section <a href="#">3.1.33.1.3</a> .
$GBP^{*}_{d,z,g}$	Network User Balancing Position before settlement – End-of-Day hourly value per Network User per Zone, for the last hour of the considered Gas Day $d$ , expressed in kWh, based on provisional allocation values, as provided for in section <a href="#">5.3.65.3.6</a> .
$GBP_{d,z,g}$	Network User Balancing Position after settlement – End-of-Day hourly value per Network User per Zone, for the last hour of the considered Gas Day $d$ , expressed in kWh, based on provisional allocation values, as provided for in section <a href="#">5.3.95.3.9</a> .
$GBP^{*}_{h,z,g}$	Network User Balancing Position before settlement – hourly value per Network User per Zone, expressed in kWh, based on provisional allocation values, as provided for in section <a href="#">5.3.15.3.1</a> .
$GBP_{h,z,g}$	Network User Balancing Position after settlement – hourly value per Network User per Zone, expressed in kWh, based on provisional allocation values, as provided for in section <a href="#">5.3.55.3.5</a> .
$GCV'_h$	Gross Calorific Value (final) – hourly value per Connection Point; expressed in kWh/m <sup>3</sup> (n); as provided for in section <a href="#">3.1.23.1.2</a> .
$GCV_h$	Gross Calorific Value (provisional) – hourly value per Connection Point; expressed in kWh/m <sup>3</sup> (n); as provided for in section <a href="#">3.1.23.1.2</a> .
$GE_{d,z,g}$	Network User Excess – End-of-Day hourly value per Network User per Zone, for the last hour of the considered Gas Day $d$ , based on provisional values, expressed in kWh, as provided for in section <a href="#">5.3.65.3.6</a> .

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$GE_{h,z,g}$	Network User Excess – hourly value per Network User and per Zone, based on provisional values, expressed in kWh, as provided for in section <a href="#">5.3.35.3.3</a> .	Formatted: E
$GEBS_{d,z,g}$	Network User Excess Balancing Settlement – End-of-Day value per Network User and per Zone, based on provisional data, expressed in €; as provided for in section <a href="#">5.3.75.3.7</a> .	Formatted: E
$GEBS_{h,z,g}$	Network User Excess Balancing Settlement – hourly value per Network User and per Zone, based on Provisional data, expressed in €; as provided for in section <a href="#">5.3.35.3.3</a> .	Formatted: E
$GP_d$	Gas Price – reference price for Gas Day $d$ – daily value; expressed in €/kWh. Fluxys Belgium will publish on its website – transmission tariff web-page – the currently applicable price reference together with the list of previous used references with their associated validity period. Such applicable price reference can change over time, subject to a notification by Fluxys Belgium to the market with pre-notice period of at least 1 month.	
$GS_{d,z,g}$	Network User Shortfall – End-of-Day hourly value per Network User and per Zone, for the last hour of the considered Gas Day $d$ , based on provisional values, expressed in kWh, as provided for in section <a href="#">5.3.65.3.6</a> .	Formatted: E
$GS_{h,z,g}$	Network User Shortfall – hourly value per Network User and per Zone, based on provisional values, expressed in kWh, as provided for in section <a href="#">5.3.45.3.4</a> .	Formatted: E
$GSBS_{d,z,g}$	Network User Shortfall Balancing Settlement – End-of-Day value per Network User $g$ and per Zone $z$ , based on provisional data, expressed in €, as provided for in section <a href="#">5.3.85.3.8</a> .	Formatted: E
$GSBS_{h,z,g}$	Network User Shortfall Balancing Settlement – hourly value per Network User $g$ and per Zone $z$ , based on Provisional data, expressed in €, as provided for in section <a href="#">5.3.45.3.4</a> .	Formatted: E
$h$	Hour – Period of 60 minutes, beginning at a full hour and ending at the next succeeding full hour, and identified by the beginning as herein defined.	
$I_{h,z,g}$	Imbalance – hourly value in kWh per Zone and per Network User; based on provisional values; as provided for in section <a href="#">5.3.15.3.1</a> .	Formatted: E
$I_{h,g,for\ allocation\ GDLux}$	Imbalance for GD Lux – hourly value – hourly imbalance in Grand Duchy Luxemburg for hour $h$ and per Network User $g$ ; based on the sum of provisional hourly Entry Allocation in energy on the Remich Interconnection Point (border between Germany and Great	

Duchy Luxemburg) and the provisional hourly Exit Allocations in energy (negative values) on the Domestic Points in the Great Duchy Luxemburg.

$IEXE_{m, np, XP}$  Incentives for Excess of Exit Energy (non-peak) for End User Domestic Point – monthly value per Network User and per End User Domestic Point; expressed in €; as provided for in section [3.1.33-1.3](#).

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$IEXE_{m, p, XP}$  Incentives for Excess of Exit Energy (peak) for End User Domestic Point – monthly value per Network User and per End User Domestic Point; expressed in €; as provided for in section [3.1.33-1.3](#).

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$IPT_{h,z,g}$  Imbalance Pooling Transfer – hourly value in kWh per Zone and per Network User; based on provisional values; as provided for in section 3.5.2.

$MBP_{d,z}$  Market Balancing Position after settlement – End-of-Day hourly value per Zone for the last hour of the considered Gas Day; expressed in kWh; as provided for in section [5.3.95-3.9](#).

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$MBP^*_{d,z}$  Market Balancing Position before settlement – End-of-Day hourly value per Zone, for the last hour of the considered Gas Day; expressed in kWh; as provided for in section [5.3.65-3.6](#).

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$MBP_{h,z}$  Market Balancing Position after settlement – hourly value per Zone; expressed in kWh; as provided for in section [5.3.55-3.5](#).

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$MBP^*_{h,z}$  Market Balancing Position before settlement – hourly value per Zone; expressed in kWh; as provided for in section [5.3.15-3.1](#).

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$ME_{d,z}$  Market Excess – End-of-Day hourly value per Zone for the last hour of the considered Gas Day; based on provisional values, expressed in kWh, positive value; as provided for in section [5.3.65-3.6](#).

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$ME_{h,z}$  Market Excess – hourly value per Zone; based on provisional values, expressed in kWh; as provided for in section [5.3.35-3.3](#).

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#### *Monthly Administrative Fee*

Amounts, invoiced to and payable by Network User on a monthly basis based on the performed assignment transactions on the secondary market, cancellations and the subscribed real time data delivery service on the Electronic Data Platform, invoiced with the Monthly Invoice in accordance with the Standard Transmission

Agreement (STA – Attachment 2 – Article 6), section 6 of this Attachment and the Regulated Tariffs.

*Monthly Allocation Settlement Fee*

Amounts payable by or to Network User on a monthly basis based on the difference between the provisional and final allocations, invoiced with the Monthly Invoice or with the Monthly Self-billing Invoice in accordance with the Standard Transmission Agreement (STA – Attachment 2 – Article 6), section 6 of this Attachment and the Regulated Tariffs.

*Monthly Allocation Settlement Purchase Fee*

Amounts, invoiced to and payable by Network User on a monthly basis based on the subscribed Transmission Services, invoiced with the Monthly Invoice in accordance with the Standard Transmission Agreement (STA – Attachment 2 – Article 6), section 6 of this Attachment and the Regulated Tariffs.

*Monthly Allocation Settlement Sale Fee*

Amounts, invoiced to and payable to Network User on a monthly basis based on the subscribed Transmission Services, invoiced with the Monthly Self-billing Invoice in accordance with the Standard Transmission Agreement (STA – Attachment 2 – Article 6), section 6 of this Attachment and the Regulated Tariffs.

*Monthly Capacity Fee for implicitly allocated Transmission Services for Zeebrugge*

Amounts, invoiced to and payable by Network User on a monthly basis based on the implicit allocation of Transmission Services invoiced with the Monthly Invoice in accordance with the Standard Transmission Agreement (STA – Attachment 2 – Article 6), section 6 of this Attachment and the Regulated Tariffs.

*Monthly Capacity Fee for Quality Conversion H->L*

Amounts, invoiced to and payable by Network User on a monthly basis based on the subscribed Quality Conversion H->L Services, invoiced with the Monthly Invoice in accordance with the Standard Transmission Agreement (STA – Attachment 2 – Article 6), section 6 of this Attachment and the Regulated Tariffs.

*Monthly Capacity Fee for Quality Conversion L->H*

Amounts, invoiced to and payable by Network User on a monthly basis based on the subscribed Quality Conversion H->L Services, invoiced with the Monthly Invoice in accordance with the

Standard Transmission Agreement (STA – Attachment 2 – Article 6), section 6 of this Attachment and the Regulated Tariffs.

*Monthly Energy in Cash Fee*

Amounts, payable by Network User on a monthly basis, based on the transmitted quantities, invoiced with the Monthly Invoice, in accordance with the Standard Transmission Agreement (STA – Attachment 2 – Article 6), section 6 of this Attachment and the Regulated Tariffs.

*Monthly DPRS Fee*

Component of the Monthly Capacity Fee, invoiced to and payable by Network User on a monthly basis, based on the Subscribed Transmission Services, invoiced with the Monthly Invoice, in accordance with the Standard Transmission Agreement (STA – Attachment 2 – Article 6), section 6 of this Attachment and the Regulated Tariffs.

*Monthly Fixed Fees for ZTP Trading Services*

Amounts, invoiced to and payable by Network User on a monthly basis based on the subscribed ZTP Trading Services, invoiced with the Monthly Invoice in accordance with the Standard Transmission Agreement (STA – Attachment 2 – Article 6), section 6 of this Attachment and the Regulated Tariffs.

*Monthly Incentive Fee*

Amounts, invoiced to and payable by Network User on a monthly basis, for the Capacity Exceedings and Balancing Incentives, invoiced with the Monthly Invoice in accordance with the Standard Transmission Agreement (STA – Attachment 2 – Article 6), section 6 of this Attachment and the Regulated Tariffs.

*Monthly Neutrality Charge Fee*

Fee payable by or to be paid to Network User on a monthly basis to cover the balancing costs as determined on the basis of the Regulated Tariffs.

*Monthly Odourisation Fee*

Amounts, invoiced to and payable by Network User on a monthly basis, for the odourisation of the Natural Gas, invoiced with the Monthly Invoice in accordance with the Standard Transmission Agreement (STA – Attachment 2 – Article 6), section 6 of this Attachment and the Regulated Tariffs.

*Monthly Settlement Fee*

Amounts, payable by Network User on a monthly basis based on the Network User Balancing Position and the Market Balancing Position, invoiced with the Monthly Invoice, in accordance with this Standard Transmission Agreement (STA – Attachment 2 – Article 6 section 6 of this Attachment and the Regulated Tariffs.

*Monthly Transmission Imbalance Settlement Fee*

Amounts, payable by Network User on a monthly basis based on Transmission Imbalance, invoiced with the Monthly Invoice, in accordance with the Standard Transmission Agreement (STA – Attachment 2 – Article 6), section 6 of this Attachment and the Regulated Tariffs.

*Monthly Variable Fee for Quality Conversion H->L*

Amounts, payable by Network User on a monthly basis, based on the converted quantities by the Quality Conversion H->L Service, invoiced with the Monthly Invoice, in accordance with the Standard Transmission Agreement (STA – Attachment 2 – Article 6), section 6 of this Attachment and the Regulated Tariffs.

*Monthly Variable Fees for ZTP Trading Services*

Amounts, invoiced to and payable by Network User on a monthly basis, based on traded/transferred quantities of Gas through ZTP Trading Services, invoiced with the Monthly Invoice in accordance with the Standard Transmission Agreement (STA – Attachment 2 – Article 6), section 6 of this Attachment and the Regulated Tariffs

*Monthly Zee Platform Fee*

Amounts, invoiced to and payable by Network User on a monthly basis based on the subscribed Zee Platform Services, invoiced with the Monthly Invoice in accordance with the Standard Transmission Agreement (STA – Attachment 2 – Article 6), section 6 of this Attachment and the Regulated Tariffs.

*MP<sub>XP</sub>*

Medium Pressure – value per Domestic Point; physical characteristic of a Domestic Point; equals 1 if the Domestic Point is on a MP-grid, and 0 if the Domestic Point is on a HP-grid; may be any value between 0 and 1 for Domestic Points of type ARS, as provided for in section [6.2.1.26-2.1.2](#).

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<i>MS<sub>d,z</sub></i>	Market Shortfall – End-of-Day hourly value per Zone for the last hour of the considered Gas Day, based on provisional values; expressed in kWh; as provided for in section <a href="#">5.3.65-3.6</a> .
<i>MS<sub>h,z</sub></i>	Market Shortfall – hourly value per Zone, based on provisional values; expressed in kWh, positive value; as provided for in section <a href="#">5.35-3</a> .
<i>MT<sup>+</sup><sub>h,z</sub></i>	Market Threshold – upper limit – hourly value per Zone, as provided for in section <a href="#">5.3.15-3.1</a> .
<i>MT<sup>-</sup><sub>h,z</sub></i>	Market Threshold – lower limit – hourly value per Zone, as provided for in section <a href="#">5.3.15-3.1</a> .
<i>MTSR</i>	Maximum Transmission Services Right – value per Network User and per Connection Point; expressed in kWh/h; as provided for in section 3.
<i>MTSRBB</i>	Maximum Transmission Services Right Buy-Back – value per Network User and per Interconnection Point that is bought back through the buy-back procedures from Network User by TSO; expressed in kWh/h; as provided for in section 3.
<i>MTSR<sub>1m</sub></i>	Maximum Transmission Services Right – Primary Market – value per Network User and per Connection Point; subscribed on the Primary market; expressed in kWh/h.
<i>MTSR<sub>2m</sub></i>	Maximum Transmission Services Right – Secondary Market – value per Network User and per Connection Point, traded on the Secondary market, positive value if bought and a negative value if sold; expressed in kWh/h.
<i>MTSR<sub>b</sub></i>	Maximum Transmission Services Right – Backhaul – value per Network User and per Connection Point; expressed in kWh/h; as provided for in section 3.
<i>MTSR<sub>cbds</sub></i>	Maximum Transmission Services Right – Cross Border Delivery Service – value per Network User and per Interconnection Point; expressed in kWh/h; as provided in section <a href="#">3.2.23-2.2</a> .
<i>MTSR<sub>d</sub></i>	Maximum Transmission Services Right – value per Network User and per Connection Point for considered Gas Day <i>d</i> ; expressed in kWh/h; as provided for in section 3.
<i>MTSR<sub>d,ct,y,XP,g</sub></i>	Maximum Transmission Services Right for Gas Day <i>d</i> for Capacity Type <i>ct</i> , of the Yearly Rate Type <i>y</i> , at Domestic Point <i>XP</i> for Network User <i>g</i> ; expressed in kWh/h; as provided for in section 3.

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<i>MTSR<sub>d,ct,s,XP,g</sub></i>	Maximum Transmission Services Right for Gas Day <i>d</i> for Capacity Type <i>ct</i> , of the Seasonal Rate Type <i>s</i> , at Domestic Point <i>XP</i> for Network User <i>g</i> ; expressed in kWh/h; as provided for in section 3.
<i>MTSR<sub>d,ct,st,XP,g</sub></i>	Maximum Transmission Services Right for Gas Day <i>d</i> for Capacity Type <i>ct</i> , of the Short Term Rate Type <i>st</i> , at Domestic Point <i>XP</i> for Network User <i>g</i> ; expressed in kWh/h; as provided for in section 3.
<i>MTSR<sub>d,ct,ff,XP,g</sub></i>	Maximum Transmission Services Right for Gas Day <i>d</i> for Capacity Type <i>ct</i> , of the Fix/Flex Rate Type, at Domestic Point <i>XP</i> for Network User <i>g</i> ; expressed in kWh/h; as provided for in section 6.
<i>MTSR<sub>d,dl,y,XP,g</sub></i>	Maximum Transmission Services Right for Gas Day <i>d</i> for Direct Line <i>dl</i> , of the Yearly Rate Type, at Domestic Point <i>XP</i> for Network User <i>g</i> ; expressed in kWh/h; as provided for in section 6.
<i>MTSR<sub>d,dl,s,XP,g</sub></i>	Maximum Transmission Services Right for Gas Day <i>d</i> for Direct Line <i>dl</i> , of the Seasonal Rate Type, at Domestic Point <i>XP</i> for Network User <i>g</i> ; expressed in kWh/h; as provided for in section 6.
<i>MTSR<sub>d,ip1,ip2,ocuc,g</sub></i>	Maximum Transmission Services Right – OCUC – value per Network User and for Entry at Interconnection Point 1 and Exit at Interconnection Point 2 for considered Gas Day <i>d</i> ; expressed in kWh/h; as provided for in section <a href="#">6.2.1.56.2.1.5</a> .
<i>MTSR<sub>d,ip1,ip2,w,g</sub></i>	Maximum Transmission Services Right – Wheeling – value per Network User and for Entry at Interconnection Point 1 and Exit at Interconnection Point 2 for considered Gas Day <i>d</i> ; expressed in kWh/h; as provided for in section <a href="#">6.2.1.46.2.1.4</a> .
<i>MTSR<sub>d,QCH-&gt;L,bl,g</sub></i>	Maximum Transmission Services Right – Quality Conversion H->L, for the Quality Conversion Service Base Load <i>bl</i> , value per Network User for Installation Point “QC” for Gas Day <i>d</i> ; expressed in kWh/h; as provided for in section <a href="#">6.2.46.2.4</a> .
<i>MTSR<sub>d,QCH-&gt;L,pl,ct,g</sub></i>	Maximum Transmission Services Right – Quality Conversion H->L, for the Quality Conversion Service Peak Load <i>pl</i> , for Capacity Type <i>ct</i> , value per Network User for Installation Point “QC” for Gas Day <i>d</i> ; expressed in kWh/h; as provided for in section <a href="#">6.2.46.2.4</a> .
<i>MTSR<sub>d,QCH-&gt;L,sl,g</sub></i>	Maximum Transmission Services Right – Quality Conversion H->L, for the Quality Conversion Service Seasonal Load <i>sl</i> , value per Network User for Installation Point “QC” for Gas Day <i>d</i> ; expressed in kWh/h; as provided for in section <a href="#">6.2.46.2.4</a> .

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<i>MTSR<sub>d,QCL-&gt;H,g</sub></i>	Maximum Transmission Services Right – Quality Conversion L->H – value per Network User for Installation Point “QC” for Gas Day <i>d</i> ; as provided for in section <a href="#">6.2.4.26.2.4.2</a> .
<i>MTSR<sub>d,ts,ct,s,IP,g</sub></i>	Maximum Transmission Services Right for Gas Day <i>d</i> for Transmission Service <i>ts</i> , of Capacity Type <i>ct</i> , of the Seasonal Rate Type, at Interconnection Point or Installation Point <i>IP</i> for Network User <i>g</i> ; expressed in kWh/h; as provided for in section 6.
<i>MTSR<sub>d,ts,ct,y,IP,g</sub></i>	Maximum Transmission Services Right for Gas Day <i>d</i> for Transmission Service <i>ts</i> , of Capacity Type <i>ct</i> , of the Yearly Rate Type, at Interconnection Point or Installation Point <i>IP</i> for Network User <i>g</i> ; expressed in kWh/h; as provided for in section 6.
<i>MTSR<sub>e</sub></i>	Maximum Transmission Services Right – Entry – value per Network User and per Interconnection Point or Installation Point; expressed in kWh/h; as provided for in section <a href="#">3.1.23.1.2</a> .
<i>MTSR<sub>f</sub></i>	Maximum Transmission Services Right – Firm – value per Network User and per Connection Point; expressed in kWh/h; as provided for in section 3.
<i>MTSR<sub>ff</sub></i>	Maximum Transmission Services Right – Fix/Flex – value per Network User and per Domestic Point, expressed in kWh/h; as provided for in section <a href="#">3.13.1</a> .
<i>MTSR<sub>h,ts,ct,s,IP,g</sub></i>	Maximum Transmission Services Right for Gas Hour <i>h</i> for Transmission Service <i>ts</i> , of Capacity Type <i>ct</i> , of the Seasonal Rate Type, at Interconnection Point or Installation Point <i>IP</i> for Network User <i>g</i> ; expressed in kWh/h; as provided for in section 6.
<i>MTSR<sub>h,ts,ct,y,IP,g</sub></i>	Maximum Transmission Services Right for Gas Hour <i>h</i> for Transmission Service <i>ts</i> , of Capacity Type <i>ct</i> , of the Yearly Rate Type, at Interconnection Point or Installation Point <i>IP</i> for Network User <i>g</i> ; expressed in kWh/h; as provided for in section 6.
<i>MTSR<sub>i</sub></i>	Maximum Transmission Services Right – Interruptible – value per Network User and per Connection Point; expressed in kWh/h; as provided for in section 3.
<i>MTSR<sub>io</sub></i>	Maximum Transmission Services Right – Interruptible Operational – value per Network User and per Installation Point; expressed in kWh/h; as provided for in section 3.
<i>MTSR<sub>ITS</sub></i>	Maximum Transmission Services Right – Imbalance Transfer Service – value per Network User; expressed in kWh/h; as provided for in section 3.5.2.

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<i>MTSR<sub>ITSia</sub></i>	Maximum Transmission Services Right – Imbalance Transfer Service Implicit Allocation – value per Network User; expressed in kWh/h; as provided for in section 3.5.2.
<i>MTSR<sub>LHCS,Y</sub></i>	Maximum Transmission Services Right eligible for L/H Capacity switch Service for Gas Year <i>Y</i> as provided for in section 3.6.2.
<i>MTSR<sub>ONia</sub></i>	Maximum Transmission Services Right – Implicit Allocation through overnomination – value per Network User; expressed in kWh/h; as provided for in Attachment B.
<i>MTSR<sub>QCH-&gt;L</sub></i>	Maximum Transmission Services Right – Quality Conversion H→L – value per Network User on Installation Point “QC”, in kWh/h; as provided for in section 3.4.
<i>MTSR<sub>QCL-&gt;H</sub></i>	Maximum Transmission Services Right – Quality Conversion L->H – value per Network User for Installation Point “QC”; expressed in kWh/h; as provided for in section 3.4.2.
<i>MTSR<sub>s</sub></i>	Maximum Transmission Services Right – Seasonal – value per Network User and per Connection Point, expressed in kWh/h; as provided for in section 3.
<i>MTSR<sub>st</sub></i>	Maximum Transmission Services Right – Short Term – value per Network User and per Domestic Point, expressed in kWh/h; as provided for in section 3.
<i>MTSR<sub>x</sub></i>	Maximum Transmission Services Right – Exit – value per Network User and per Connection Point; expressed in kWh/h; as provided for in section 3.
<i>MTSR<sub>y</sub></i>	Maximum Transmission Services Right – Yearly – value per Network User and per Connection Point; expressed in kWh/h; as provided for in section 3.
<i>MTSR<sub>zpf</sub></i>	Maximum Transmission Services Right – Yearly – unlimited MTSR per Network User to transmit natural gas between Zee Platform Interconnection Points or Installation Point; on the conditions as set out in section 3.2.2.
<i>MVFF<sub>g,XP,y,m</sub></i>	Monthly Variable Flex Fee – monthly value per Network User <i>g</i> per Domestic Point <i>XP</i> , for the calendar year <i>y</i> and for the month <i>m</i> ; expressed in €; as provided for in section <a href="#">6.2.26.2.2</a> .
<i>NCTT<sub>h,g,z</sub></i>	Net Confirmed Title Transfers – provisional – hourly value per Zone per Network User, expressed in kWh, positive values indicate net purchases, negative values indicate net sales, as described in ACT – Attachment C1.

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$NCTT'_{h,g,z}$	Net Confirmed Title Transfers – final – hourly value per Zone and per Network User, expressed in kWh, positive values indicate net purchases, negative values indicate net sales, as described in ACT – Attachment C1.
$NCTTP_{h,g,z}$	Net Confirmed Title Transfers for ZTP Physical Trading Services being the net values transferred to or from the Network User Balancing Position via Zeebrugge in order to have balanced ZTP Physical Trading Services – provisional – hourly value per Zone per Network User, expressed in kWh, positive values indicate net purchases, negative values indicate net sales, as described in ACT – Attachment C1.
$NCTTP'_{h,g,z}$	Net Confirmed Title Transfers for ZTP Physical Trading Services being the net values transferred to or from the Network User Balancing Position via Zeebrugge in order to have balanced ZTP Physical Trading Services – final – hourly value per Zone and per Network User, expressed in kWh, positive values indicate net purchases, negative values indicate net sales, as described in ACT – Attachment C1.
$NCTTN_{h,g,z}$	Net Confirmed Title Transfers for ZTP Notional Trading Services being the net values transferred to or from the Network User Balancing Position via ZTP or ZTPL in order to have balanced ZTP Notional Trading Services – provisional – hourly value per Zone per Network User, expressed in kWh, positive values indicate net purchases, negative values indicate net sales, as described in ACT – Attachment C1.
$NCTTN'_{h,g,z}$	Net Confirmed Title Transfers for ZTP Notional Trading Services being the net values transferred to or from the Network User Balancing Position via ZTP or ZTPL in order to have balanced ZTP Notional Trading Services – final – hourly value per Zone and per Network User, expressed in kWh, positive values indicate net purchases, negative values indicate net sales, as described in ACT – Attachment C1.
$N_{h,y}$	Number of Hours within the considered calendar year, as provided in section 6.
$N_m$	Number of Days within the considered calendar month, as provided in section 6.
$N_y$	Number of Days within the considered calendar year, as provided in section 6.
$NYM$	Non-Yearly Multiplier – factor applied for non-yearly capacity, as defined in the Regulated Tariffs, and as provided for in section 6.

$ODO_{XP}$	Odourisation – value per Domestic Point; physical characteristic of a Domestic Point; equals 1 if the Domestic Point is odourised, and 0 otherwise, may be any value between 0 and 1 for Distribution Domestic Points, as provided for in section <a href="#">6.2.106.2.10</a> .
$OF_{m,IPorXP,g}$	Occurrence Factor – monthly value per Network User and per Connection Point; one increased by the number of Months of the preceding 12 Months during which capacity exceedings have taken place for Network User for the concerned Connection Point, as provided for in section <a href="#">3.1.33.1.3</a> .
$P_{BB,g}$	Price for buy back paid by the TSO – daily; expressed in €/kWh/h/d as provided for in section <a href="#">6.2.16.2.1</a> .
$P_{LH,Y}$	Percentage of L-gas Entry Service that can be transferred for Gas Year Y under the L/H Capacity Switch Service as set out in section 3.6.2. This percentage is defined based on the physical conversion planning as published by Synergrid once a year.
$RH_{g,XP,y,n}$	Running hours – monthly value based on final allocations, corresponding to the equivalent number of hours that the MTSR of Network User $g$ on Domestic Point $XP$ was used under full load in year $y$ up to and including month $n$ – expressed in hours, as provided for in section <a href="#">6.2.26.2.2</a> .
$RH-TRH$	Running hours threshold – value provided in the Regulated Tariffs, expressed in number of hours and which represent the threshold of $RH_{g,XP,y,n}$ at which the applicable tariff changes from $T_{flex,ff,XP,1}$ to $T_{flex,ff,XP,2}$
$RMLS_{h,z}$	Rounding Minimum Lot Size – hourly value per Zone, as provided for in section <a href="#">5.35.3</a> .
$RPS_{XP}$	Reduced Pressure Service - value per Domestic Point; physical characteristic of a Domestic Point; equals 1 if the Domestic Point is equipped with a RPS, and 0 otherwise, may be any value between 0 and 1 for Distribution Domestic Points; as provided for in section <a href="#">6.2.1.26.2.1.2</a> <sup>1</sup> .
$SA_{causer}$	Small Adjustment for causer – percentage defined in the Regulated Tariffs which are approved by CREG and to be applied to the Gas Price ( $GP_d$ ) in case, when a Within-day/End-of-day Balancing Settlement occurs, the Network User Balancing Position

<sup>1</sup> From 2020 onwards, the medium pressure and Dedicated Pressure Reduction Station service will be replaced by the Reduced Pressure Service. This service will reduce the pressure at a Domestic Point within the contractual minimum and maximum pressure limits. Hence from that date  $MP_{XP}$  and  $DPRS_{XP}$  coefficients will be replaced by  $RPS_{XP}$  and accordingly the  $T_{cl,RPS,XP}$  will be applied.

(respectively  $GBP^{*}_{h,z,g}$  or  $GBP^{*}_{d,z,g}$ ) is in the same direction as the Market Balancing Position (respectively  $MBP^{*}_{h,z}$  or  $MBP^{*}_{d,z}$ ) in accordance with section [5.35-3](#).

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 $SA_{\text{helper}}$ 

Small Adjustment for helper – percentage defined in the Regulated Tariffs which are approved by ILR and CREG and to be applied to the Gas Price ( $GP_d$ ) in case, when a within-day/end-of-day balancing settlement occurs, the Network User Balancing Position (respectively  $GBP^{*}_{h,z,g}$  or  $GBP^{*}_{d,z,g}$ ) is in the opposite direction as the Market Balancing Position (respectively  $MBP^{*}_{h,z}$  or  $MBP^{*}_{d,z}$ ) in accordance with section [5.35-3](#).

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 $SBP_{d,z}$ 

Shortfall Balancing Price ( $SBP_{d,z}$ ) – daily value per Zone; the highest price of any purchases in which the TSO is involved in respect of the Gas Day; for the considered Zone  $z$ ; expressed in €/kWh.

In case the TSO has not been able to totally or partially buy the Natural Gas compensating for the considered Market Shortfall ( $MS_{d,z}$ ) in L-Zone, it will do so in the H-zone. In case of a quantity bought in H-Zone for compensating a Market Shortfall ( $MS_{d,z}$ ) in L-Zone, the price at which the TSO has bought the gas in the H-Zone in respect of the Gas Day will be increased with a corresponding conversion fee in accordance with the applicable Regulated Tariff for a daily Firm Peak Load Gas Quality Conversion Service H->L, corresponding to the firm capacity needed to convert such quantity in one hour and related Peak Load Quality Conversion commodity fee.

 $SBP_{h,z}$ 

Shortfall Balancing Price ( $SBP_{h,z}$ ) – hourly value per Zone; the highest price of any purchases in which the TSO is involved in respect of the gas hour ; for the considered Zone  $z$ ; expressed in €/kWh.

In case the TSO has not been able to totally or partially buy the Natural Gas compensating for the considered Market Shortfall ( $MS_{h,z}$ ) in L-Zone, it will do so in the H-zone. In case of a quantity bought in H-Zone for compensating a Market Shortfall ( $MS_{h,z}$ ) in L-Zone, the price at which the TSO has bought the gas in the H-Zone in respect of the Gas Day will be increased with a corresponding conversion fee in accordance with the applicable regulated tariff for a daily Firm Peak Load Gas Quality Conversion Service H->L offered by Fluxys Belgium, corresponding to the firm capacity needed to convert such quantity in one hour and related Peak Load Quality Conversion commodity fee.

The Balancing Price for each Market Shortfall shall be published on the Electronic Data Platform.

$SBSP_{d,z}$	End-of-day Shortfall Balancing Settlement Price ( $SBSP_{d,z}$ ) – daily value per Zone $z$ ; determined in accordance with <a href="#">5.3.75.3.7</a> and <a href="#">5.3.85.3.8</a> ; expressed in €/kWh. The End-of-day Shortfall Balancing Settlement Price ( $SBSP_{d,z}$ ) will be published on the Electronic Data Platform for each End-of-Day Market Shortfall.
$SBSP_{h,z}$	Shortfall Balancing Settlement Price ( $SBSP_{h,z}$ ) – hourly value per Zone $z$ ; determined in accordance with <a href="#">5.3.45.3.4</a> ; expressed in €/kWh. The Shortfall Balancing Settlement Price ( $SBSP_{h,z}$ ) will be published on the Electronic Data Platform for each Within-Day Market Shortfall.
$SCG_{h,z}$	Shortfall Causing Network Users – hourly list of Network Users causing to the Market Shortfall for the considered hour $h$ , for the considered Zone $z$ , as set out in section <a href="#">5.35.3</a> .
$SC_m$	Seasonal Coefficient – monthly value; factor <u>used for</u> defining the seasonal capacity tariff versus the yearly capacity tariff, using a quarterly factor for <u>any sub(period) that represents a standard quarterly products</u> , and a monthly factor for <del>shorter</del> <u>all other</u> periods, as defined in the Regulated Tariffs, as provided for in section <a href="#">6.16.1</a> . <u>In case of a capacity service obtained through a transaction such as secondary market or substitution service, the Seasonal Coefficient is determined by the original service period.</u>
$STM$	Short Term Multiplier – factor defining the Short Term capacity tariff versus the Seasonal capacity tariff, as defined in the Regulated Tariffs; as provided for in section 6.
$T_{ct,HP,XP}$	Tariff for HP Supply of Capacity Type $ct$ at Domestic Point $XP$ – Regulated Tariff; expressed in € / kWh/h / year, as provided for in section 6.
$T_{ct,MP,XP}$	Tariff for MP Supply of Capacity Type $ct$ at Domestic Point $XP$ – Regulated Tariff; expressed in € / kWh/h / year, as provided for in section 6.
$T_{ct,RPS,XP}$	Tariff for RPS Supply of Capacity Type $ct$ at Domestic Point $XP$ – Regulated Tariff; expressed in € / kWh/h / year, as provided for in section 6 <sup>2</sup> .

<sup>2</sup> From 2020 onwards, the medium pressure and Dedicated Pressure Reduction Station service will be replaced by the Reduced Pressure Service. This service will reduce the pressure at a Domestic Point within the contractual minimum and maximum pressure limits. Hence from that date  $MP_{XP}$  and  $DPRS_{XP}$  coefficients will be replaced by  $RPS_{XP}$  and accordingly the  $T_{ct,RPS,XP}$  will be applied.

$T_{dt,ct}$	Tariff for Direct Line of Capacity Type $ct$ – Regulated Tariff; expressed in € / kWh/h / year, as provided for in section 6.
$T_{dt,d}$	Tariff for Direct Line based on Distance $D_{dl}$ – Regulated Tariff; expressed in € / kWh/h / km / year, as provided for in section 6.
$T_{DPRS}$	Tariff for DPRS – Yearly – Regulated Tariff; expressed in €/(kWh/h)/year; as provided for in section <a href="#">6.2.1.26.2.1.2</a> .
$T_{EIC}$	Tariff for Energy In Cash – Regulated Tariff; factor of applicable on the total allocated energy of a Network User on a Connection Point, used in the invoicing of the energy in cash, as provided for in section 6.
$T_{FixZTP}$	Fixed tariff for ZTP Trading Services - Regulated Tariff; expressed in €/Month, as provided for in section 6.
$T_{fix,ff,XP}$	Fix tariff – Fix/Flex – fixed tariff applicable on Exit Services towards End Users Domestic Points of the Fix/Flex Rate Type – Regulated Tariff; as provided for in <a href="#">6.2.1.26.2.1.2</a> .
$T_{flex,ff,XP,1}$	Flex tariff – Fix/Flex – variable tariff applicable on Exit Services towards End User Domestic Points $XP$ of the Fix/Flex Rate Type $ff$ , applicable until $RH_{g,XP,y,n} \leq RH-TRH$ – Regulated Tariff; expressed in € / MWh, as provided for in <a href="#">6.2.26.2.2</a> .
$T_{flex,ff,XP,2}$	Flex tariff – Fix/Flex – variable tariff applicable on Exit Services towards End User Domestic Points $XP$ of the Fix/Flex Rate Type $ff$ applicable as from $RH_{g,XP,y,n} > RH-TRH$ – Regulated Tariff; expressed in € / MWh, as provided for in <a href="#">6.2.26.2.2</a> .
$T_{IP1,IP2,OCUC}$	Tariff for OCUC from Interconnection Point $IP1$ to Interconnection Point $IP2$ – Yearly – Regulated Tariff; expressed in €/(kWh/h)/year; as provided for in section 6.
$T_{IP1,IP2,w}$	Tariff for Wheeling from Interconnection Point $IP1$ to Interconnection Point $IP2$ – Yearly – Regulated Tariff; expressed in €/(kWh/h)/year; as provided for in section 6.
$T_{ITS}$	Tariff for the implicit allocation of Transmission Services at the Zeebrugge Interconnection Point for the Imbalance Transfer Service – Regulated Tariff; expressed in €/(kWh/h)/year, as defined in the Regulated Tariffs, as provided for in section 6.2.6.
$T_{msc}$	Tariff for multi-shipper codes – Regulated Tariff; expressed in € / Additional Nomination Code / year; as provided for in section 6.
$T_{ODO}$	Tariff for Odourisation – variable term – Regulated Tariff; expressed in €/MWh; as provided for in section <a href="#">6.2.106.2.10</a> .

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$T_{QCH \rightarrow L, bl}$	Tariff for Quality Conversion H->L, for Quality Conversion Service Base Load $bl$ – Regulated Tariff; expressed in €/kWh/h/year, as provided for in section 6.
$T_{QCH \rightarrow L, pl}$	Tariff for Quality Conversion H->L, for Quality Conversion Service Peak Load $pl$ – Regulated Tariff; expressed in €/kWh/h/year, as provided for in section 6.
$T_{QCH \rightarrow L, sl}$	Tariff for Quality Conversion H->L, for Quality Conversion Service Seasonal Load $sl$ – Regulated Tariff; expressed in €/kWh/h/year, as provided for in section 6.
$T_{QCL \rightarrow H}$	Tariff for Quality Conversion L->H – Regulated Tariff; expressed in € / kWh/h / year, as provided for in section 6.
$T_{ts, ct, IP}$	Tariff for Transmission Service $ts$ of Capacity Type $ct$ at Interconnection Point or Installation Point $IP$ – Regulated Tariff; expressed in € / kWh/h / year, as provided for in section 6.
$T_{VarZTP}$	Variable tariff for ZTP Trading Services - Regulated Tariff; expressed in €/MWh, as provided for in section 6.
$T_{var, qcH \rightarrow L, pl}$	Variable tariff for Quality Conversion H->L, applicable on the Quality Conversion Service Peak Load $pl$ – Regulated Tariff; expressed in € / MWh, as provided for in section 6.
$TI'_{h, g}$	Transmission Imbalance – validated – hourly value per Network User based on final allocations for Wheeling Services, Zee Platform Services, Services submitted to an Operational Capacity Usage Commitment or Direct Line Services; expressed in kWh; as provided for in section <a href="#">6.2.96.2.9</a> .
$TVFF_{g, XP, y, n}$	Total Variable Flex Fee – Total Variable Flex Fee in year $y$ up to and including month $n$ , total monthly value per Network User and per Domestic Point $XP$ ; expressed in €; as provided for in section <a href="#">6.2.26.2.2</a> .
$TXEA_{h, z, g}$	Total Exit Energy Allocations – hourly value per Zone, per Network User, expressed in kWh, as provided for in Attachment C section 5.1.4.
$VM'_h$	Volume (final) Measurement – hourly value per Domestic Exit Point; expressed in m <sup>3</sup> (n); as provided for in section <a href="#">04</a> .
$VM_h$	Volume (provisional) Measurement – hourly value per Domestic Exit Point; expressed in m <sup>3</sup> (n); as provided for in section <a href="#">04</a> .

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$XEA'_h$	Exit Energy (final) Allocation – hourly value per Network User and per Connection Point; negative value expressed in kWh; as provided for in section 4.1.
$XEA_h$	Exit Energy (provisional) Allocation – hourly value per Network User and per Connection Point negative value expressed in kWh; as provided for in section 4.1.
$XEN'_h$	Exit Energy (last) Nomination – hourly value per Network User and per Connection Point; negative value expressed in kWh; last nomination accepted by the TSO, as provided for in section 4.1.
$XEN^m_h$	Exit Energy (last) Nomination – matched - hourly value per Network User and per Connection Point; negative value expressed in kWh; last nomination confirmed by the TSO, as provided for in section 4.1.
$ZPF_{d,g}$	Number of Zee Platform Connection Points (minimum 2 points) for which Network User has Zee Platform Services for Gas Day $d$ , as provided for in section 3.2.2.



## 2 Application area

Fluxys Belgium and the TSO from Luxembourg, Creos Luxembourg, have worked on the integration of their respective H market as from 1 October 2015. The resulting BeLux zone consists of an entry/exit system with a Virtual Trading Point “Zeebrugge Trading Point” or “ZTP”. Network Users don’t have to subscribe to capacity services to transport gas between Belgium and Luxembourg (and vice versa). This Access Code for Transmission is applicable for services offered by Fluxys Belgium on the Belgian territory.

## 3 Services

### 3.1 Entry and Exit Services

#### 3.1.1 Overview and characteristics of subscribed MTSR of Entry and Exit Services

The Transmission Grid consists of two Zones (one for H-calorific Natural Gas and one for L-calorific Natural Gas), of Interconnection Points, Installation Points and Domestic Points for each Zone. Each Interconnection Point, Installation Point and Domestic Point is located in one Zone<sup>3</sup>.

Each Transmission Service is characterized by respectively a location (Interconnection Point, Installation Point or Domestic Point), by a Capacity Type, a Rate Type and a Service Period (with a start date and an end date).

The following Entry and Exit Services exist:

- An Entry Transmission Service ( $MTSR_e$ ) enables a Network User to inject a quantity of Natural Gas at an Interconnection Point, Installation Point or a Domestic Point<sup>4</sup> into a Zone.
- An Exit Transmission Service ( $MTSR_x$ ) enables a Network User to withdraw a quantity of Natural Gas from a Zone, at an Interconnection Point, Installation Point or a Domestic Point.

The following Capacity Types exist for Transmission Services:

- Firm Transmission Services ( $MTSR_f$ ) are, subject to the terms and conditions of the Standard Transmission Agreement, always available and usable under normal operating conditions.

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<sup>3</sup> Except for the Connection Point “Quality Conversion” which is located both in the H Zone and the L Zone.

<sup>4</sup> For the Domestic Entry Service the TSO reserves the right to change the start-date of the service (or to put indefinitely this start-date on-hold) and/or to subject the access to the service to financial, technical and/or quality requirements to ensure coverage of the costs linked to the service, safeguard the system integrity of the Transmission system and compliance with applicable laws and regulations. The indicative start-date is 1 January 2020

- Interruptible capacity ( $MTSR_i$ ,  $MTSR_{io}$ ) can be interrupted by the TSO, following the rules described in ACT – Attachment C1.
- Backhaul capacity ( $MTSR_b$ ) is offered at uni-directional Connection Points, in the opposite direction of the physical gas flow direction and is available as long as the resulting physical flow remains in the physical direction of the Connection Point.

In the following tables, an overview is set out with the Capacity Types on offer for the different Point:

Interconnection Points and Installation Points	Zone	Entry Transmission Services			Exit Transmission Services		
		Firm	Backhaul	Interruptible	Firm	Backhaul	Interruptible
Blaregnies L	L		X		X		O
Eynatten 1	H	X		O	X		O
Eynatten 2	H	X		O	X		O
IZT	H	X		O	X		O
Hilvarenbeek L	L	X		O		X	
's Gravenvoeren (1)	H	X		O		X	
VIP-BENE (1)	H	X		O	X	X**	O
Virtualys (1)	H	X		O	X		O
Zandvliet H (1)	H	X		O		X	
Zeebrugge	H	X		O	X		O
Zelzate 1 (1)	H	X		O	X		O
Zelzate 2	H		X		X		O
ZPT	H	X		O		X	
Loenhout	H	X		X*	X		X*
Zeebrugge LNG Terminal	H	X		X		X	
Dunkirk LNG Terminal	H	X					

- X = Service is offered and can be contracted within indicative availabilities as published on the Fluxys Belgium website
- X\* = Operational Interruptible capacity that corresponds to capacities that Fluxys Belgium has secured for the operation of the Transmission Grid and that are made available to Network Users on an Interruptible basis.
- X\*\* = Service valid for contracts concluded before the start date of the virtual Interconnection Point
- O = Service is optionally offered, depending on Firm availability
- (1) = According to the regulations set out in NC CAM Art 19.9, the name of the former Interconnection Points are aligned with the name of their respective “virtual” Interconnection Point as stated in the table below. Any reference in a Service Confirmation to these former

Interconnection Point names is considered as a reference to the new “virtual” Interconnection Point.

Former IP (name)	IP (name) “virtual”
- Blaregnies Segeo	- Virtualys
- Blaregnies Troll	- Virtualys
- Alveringem	- Virtualys
- 's Gravenvoeren	- VIP-BENE (1) (as from <del>Q1</del> 01/04/2020 <sup>5</sup> )
- Zandvliet H	- VIP-BENE (1) (as from 01/04/ <del>Q1</del> 2020 <sup>5</sup> )
- Zelzate 1	- VIP-BENE (1) (as from 01/04/ <del>Q1</del> 2020 <sup>5</sup> )

The Quality Conversion Service H→L consists of the possibility to have Natural Gas transmitted from the H Zone to the L zone, at the Installation Point “QC”. The Capacity Type can be Firm or Interruptible. The Quality Conversion Service L→H consists of the possibility to inject Natural Gas into the H Zone at the Installation Point “QC”. The Capacity Type is Interruptible.

Even though it is no longer possible to subscribe capacities on the Interconnection Point GDLux, GDLux continues to exist for amongst others the subject of section 5.

Domestic Points	Zone	Entry Transmission Services			Exit Transmission Services		
		Firm	Back haul	Interruptible	Firm	Back-haul	Interruptible
End User Domestic Point	H of L	X	-	-	X	-	O
Distribution Domestic Point	H of L	-	X	-	X	-	-

The following Rate Types exists for Transmission Services:

- Yearly Transmission Services ( $MTSR_y$ );
- Seasonal Transmission Services ( $MTSR_s$ );
- Short Term Transmission Services ( $MTSR_{st}$ );
- Fix/Flex Transmission Services<sup>6</sup> ( $MTSR_{ff}$ ).

These Rate Types are attributed based on the characteristics of the Transmission Service (Entry or Exit, location and Service Period), as set out in the Access Code (ACT - Attachment B). For the sake of completeness of this Attachment, these are summarized in the following table:

<sup>5</sup> Date subject to a pre notice of 8 weeks

<sup>6</sup> Service stopped from being offered as from 2020

Capacity Transmission Services	Service Period	Rate Type	MTSR
Entry Transmission Services on Interconnection Points and Installation Points	= 1 year or multiple of 12 calendar months	Yearly	$MTSR_{d,e,ct,y,IP}$
	1 month $\geq x < 1$ year	Seasonal	$MTSR_{d,e,ct,s,IP}$
	< 1 month		
Exit Transmission Services on Interconnection Points and Installation Points	All Service Periods	Yearly	$MTSR_{d,x,ct,y,IP}$
Exit Transmission Services on End User Domestic Points	= 1 year or multiple of 12 calendar months	Yearly	$MTSR_{d,x,ct,y,XP}$
		Fix/Flex <sup>7</sup>	$MTSR_{d,x,ct,ff,XP}$
	1 month $\geq x < 1$ year	Seasonal	$MTSR_{d,x,ct,s,XP}$
	< 1 month	Short Term	$MTSR_{d,x,ct,st,XP}$
Exit Transmission Services on Distribution Domestic Points	All Service Periods	Yearly	$MTSR_{d,x,ct,y,XP}$
Entry Transmission Services on End User Domestic Points	year	Yearly	$MTSR_{d,e,ct,y,XP}$
Entry Transmission Services on Distribution Domestic Points	year	Yearly	$MTSR_{d,e,ct,y,XP}$

Note that for capacities allocated by the TSO (through implicit allocation) for Loenhout or for Distribution Domestic Exit Points, the Rate Type is always Yearly and for Zeebrugge, the Rate Type is always Seasonal.

Exit Transmission Services on Distribution Domestic Points always include the high pressure (HP) Exit Service and may include the services of medium pressure (MP), Dedicated Pressure Reduction Station (DPRS) and odorisation (ODO).

- Via the medium pressure service, Fluxys Belgium transports the gas to a Domestic Point via a medium pressure network.
- Via the Dedicated Pressure Reduction Station service, Fluxys Belgium reduces the pressure at a Domestic Point within the contractual minimum and maximum pressure limits<sup>8</sup>.

<sup>7</sup> [Service stopped from being offered as from 2020](#)

<sup>8</sup> From 2020 onwards, the medium pressure and Dedicated Pressure Reduction Station service will be replaced by the Reduced Pressure Service (RPS). This service will reduce the pressure at a Domestic Point within the contractual minimum and maximum pressure limits. Hence from that date  $MP_{XP}$  and  $DPRS_{XP}$  coefficients will be replaced by  $RPS_{XP}$  and accordingly the  $T_{ct,RPS,XP}$  will be applied.

- Odorisation consists in Fluxys Belgium injecting an odorant in gas at Domestic Points where an odorisation facility is operated by Fluxys Belgium.

The subscription of Exit Capacity at Domestic Points ( $MTSR_{d,x,ct,y,XP}$ ) implies the delivery (and the payment, according to section 4926) of these services in function of the respective coefficients  $MP_{XP}$ ,  $DPRS_{XP}$ , and  $ODO_{XP}$ . These coefficients are set per End User Domestic Point or per Aggregated Receiving Station (ARS) for Distribution Domestic Points, have a value between 0 and 1 and are published on Fluxys Belgium's website<sup>9</sup>.

For two specific cases of End Users located in Belgium near a border and directly connected to the Transmission Grid of an Adjacent TSO or to the grid of a foreign Distribution Network Operator (currently: from Veldwezelt to Steenfabriek Wienerberger and from Momignies to Gerresheimer Momignies), Direct Line MTSR ( $MTSR_{dl}$ ) is offered instead of Entry and Exit MTSR.

### 3.1.2 Maximum Transmission Services Rights (MTSR)

MTSR is always expressed in energy (kWh/h). At a considered Connection Point, Domestic Point, the MTSR of a Network User is calculated as the Energy MTSR ( $EMTSR_d$ ) minus the MTSR bought back through the buy-back procedure ( $MTSRBB_d$ ).

$$MTSR_d = EMTSR_d - MTSRBB_d$$

The  $MTSR_f$  bought back through the buy-back procedure ( $MTSRBB_{d,IP,g}$ ) for Day  $d$ , for Interconnection Point  $IP$ , for a Network User  $g$  is calculated as the maximum of  $MTSR_{h,f}$  bought back during the specific gasday.

$$MTSRBB_{d,IP,g} = \max_d (MTSRBB_{h,IP,g})$$

### 3.1.3 Capacity Exceedings

#### 3.1.3.1 Entry Capacity Exceedings at an End User Domestic Point

Capacity Exceedings for Entry are not applicable to End User Domestic Points.

#### 3.1.3.2 Exit Capacity Exceedings at an End User Domestic Point

Capacity Exceedings are applicable to End User Domestic Points, and not to Distribution Domestic Points.

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<sup>9</sup> <http://www.fluxys.com/belgium/en/Services/Transmission/TransmissionTariffs/TransmissionTariffs>

The Energy Exit Exceeding ( $EXE_{d,XP,g}$ )<sup>10</sup>, expressed in kWh/h for Gas Day  $d$ , for Network User  $g$ , for Domestic Point  $XP$  is the highest excess, for that Gas Day  $d$ , of the final Exit Energy Allocation ( $XEA'_h$ ) with respect to Transmission Services of Network User and the Energy Interrupted MTSR ( $EIMTSR_h$ ) on the considered End User Domestic Point :

$$EXE_{d,XP,g} = \max_d [\max (0; -XEA'_h,IP,g - EMTSR_{d,XP,g} + EIMTSR_{h,XP,g})]$$

The Peak Exceeding of Exit Energy for Network User  $g$  ( $EXE_{m,p,XP,g}$ ) for Month  $m$  is equal to the highest daily Exit Energy Exceeding over Month  $m$  on the considered Domestic Point  $XP$ :

$$EXE_{m,p,XP,g} = \max_m EXE_{d,XP,g}$$

The Non-Peak Exceeding of Exit Energy for Network User  $g$  ( $EXE_{m,np,XP,g}$ ) for Month  $m$  is equal to the sum of all daily Exit Energy Exceedings of Network User  $g$  for the considered Transmission Service less the Peak Exceeding of Exit Energy of Network User  $g$  on the considered Domestic Point  $XP$ :

$$EXE_{m,np,XP,g} = \sum_m EXE_{d,XP,g} - EXE_{m,p,XP,g}$$

The Peak Exit Exceeding Incentive for Month  $m$  for Network User  $g$  for Domestic Point  $XP$  is calculated as follows:

$$IEXE_{m,p,XP,g} = EXE_{m,p,XP,g} \times (T_{f,HP} + MP_{XP} \times T_{f,MP} + DPRS_{XP} \times T_{DPRS}) \times \min \left[ \frac{1.5 \times OF_{m,XP,g}}{12}; 1 \right]$$

The Non-Peak Exit Exceeding Incentive for Month  $m$  for Network User  $g$  for Domestic Point  $XP$  is calculated as follows:

$$IEXE_{m,np,XP,g} = \min \left[ EXE_{m,np,XP,g} \times \frac{(T_{f,HP} + MP_{XP} \times T_{f,MP} + DPRS_{XP} \times T_{DPRS})}{6} \times \min \left[ \frac{1.5 \times OF_{m,XP,g}}{12}; 1 \right]; IEXE_{m,p,XP,g} \right]$$

## 3.2 Short haul Services

### 3.2.1 Wheelings and OCUC (Operational Capacity Usage Commitments)

Wheelings and OCUC (Operational Capacity Usage Commitments) are operational agreements between the Network User and the TSO, in the framework of proactive congestion management, as set out in the Code of Conduct and in Congestion Management (ACT - Attachment E).

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<sup>10</sup> In case the Allocation Agreement between Network Users and the End User allows for the pooling of the Subscribed Transmission Services on the End User Domestic Point, the calculation of the Energy Exit Exceeding will take this into account.

A Wheeling or an OCUC consists of a commitment on the combined use of a given Entry Service at an Interconnection Point with a given Exit Service at another Interconnection Point, to avoid a potential congestion in the Transmission Grid, and without access to the Market Based Balancing model or to ZTP Notional Trading Services.

The Entry and Exit Services that are eligible for Wheelings or OCUC, in the framework of its proactive congestion management policy are the following ones:

Wheelings are offered between the following Interconnection Points:

- Eynatten 1 and Eynatten 2, and between Eynatten 2 and Eynatten 1
- Zelzate 1 and Zelzate 2, and between Zelzate 2 and Zelzate 1

Operational Capacity Usage Commitments are offered between the following Interconnection Points:

- Entry Eynatten 1 or Eynatten 2, with Exit 's Gravenvoeren
- Entry 's Gravenvoeren, with Exit Eynatten 1 or Eynatten 2
- Entry Zelzate 1 or Zelzate 2, with Exit IZT or Zeebrugge
- Entry IZT or Zeebrugge, with Exit Zelzate 1 or Zelzate 2
- Entry Dunkirk LNG Terminal or Virtualys (Alveringem, Blaregnies Troll, Blaregnies Segeo), with Exit IZT or Zeebrugge.

Entry and Exit Services subject to a Wheeling or an Operational Capacity Usage Commitment are subject to a specific Regulated Tariff on the MTSR that falls under the Wheeling or the OCUC, as described in the Regulated Tariffs.

### 3.2.2 Zee Platform Service

The Zee Platform Service gives unlimited Firm or Backhaul MTSR ( $MTSR_{f,zpf}$ ,  $MTSR_{b,zpf}$ ) between the Connection Points of the Zee Platform for which Network User has registered.

The table below shows the Capacity Type of the Zee Platform Service per Zee Platform Connection Point:

	<b>IZT</b>	<b>LNG</b>	<b>ZPT</b>	<b>Zeebrugge</b>
<b>Entry</b>	$MTSR_{f,zpf}$	$MTSR_{f,zpf}$	$MTSR_{f,zpf}$	$MTSR_{f,zpf}$
<b>Exit</b>	$MTSR_{f,zpf}$	$MTSR_{b,zpf}$	$MTSR_{b,zpf}$	$MTSR_{f,zpf}$

Any  $MTSR_{f,zpf}$  and/or  $MTSR_{b,zpf}$  shall be considered as Transmission Services of unlimited capacity between the Zee Platform Connection Points, to the extent that the technical import and export capacities of the Adjacent Transmission Systems at ZPT, LNG or IZT remain at the level as set forth in the table below.

	Technical Import Capacity kWh/h	Technical Export Capacity m <sup>3</sup> (n)/h
Zeebrugge ZPT	19,775,000	0
Zeebrugge IZT	25,990,000	32,770,000
Zeebrugge LNG	19,210,000	0

$MTSR_{f,zpf}$  and  $MTSR_{b,zpf}$  do not give access to ZTP Notional Trading Services nor to the Zone, and have no access to the Market Based Balancing model (for Zee Platform, Entry and Exit Nominations have to be balanced on an hourly basis).

The utilization of Zee Platform Services is separated from Entry and Exit Services in the Zeebrugge area through a separate nomination code.

In the event that the technical import and/or export capacities of the Adjacent Transmission Systems at ZPT, LNG and IZT change compared to the levels as set forth in the table above, the Transmission System Operator shall as soon as reasonably possible communicate to Network User the resulting capacity limitations (if any) following from this new situation, which shall automatically and immediately apply to the  $MTSR_{f,zpf}$  and/or  $MTSR_{b,zpf}$ .

### 3.3 Cross Border Delivery Service

A Cross Border Delivery Service ( $MTSR_{cbds}$ ) enables a Network User to inject a quantity of Natural Gas in the Transmission System at a Connection Point which is not located in Belgium nor directly physically connected to the Transmission System of Fluxys Belgium.

The Cross Border Delivery Service shall always be associated and implicitly allocated together (meaning matched in quantity, time and Capacity Type) with the subscription of its associated Entry, Exit and/or OCUC Services, as described in ACT – Attachment B. The Cross Border Delivery Service shall be offered on specific Interconnection Points and/or Installation Points linked to Cross Border Capacity. The Operator of the Transmission System or Installation connected to the Fluxys Belgium grid by means of the Cross Border Capacity shall be considered as an Adjacent TSO to the Fluxys Belgium's grid.

Overview of existing Cross Border Delivery Services:

Capacity Transmission Services (*)	Service Period	Rate Type	MTSR code
Cross Border Delivery Service on Installation Point Dunkirk LNG Terminal	$\geq 1$ year	Yearly	$MTSR_{d,cbd,f,y,IP}$
	$< 1$ year	Seasonal	$MTSR_{d,cbd,f,s,IP}$

(\*) Note that the Cross Border Delivery Service is only offered on Entry and that the Capacity Type can only be Firm.



### 3.4 Quality Conversion Services

#### 3.4.1 Quality Conversion Services H→L

The following Quality Conversion Services H→L are offered, namely “peak load”, “base load” and “seasonal load”, each with a different tariff and different specifications regarding the availability of capacities, as described in Attachment C3.

The Quality Conversion Service H→L ( $MTSR_{QCH \rightarrow L}$ ) consists of the possibility to have Natural Gas transmitted from the H Zone to the L zone, at the Installation Point “QC”. The peak load Quality Conversion Service H→L ( $MTSR_{QCH \rightarrow L, pl.}$ ) can be used from 1/11/Y until 31/03/Y+1 and the availability depends on the temperature, such that more capacity is available at cold temperatures. The seasonal load Quality Conversion Service H→L ( $MTSR_{QCH \rightarrow L, sl}$ ) can be used during the whole Contract year, but its usage is limited from 1/04/Y+1 until 31/10/Y+1. The base load Quality Conversion Service H→L ( $MTSR_{QCH \rightarrow L, bl}$ ) can be used during the whole Contract year.

Peak Load Quality Conversion Services H→L are offered in standard bundled units. One standard bundled unit consists of the following Quality Conversion Services:

Firm peak load H->L capacity	Interruptible peak load H->L capacity
1 kWh/h	0,13 kWh/h

Base and Seasonal Load Quality Conversion Service H→L are offered in energy [ $kWh/h$ ], as set out in Subscription & Allocation of Services (ACT – Attachment B). No additional Transmission Services from and towards the Installation Point “QC” are required. The following capacities are offered for the different Quality Conversion Services H→L<sup>11</sup>:

Peak load	Firm	177.000 m <sup>3</sup> (n)/h = 1.734.600 kWh/h	1.734.600 bundles
	Interruptible	23.010 m <sup>3</sup> (n)/h = 225.498 kWh/h	
Base load	Firm	100.000 m <sup>3</sup> /h = 980.000 kWh/h	-
Seasonal load	Firm		

Nominations for Quality Conversion H→L shall be made in accordance with the Operating Procedures (ACT – Attachment C.3).

The TSO calculates the Real Conversion Capacity in function of the equivalent temperature and period of year as set out in the Operating Procedures (ACT -

<sup>11</sup> Depending on operational needs, changes to the installations or the availability of the logistics contracts (e.g. with nitrogen suppliers), the TSO possibly has to adapt the Quality Conversion Service offering.

Attachment C.3). The Nominations shall not exceed the Real Conversion Capacity of Network User.

### **3.4.2 Quality Conversion Services $L \rightarrow H$**

The Quality Conversion Service  $L \rightarrow H$  consists of the possibility to inject L Natural Gas into the H Zone at the Installation Point “QC” ( $MTSR_{QCL \rightarrow H,i}$ ).

Quality Conversion Services  $L \rightarrow H$  can be subscribed as set out in Subscription & Allocation of Services (ACT - Attachment B). No additional Transmission Services from and towards the Installation Point “QC” are required.

## **3.5 ZTP Trading Services**

### **3.5.1 Overview on the ZTP Trading Services**

The TSO offers ZTP Trading Services, enabling Network Users to execute transaction (exchange title of gas), through following services:

- ZTP Physical Trading Services, and associated Imbalance Transfer Service
- ZTP Notional Trading Services (on ZTP for the H Zone, on ZTPL for the L Zone)

The operational aspects of the ZTP Trading Services are described in ACT- Attachment C1 (matching, allocations, reporting).

### **3.5.2 Imbalance Pooling Service**

The Imbalance Pooling Service enables Network Users to transfer, per Balancing Zone the hourly Imbalance (based on provisional allocation) or the Net Confirmed Title Transfer for ZTP Physical Trading Services, from one Network User (‘Imbalance Transferor’) to another Network User (‘Imbalance Transferee’) as an Imbalance Pooling Transfer ( $IPT_{h,z,g}$ ) as follows:

- the Imbalance Transferor shall authorise that its (whole) hourly Imbalance ( $I_{h,z,g}$ ) or the (whole) hourly Net Confirmed Title Transfer for ZTP Physical Trading Services ( $NCTTP_{h,g,z}$ ) being positive as well as negative shall be transferred to the Imbalance Transferee, as provided for in Section 5.3.2;
- the Imbalance Transferee shall authorise that the (whole) hourly Imbalance ( $I_{h,z,g}$ ) or the (whole) hourly Net Confirmed Title Transfer for ZTP Physical Trading Services ( $NCTTP_{h,g,z}$ ) of the Imbalance Transferor, if any, being positive as well as negative shall be taken into account for the calculation of its Network User Balancing Position, as provided for in Section 5.3.2;
- the transfer of the hourly Net Confirmed Title Transfer for ZTP Physical Trading Services shall be performed by the TSO before the Imbalance Transfer Service, as provided in section 3.5.2;

- the transfer of the hourly Imbalance and the transfer of the Net Confirmed Title Transfer for ZTP Physical Trading Services will be performed by the TSO as implicit Nominations on the ZTP Notional Trading Services for the transfer of the hourly Imbalance and on the ZTP Physical Trading Services for the transfer of the hourly Net Confirmed Title Transfer for ZTP Physical Trading Services and will be accounted for as transactions for both Parties in accordance with Section 6.2.11.2;
- a Network User can only perform the role of either Imbalance Transferor or Imbalance Transferee per transfer type being the transfer of the hourly Imbalance or the transfer of the hourly Net Confirmed Title Transfer for ZTP Physical Trading Services;
- as an Imbalance Transferee a Network User can enter per type of transfer into several Imbalance Pooling Services with more than one Imbalance Transferor; and,
- for the avoidance of doubt, the Imbalance Transferor remains liable vis-à-vis the TSO for any Allocation Settlements in accordance with Section 5.4 when applicable.

The Imbalance Pooling Service can be subscribed according to the rules defined in ACT – Attachment B and via the Imbalance Pooling Service form as published on the Fluxys Belgium website.

### 3.5.3 Imbalance Transfer Service

The Imbalance Transfer Service is a Service performed by the TSO for the Network User(s) whereby the Net Confirmed Title Transfer for ZTP Physical Trading Services ( $NCTTP_{h,g,z}$ ) are automatically transferred to/from the Network User Balancing Position in the BeLux H-Zone. The Transmission Services (Entry or Exit) at the Interconnection Point Zeebrugge required to perform such transfer are implicitly allocated.

Transmission Services at Zeebrugge ( $MTSR_{ITSia}$ ) are implicitly allocated to the Network User till the end of the same Gas Day in case and up to the amount the hourly quantities transferred under this Imbalance Transfer Service plus the hourly matched Nominations ( $EEN'_{mh,g}$ ,  $XEN'_{mh,g}$ ) on Transmission Services for Interconnection Points IZT, ZPT and Installation Point Zeebrugge LNG Terminal are the sum of:

- the hourly subscribed Transmission Services at the Interconnection Points Zeebrugge, IZT, ZPT and Installation Point Zeebrugge LNG Terminal of the Network User in the same direction ( $MTSR_{Zeebrugge,h,g} + MTSR_{IZT,h,g} + MTSR_{ZeebruggeLNGTerminal,h,g} + MTSR_{ZPT,h,g}$ ); and
- the implicitly allocated Transmission Services at Zeebrugge till the end of the same Gas Day under the Imbalance Transfer Service for (a) previous hour(s) of the same Gas Day ( $MTSR_{ITSia,h-n,g}$ ).

This Service is an associated Service, which doesn't have to be subscribed by Network Users and which is performed by the TSO for each Network User using the ZTP Physical Trading Service as long as Firm Transmission Services are available at the Interconnection Points Zeebrugge, IZT, ZPT and at Installation Point Zeebrugge LNG Terminal in the same direction. The detailed calculation of the implicit allocation of Transmission Services at the Interconnection Point Zeebrugge for the Imbalance Transfer Service is set out in ACT- Attachment B.

### **3.6 Substitution Services**

The Substitution Services enable a Network User holding unbundled Transmission Service at an Interconnection Point or at an Installation Point to either convert (part of) that Transmission Service into a bundled Transmission Service on the same Interconnection Point, or to transfer (part of) that Transmission Service to another Interconnection Point or Installation Point. It is to be understood that Substitution Services are not modifying the existing Transmission Services except for, as the case may be, the Connection Point, the quantity, the tariff and/or the capacity type. As a consequence, Entry or Exit Transmission Services resulting from the conversion of a Transmission Service from unbundled to bundled, and/or resulting from the transfer of a Transmission Service from an Interconnection Point or an Installation Point to another Interconnection Point or Installation Point, cannot be considered as eligible for OCUC or Wheeling.

Transmission Services bought on PRISMA in the framework of Substitution Services are substituted by existing Transmission Services with its related contract reference. This reference is unknown by PRISMA and as a consequence, Entry or Exit Transmission Services resulting from the conversion of a Transmission Service from unbundled to bundled, and/or resulting from the transfer of a Transmission Service from an Interconnection Point or an Installation Point to another Interconnection Point or Installation Point cannot be assigned to another Network User on PRISMA.

#### **3.6.1 Capacity Conversion Service**

The Capacity Conversion Service enables Network Users holding unbundled capacity at one side of an Interconnection Point to convert this capacity into bundled capacity according to the conditions set forth in ACT – Attachment B and free of extra charge.

Firm and Backhaul Entry and Exit Transmission Services as well as OCUC and Wheeling Transmission Services are eligible for Capacity Conversion Service.

To apply, the Network User will use the Service Request Form for Capacity Conversion Service as published on the Fluxys Belgium website.

#### **3.6.2 L/H Capacity Switch Service**

In the framework of the physical L-gas to H-gas conversion project, TSO shall proceed each year with the commercial conversion of the concerned L-gas Domestic Exits.

The L/H Capacity Switch Service is offered each Gas Year, free of charge, to Network Users having a  $MTSR_{d,f,y,IP}$  Entry on an Interconnection Point on the L-Zone after the 1st of June of that Gas Year. Only unbundled Firm Entry Transmission Services with a Yearly rate type are eligible for the L/H Capacity Switch Service. Moreover, Transmission Services that are assigned with retained payment obligation cannot be transferred under the L/H Capacity Switch Service by the assignor nor the assignee.

Each Gas Year Y, following the confirmation of the conversion planning made by Synergrid, TSO shall publish, on the one hand, the percentage  $P_{LH,Y}$  that depends on the Distribution Domestic Points of the L-Zone that shall have been converted to H-gas between the start of conversion project (1st of June 2018) and the start of Gas Years Y+1, and on the other hand, the list of End User Domestic Points that will be converted from L-gas to H-gas during the summer of Gas Year Y.

The quantity that will be eligible for the L/H Capacity Switch Service on an Interconnection Point of the L-Zone for the Gas Year Y+1 ( $MTSR_{LHCS,Y+1}$ ), shall be equal to the sum of :

- The  $MTSR_{1/06/Y,IP,e}$  such Network User holds on that Interconnection Point  $IP$  on the 1st of June of Gas Year Y multiplied by the applicable percentage  $P_{LH,Y}$ ;
- The sum of the  $MTSR_{1/06/Y,XP,x}$  such Network User holds on the End User Domestic Exit points  $XP$  that will be converted from L to H in Gas Year Y.

$$MTSR_{LHCS, Y+1} = MTSR_{1/06/Y,IP,e} \times P_{LH,Y} + \sum MTSR_{1/06/Y,XP,x}$$

In the framework of the L/H Capacity Switch Service, TSO shall offer to the Network User holding  $MTSR_{LHCS,Y+1}$  on an Interconnection Point on the L-Zone the possibility to transfer (part of) the underlying existing Transmission Services during the Gas Year Y+1 under the strict condition that the Network User subscribes new Firm Entry Transmission Services on Interconnection Points of the H-Zone for the Gas Year Y+1 with the same quantity in kWh/h as the existing Transmission Services to be transferred.

To apply, the Network User will use the Service Request Form for L/H Capacity Service as published on the Fluxys Belgium website.

### 3.6.3 Diversion Service

Firm and Backhaul Entry and Exit Transmission Services as well as OCUC Transmission Services are eligible for Diversion Service.

The Diversion Service is offered, free of charge, to Network Users willing to transfer Transmission Services for a standard period of a Gas Month, a Gas Quarter or a Gas

Year<sup>12</sup>- between the following Interconnection Points or Installation Point that are at the same grid location :

- Zelzate 1 and Zelzate 2
- Eynatten 1 and Eynatten 2
- Zeebrugge, Zeebrugge LNG Terminal, ZPT and IZT

TSO shall offer Diversion Service to Network User on such Interconnection Points or Installation Point under the strict condition that Network User subscribes new Transmission Services on another applicable Interconnection Point or Installation Point for the considered period. Such new Transmission Services shall have the same direction and the same Capacity Type than the existing Transmission Services to be diverted and generate equivalent monthly capacity fees for TSO (based on tariffs applicable at the time of the allocation and without taking into account any premium due by Network User for a given auction)

To apply, the Network User will use the Service Request Form for Diversion Service as published on the Fluxys Belgium website<sup>13</sup>.

### 3.7 Ancillary Services

#### 3.7.1 Real-time data measurement

The TSO offers a real-time data service which can additionally be subscribed by Network Users and which provides them with on-line gas flow data (updated every 6 minutes) for selected Interconnection Points, privately available on the Electronic Data Platform.

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~~<sup>12</sup> Except for Transmission Services that are sold on FCFS basis for which a minimum of 30 days shall be considered.~~

<sup>13</sup> The possibility to use PRISMA to request the Diversion of existing Services is being developed. The start date will be confirmed by the TSO at least 4 weeks in advance. Until then, the procedure remains manual

## 4 Nominations, Metering and Allocations

### 4.1 Overview

The following table illustrates the different parameters for Nominations and Allocations at Interconnection Points and Domestic Points, defined and used in this section.

		Connection Point	
		Entry	Exit
<b>Nominations</b>	Last accepted	$EEN'_h$	$XEN'_h$
	Last confirmed	$EEN^m_h$	$XEN^m_h$
<b>Allocations</b>	Provisional	$EEA_h$	$XEA_h$
	Final	$EEA'_h$	$XEA'_h$
<b>Metering</b>	Provisional	$EM_h & VM_h & GCV_h$	$EM_h & VM_h & GCV_h$
	Validated	$EM'_h & VM'_h & GCV'_h$	$EM'_h & VM'_h & GCV'_h$

### 4.2 Nominations

In order to notify the TSO of the quantity of Natural Gas that will flow at each Interconnection Point, at the exception of Interconnection Point GDLux, Installation Point or End User Domestic Point, the Network User shall send Nominations and, if applicable, renominations to the TSO, according to the Operating Procedures (ACT – Attachment C.1).

The Nominations and Allocation for Entry and Exit Services subject to a Wheeling or an OCUC, are independent from other Entry and Exit Services through the use of separate nomination codes, as described in the Operating Procedures (ACT – Attachment C.1).

### 4.3 Metering

Each Connection Point Domestic Point may contain one or more Nodes providing hourly measurement data, as set out in the Metering Procedures (ACT - Attachment D).

### 4.4 Allocations

At each Interconnection Point, at the exception of Interconnection Point GDLux, Installation Point or Domestic Point, the TSO shall allocate a quantity of the Natural Gas measured to each Network User for which Natural Gas is transported at that Connection Point, according to the relevant Allocation Agreement or Operating Balancing Agreement, as set out in the Operating Procedures (ACT - Attachment C.1).

The determination of provisional allocations of Natural Gas takes place every hour. The determination of the final allocated quantities of Natural Gas takes place on M+1 for every hour.

On Interconnection Point GDLux, Network User receives from the TSO an allocation quantity of the Natural Gas equal to the hourly imbalance  $I_{h,g,before\ allocation\ GDLux}$  of this Network User calculated in accordance with the access code for transmission of Creos between Creos and Network User. This quantity is equal to the Initial Allocation  $EEA_h$

or  $XEA_h$ . The final Allocation  $EEA'_h$  or  $XEA'_h$  shall be equal to the Initial Allocation  $EEA_h$  or  $XEA_h$ .

## 5 Balancing

There are balancing settlements (Within-Day and End-of-Day) and allocation settlements (only End-of-Day):

- Balancing settlements are based on provisional data (H+1);
- Allocation settlements are settlements based on the difference between the provisional and the final data and are settled after the considered Month.

The quantity to be settled by an balancing Within-Day hourly settlement for a Network User ( $GE_{h,z,g}$ ,  $GS_{h,z,g}$ ), for an hour  $h$  not being the last hour of the considered Gas Day depends on:

- the provisional hourly allocations ( $EEA_{h,g}$ ,  $XEA_{h,g}$ ) for Network User for the Interconnection Points, Installation Points and the Domestic Points of the considered Zone;
- the Net Confirmed Title Transfers for ZTP Notional Trading Services<sup>14</sup> of the considered Zone, for the Network User, ( $NCTTN_{h,z,g}$ );
- the Imbalance Pooling Transfer ( $IPT_{h,z,g}$ ) of the considered Zone - as Imbalance Transferee or Imbalance Transferor - under the Imbalance Pooling Service;
- the Market Balancing Position before the settlement ( $MBP^*_{h,z}$ ) versus the Market Threshold ( $MT^+_{h,z}$ ,  $MT_{h,z}$ );
- the proportion of the Network User Balancing Position before the settlement ( $GBP^*_{h,z,g}$ ) in the sum of the Excess Causing Network Users or Shortfall Causing Network Users, as the case may be;

The quantity to be settled by balancing End-of-Day settlement for a Network User (End-of-Day Network User Excess:  $GE_{d,z,g}$ , or End-of-Day Network User Shortfall:  $GS_{d,z,g}$ ) depends on:

- the Network User Balancing Position before settlement of the last hour of the Gas Day ( $GBP^*_{d,z,g}$ ).

The difference between final and provisional allocations is settled via Allocation Settlements, based on section [5.45.4](#).

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### 5.1 Balancing obligations for Network Users

Pursuant to article 86 of the Code of Conduct, it is forbidden for Network User to deliberately create an imbalance for reasons of commercial opportunities. A Network

<sup>14</sup> Net Confirmed Title Transfer for ZTP Physical Trading Services ( $NCTTP_{h,z,g}$ ) are considered as net Entry or Exit Allocations at Interconnection Point Zeebrugge



User will not commit any act that would be constitutive of abuse and/or manipulation of the balancing system.

If a Network User commits such act, then the TSO shall have the right to:

- refuse the (re)nominations of this Network User; and
- charge to this Network User, and the Network User shall have to pay, any balancing costs incurred by the TSO relating to the specific behaviour of this Network User.

It is reminded to Network Users that the non-compliance of article 86 of the Code of Conduct shall be sanctioned under criminal law, in accordance with article 234 of the Code of Conduct.

## 5.2 Consideration of Net Confirmed Title Transfers into Network User Balancing Position

For each hour, the TSO takes Net Confirmed Title Transfers for ZTP Trading Services<sup>15</sup> into account for determining the Network User Balancing Position ( $GBP_{h,z,g}$ ) of the Network User on the related Zone, as set out in section [5.35.3](#). Purchases are added as positive values to the Network User Balancing Position, whereas sales are added as negative values to the Network User Balancing Position.

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The TSO may suspend the right to use the ZTP Trading Services for a Network User with immediate effect and until further notice as soon as the Network User has realized imbalances and/or is subject to settlements that may cause amounts to be due and payable, arising from the balancing regime, that are of such a nature that TSO may reasonably not expect to receive full and timely payment of these amounts.

## 5.3 Balancing Settlements

### 5.3.1 Market Threshold ( $MT^+_{h,z}; MT^-_{h,z}$ )

The table below shows the default Market Threshold values for each period of the year, for the H Zone.

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
$MT^+_{h,H\ zone}$	22 GWh	22 GWh	22 GWh	25 GWh	29 GWh	29 GWh	30 GWh	30 GWh	29 GWh	25 GWh	22 GWh	22 GWh
$MT^-_{h,H\ zone}$	-22 GWh	-22 GWh	-22 GWh	-25 GWh	-29 GWh	-29 GWh	-30 GWh	-30 GWh	-29 GWh	-25 GWh	-22 GWh	-22 GWh

<sup>15</sup> Net Confirmed Title Transfer for ZTP Physical Trading Services ( $NCTTP_{h,z,g}$ ) are considered as net Entry or Exit Allocations at Interconnection Point Zeebrugge

The table below shows the default Market Threshold values for each period of the year, for the L Zone.

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
$MT_{h,L\ zone}^+$	13 GWh	13 GWh	13 GWh	13 GWh	15 GWh	15 GWh	16 GWh	16 GWh	15 GWh	13 GWh	13 GWh	13 GWh
$MT_{h,L\ zone}^-$	-13 GWh	-13 GWh	-13 GWh	-13 GWh	-15 GWh	-15 GWh	-16 GWh	-16 GWh	-15 GWh	-13 GWh	-13 GWh	-13 GWh

The TSO has the right to modify, at any time and acting in accordance with the standards of a Prudent and Reasonable Operator, the effective values of the Market Thresholds in function of the Transmission Grid operating conditions (for example but not limited to: in case of high gas demand, or as from an Incident Management level, etc) in accordance with the Operating Procedures (ACT – Attachment C.1).

Any structural revision of these Market Thresholds, based on evolved flexibility requirements of the market in Belgium, shall be evaluated together with CREG and announced in due time on the website and on the Electronic Data Platform.

### 5.3.2 Within-Day balancing position before settlement

The Network User starts the Gas Day with a Network User Balancing Position which is equal to zero.

The hourly Imbalance ( $I_{h,z,g}$ ) for an hour  $h$  for a Zone  $z$  and for Network User  $g$  is calculated as the sum of all provisional hourly Entry Energy Allocations<sup>16</sup> for Network User for the Interconnection Points and Installation Points of the considered Zone ( $EEA_{h,g}$ ) increased by the provisional hourly Exit Energy Allocations<sup>13</sup> (negative values) for Network User  $g$  for the Interconnection Points, Installation Points and the Domestic Points of the considered Zone ( $XEA_{h,z,g}$ ), increased by the Net Confirmed Title Transfers for ZTP Notional Trading Services<sup>17</sup> ( $NCTTN_{h,z,g}$ ):

$$I_{h,z,g} = \sum_{Zone} EEA_{h,z,g} + \sum_{Zone} XEA_{h,z,g} + NCTTN_{h,z,g}$$

The Network User Balancing Position before settlement ( $GBP^*_{h,z,g}$ ) for an hour  $h$  for a Zone  $z$  and for Network User  $g$  is calculated by adding the Network User Balancing Position after settlement of the previous hour ( $GBP_{h-1,z,g}$ ), the hourly Imbalance ( $I_{h,z,g}$ ) such as higher calculated and the Imbalance Pooling Transfer ( $IPT_{h,z,g}$ ) (as Imbalance

<sup>16</sup> Entry and Exit Services submitted to an Operational Capacity Commitment and Wheeling Services, Direct Lines and Zee Platform Services are not considered in the hourly Imbalance, and for Distribution Domestic Exit, the Exit Energy Allocations are calculated as set out in the Operating Procedures (ACT - Attachment C.1).

<sup>17</sup> Net Confirmed Title Transfer for ZTP Physical Trading Services ( $NCTTP_{h,z,g}$ ) are considered as net Entry or Exit Allocations at Interconnection Point Zeebrugge

Transferee or Imbalance Transferor) under the Imbalance Pooling Service, if applicable:

$$GBP^*_{h,z,g} = GBP_{h-1,z,g} + I_{h,z,g} + IPT_{h,z,g}$$

Where  $IPT_{h,z,g}$  meaning the Imbalance Pooling Transfer of

- the Imbalance Transferor for which the Imbalance Transferor has an Imbalance Pooling Service in place;
- the Imbalance Transferee being the sum of the Imbalance Pooling Transfers of all Imbalance Transferors for whom the Imbalance Transferee has an Imbalance Pooling Service in place.

Such Network User Balancing Position before settlement is communicated to the Network User as set out in the Operating Procedures (ACT – Attachment C.1).

The Market Balancing Position before settlement ( $MBP^*_{h,z}$ ) for an hour  $h$  for a Zone  $z$  is calculated by taking the sum of the Network User Balancing Position before settlement ( $GBP^*_{h,z}$ ) of all Network Users for the considered hour and Zone:

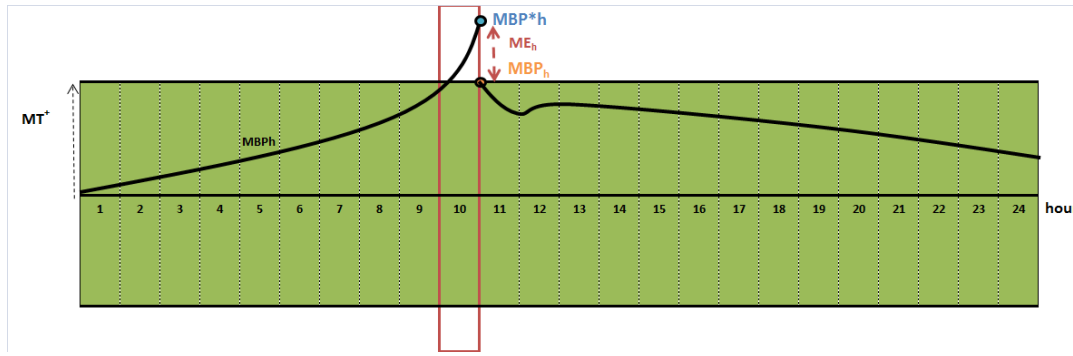
$$MBP^*_{h,z} = \sum_{allGridUsers} GBP^*_{h,z,g}$$

Such Market Balancing Position is communicated to the Network User as set out in the Operating Procedures.

### 5.3.3 Within-Day Market Excess

In case the Market Balancing Position before settlement ( $MBP^*_{h,z}$ ) for an hour  $h$  not being the last hour of the Gas Day exceeds the upper Market Threshold ( $MT^+_{h,z}$ ), there is a Market Excess ( $ME_{h,z}$ ), which is calculated as the difference between the Market Balancing Position before settlement ( $MBP^*_{h,z}$ ) and the upper Market Threshold ( $MT^+_{h,z}$ ), rounded up (ceiling) taking into account the rounding parameter ( $RMLS_{h,z}$ ):

$$ME_{h,z} = \max \left[ \left\lceil \frac{MBP^*_{h,z} - MT^+_{h,z}}{RMLS_{h,z}} \right\rceil * RMLS_{h,z}; 0 \right]$$



This Within-Day Market Excess ( $ME_{h,z}$ ) is settled with the Excess Causing Network Users ( $ECG_{h,z}$ ), being Network Users with a positive Network User Balancing Position before settlement ( $GBP^*_{h,z}$ ).

$$ECG_{h,z} : GBP^*_{h,z} > 0$$

The Within-Day Network User Excess ( $GE_{h,z,g}$ ) is calculated by distributing the Market Excess ( $ME_{h,z}$ ) according to the proportion of the Network User Balancing Position before settlement ( $GBP^*_{h,z,g}$ ) in the sum of the Network User Balancing Positions before settlement of all Excess Causing Network Users, and is communicated to the Network User as set out in the Operating Procedures.

$$GE_{h,z,g} = ME_{h,z} \times \frac{GBP^*_{h,z,g}}{\sum_{\text{Excess Causing GridUsers}} GBP^*_{h,z}}$$

The Within-Day Network User Excess Balancing Settlement ( $GEBS_{h,z,g} - \text{€}$ ) is calculated by multiplying the hourly Network User Excess quantity ( $GE_{h,z,g} - \text{kWh}$ ) by minus one (negative value means this amount is credited) and by the hourly Excess Balancing Settlement Price ( $EBSP_{h,z} - \text{€ / kWh}$ ).

$$GEBS_{h,z,g} = -GE_{h,z,g} \times EBSP_{h,z}$$

In case of Within-Day Market Excess, Excess Balancing Settlement Price ( $EBSP_{h,z}$ ) is calculated as the minimum between the Excess Balancing Price ( $EBP_{h,z}$ ) and the Gas Price ( $GP_d$ ) to which the Small Adjustment for causer ( $SA_{causer}$ ) is applied:

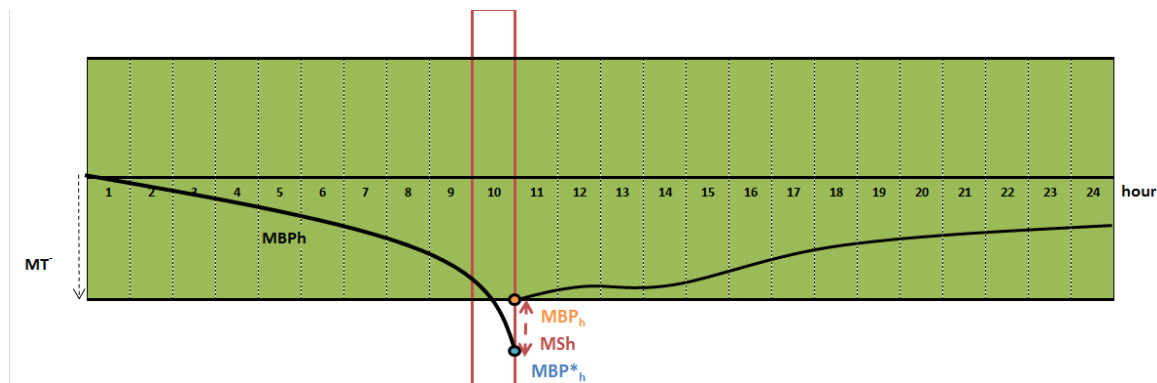
$$EBSP_{h,z} = \min( EBP_{h,z} ; GP_d \times (1 - SA_{causer}) )$$

### 5.3.4 Within-Day Market Shortfall

In case the Within-Day Market Balancing Position before settlement ( $MBP^*_{h,z}$ ) for an hour h not being the last hour of the Gas Day is lower than the lower Market Threshold ( $MT_{h,z}$ ), there is a Market Shortfall ( $MS_{h,z}$ , positive value), which is calculated as the absolute value of the difference between the Market Balancing Position before

settlement ( $MBP^*_{h,z}$ , negative value) and the Market Threshold ( $MT_{h,z}$ , negative value), rounded up (floor) taking into account the rounding ( $RMLS_{h,z}$ ):

$$MS_{h,zone} = \left\lfloor \min \left( \left[ \frac{MBP^*_{h,z} - MT^-_{h,z}}{RMLS_{h,z}} \right] * RMLS_{h,z}; 0 \right) \right\rfloor$$



This Within-Day Market Shortfall ( $MS_{h,z}$ ) is settled with the Shortfall Causing Network Users ( $SCG_{h,z}$ ), being Network Users with a negative Network User Balancing Position before settlement ( $GBP^*_{h,z}$ ).

$$SCG_{h,z} : GBP^*_{h,z} < 0$$

The Network User Shortfall ( $GS_{h,z,g}$ ) is calculated by distributing the Market Shortfall ( $MS_{h,z}$ ) according to the proportion of the Within-Day Network User Balancing Position before settlement ( $GBP^*_{h,z,g}$ ) in the sum of the Network User Balancing Positions before settlement of all Shortfall Causing Network Users, and is communicated to the Network User as set out in the Operating Procedures (ACT – Attachment C.1).

$$GS_{h,z,g} = MS_{h,z} \times \frac{GBP^*_{h,z,g}}{\sum_{\text{sum of all Shortfall Causing Grid Users}} GBP^*_{h,z}}$$

The Within-Day Network User Shortfall Balancing Settlement ( $GSBS_{h,z,g}$  - €) is equal to the Within-Day Network User Shortfall ( $GS_{h,z,g}$  - kWh) multiplied by the Shortfall Balancing Settlement Price ( $SBSP_{h,z}$  - €/kWh).

$$GSBS_{h,z,g} = GS_{h,z,g} \times SBSP_{h,z}$$

In case of Within-Day Market Shortfall, Shortfall Balancing Settlement Price ( $SBSP_{h,z}$ ) is calculated as the maximum between the Shortfall Balancing Price ( $SBP_{h,z}$ ) and the Gas Price ( $GP_d$ ) to which the Small Adjustment for causer ( $SA_{causer}$ ) is applied:

$$SBSP_{h,z} = \max( SBP_{h,z}; GP_d \times (1 + SA_{causer}) )$$

### 5.3.5 Within-Day balancing position after settlement

The Network User Balancing Position after settlement ( $GBP_{h,z,g}$ ) for an hour  $h$  (not being the last hour of the considered Gas Day) for a Zone  $z$  and for Network User  $g$  is calculated by adding the Network User Balancing Position before settlement of the considered hour ( $GBP^*_{h,z,g}$ ) to the Network User Shortfall for the considered hour ( $GS_{h,z,g}$ ), decreased by the Network User Excess for the considered hour ( $GE_{h,z,g}$ ):

$$GBP_{h,z,g} = GBP^*_{h,z,g} + GS_{h,z,g} - GE_{h,z,g}$$

The Market Balancing Position after settlement ( $MBP_{h,z}$ ) for an hour  $h$  for a Zone  $z$  is calculated by taking the sum of the Network User Balancing Position after settlement ( $GBP_{h,z,g}$ ) of all Network Users for the considered hour and Zone:

$$MBP_{h,z} = \sum_{allGridUsers} GBP_{h,z,g}$$

### 5.3.6 End-of-Day Market Excess and End-of-Day Market Shortfall

In case the End-of-Day Market Balancing Position before settlement ( $MBP^*_{d,z}$ ), being the Market Balancing Position before settlement of the last hour of the Gas Day ( $MBP^*_{last\ h,z}$ ) is a positive value, there is an End-of-Day Market Excess ( $ME_{d,z}$ ), which is equal to such End-of-Day Market Balancing Position before settlement. In case the End-of-Day Market Balancing Position before settlement is a negative value, there is an End-of-Day Market Shortfall ( $MS_{d,z}$  – positive value), which is equal to such End-of-Day Market Balancing Position before settlement (absolute value).

$$MBP^*_{d,z} = MBP^*_{last\ h,z}$$

$$\text{If } MBP^*_{d,z} > 0: ME_{d,z} = MBP^*_{d,z}; MS_{d,z} = 0$$

$$\text{If } MBP^*_{d,z} < 0: MS_{d,z} = |MBP^*_{d,z}|; ME_{d,z} = 0$$

$$\text{If } MBP^*_{d,z} = 0: MS_{d,z} = ME_{d,z} = 0$$

The Excess Causing Network Users are the Network Users with a positive End-of-Day Network User Balancing Position before settlement ( $GBP^*_{d,z}$ ), being the Network User Balancing Position before settlement of the last hour of the Gas ( $GBP^*_{last\ h,z}$ ). The Shortfall Causing Network Users are the Network Users with a negative End-of-Day Network User Balancing Position before settlement ( $GBP^*_{d,z}$ ).

$$GBP^*_{d,z} = GBP^*_{last\ h,z}$$

$$ECG_{d,z} : GBP^*_{d,z} > 0$$

$$SCG_{d,z} : GBP^*_{d,z} < 0$$

### 5.3.7 End-of-Day Settlements in case of End-of-Day Market Excess

For Excess Causing Network Users, the End-of-Day Network User Excess Balancing Settlement ( $GEBS_{d,z,g}$ ) is equal to the End-of-Day Network User Balancing Position before settlement ( $GBP^*_{d,z,g}$ ) multiplied by the End-of-Day Excess Balancing Settlement Price ( $EBSP_{d,z}$ ), multiplied by minus one (negative settlement means that amount is credited).

$$GEBS_{d,z,g} = -GBP^*_{d,z,g} \times EBSP_{d,z}$$

In case of End-Of-Day Market Excess, Excess Balancing Settlement Price ( $EBSP_{d,z}$ ) is calculated as the minimum between the Excess Balancing Price ( $EBP_{d,z}$ ) and the Gas Price ( $GP_d$ ) to which the Small Adjustment for causer ( $SA_{causer}$ ) is applied:

$$EBSP_{d,z} = \min( EBP_{d,z} ; GP_d \times (1 - SA_{causer}) )$$

For Network Users who are not causing the Market Excess (being all other Network Users than the Excess Causing Network Users), the End-of-Day Network User Shortfall Balancing Settlement ( $GSBS_{d,z,g}$ ) is equal to the End-of-Day Network User Balancing Position before settlement ( $GBP^*_{d,z,g}$  - absolute value) multiplied by the End-of-Day Shortfall Balancing Settlement Price ( $SBSP_{d,z}$ ).

$$GSBS_{d,z,g} = |GBP^*_{d,z,g}| \times SBSP_{d,z}$$

In case of End-Of-Day Market Excess, Shortfall Balancing Settlement Price ( $SBSP_{d,z}$ ) is calculated as the maximum between the Shortfall Balancing Price ( $SBP_{d,z}$ ) and the Gas Price ( $GP_d$ ) to which the Small Adjustment for helper ( $SA_{helper}$ ) is applied :

$$SBSP_{d,z} = \max( SBP_{d,z} ; GP_d \times (1 + SA_{helper}) )$$

### 5.3.8 End-of-Day Settlements in case of End-of-Day Market Shortfall

For Shortfall Causing Network Users, the End-of-Day Network User Shortfall Balancing Settlement ( $GSBS_{d,z,g}$ ) is equal to the End-of-Day Network User Balancing Position before settlement ( $GBP^*_{d,z,g}$  - absolute value) multiplied by the End-of-Day Shortfall Balancing Settlement Price ( $SBSP_{d,z}$ ).

$$GSBS_{d,z,g} = |GBP^*_{d,z,g}| \times SBSP_{d,z}$$

In case of End-Of-Day Market Shortfall, Shortfall Balancing Settlement Price ( $SBSP_{d,z}$ ) is calculated as the maximum between the Shortfall Balancing Price ( $SBP_{d,z}$ ) and the Gas Price ( $GP_d$ ) to which the Small Adjustment for causer ( $SA_{causer}$ ) is applied:

$$SBSP_{d,z} = \max( SBP_{d,z} ; GP_d \times (1 + SA_{causer}) )$$

For Network Users who are not causing the Market Shortfall (being all other Network Users than the Shortfall Causing Network Users), the End-of-Day Network User Excess Balancing Settlement ( $GEBS_{d,z,g}$ ) is equal to the End-of-Day Network User Balancing Position before settlement ( $GBP^*_{d,z,g}$ ) multiplied by the End-of-Day Excess Balancing Settlement Price ( $EBSP_{d,z}$ ), multiplied by minus one (negative balancing settlement value means that amount is credited).

$$GEBS_{d,z,g} = - GBP^*_{d,z,g} \times EBSP_{d,z}$$

In case of End-Of-Day Market Shortfall, Excess Balancing Settlement Price ( $EBSP_{d,z}$ ) is calculated as the minimum between the Excess Balancing Price ( $EBP_{d,z}$ ) and the Gas Price ( $GP_d$ ) to which the Small Adjustment for helper ( $SA_{helper}$ ) is applied:

$$EBSP_{d,z} = \min( EBP_{d,z} ; GP_d \times (1 - SA_{helper}) )$$

### 5.3.9 End-of-Day balancing position after settlement

The End-of-Day Network User Balancing Position after settlement ( $GBP_{d,z,g}$ ) for a Zone  $z$  and for Network User  $g$  is equal to 0 (zero). As a consequence the End-of-Day Market Balancing Position after settlement ( $MBP_{d,z}$ ) for a Zone  $z$  is also equal to 0 (zero).

## 5.4 Allocation Settlements

The difference between provisional allocations and the final allocations is settled via the Allocation Settlements.

The quantity to be settled for Gas Day  $d$  for a Network User  $g$ , in the Zone  $z$  for Allocation Settlement ( $AS_{d,z,g}$ ) is calculated as the sum of the difference between the provisional and final Entry Allocations ( $EEA'_{h,z,g}$  and  $EEA_{h,z,g}$  respectively) and between the provisional and final Exit Allocations ( $XEA'_{h,z,g}$  and  $XEA_{h,z,g}$  respectively).

$$AS_{d,z,g} = \sum_{h \in d} \left[ (EEA_{h,z,g} - EEA'_{h,z,g}) + (XEA_{h,z,g} - XEA'_{h,z,g}) \right]$$

The following cases can occur:

- Allocation Settlement Network User Sale ( $ASGS_{d,z,g}$ );
- Allocation Settlement Network User Purchase ( $ASGP_{d,z,g}$ ).

### 5.4.1 Allocation Settlement Network User Sale

In case the Allocation Settlement ( $AS_{d,z,g}$ ) is negative, there will be an Allocation Settlement Network User Sale ( $ASGS_{d,z,g}$  – negative value):

$$ASGS_{d,z,g} = AS_{d,z,g} * GP_{d,z,g}$$



### 5.4.2 Allocation Settlement Network User Purchase

In case the Allocation Settlement ( $AS_{d,z,g}$ ) is positive, an Allocation Settlement Network User Purchase ( $ASGP_{d,z,g}$  – positive value) will take place:

$$ASGP_{d,z,g} = AS_{d,z,g} * GP_{d,z,g}$$

## 6 Invoicing

### 6.1 General

There are 4 monthly invoices:

- Monthly Invoice;
- Monthly Self-billing Invoice;
- Monthly COM2 Invoice;
- Monthly COM2 Self-billing Invoice.

The following Fees are invoiced with the Monthly Invoice:

- Monthly Capacity Fees;
- Monthly Variable Flex Fee;
- Monthly Zee Platform Fee;
- Monthly Capacity Fee for Quality Conversion H→L;
- Monthly Variable Fee for Quality Conversion H->L;
- Monthly Capacity Fee for Quality Conversion L->H;
- Monthly Fee for implicitly allocated Transmission Service at Zeebrugge Interconnection Point for Imbalance Transfer Service.
- Monthly Energy In Cash Fee;
- Monthly Allocation Settlement Network User Purchase Fees;
- Monthly Transmission Imbalance Fee;
- Monthly Odourisation Fee;
- Monthly Fixed Fees for ZTP Trading Services and transactions;
- Monthly Incentive Fees.
- Monthly Administrative Fees.

The following Fees are invoiced with the Monthly Self-billing Invoice:

- Monthly Allocation Settlement Network User Sales Fees.

The following Fees are invoiced with the Monthly COM2 Invoice:

- Shortfall Monthly Balancing Settlement Fee;
- If applicable, Monthly Balancing Neutrality Charge Fee.

The following Fees are invoiced with the Monthly COM2 Self-billing Invoice:

- Excess Monthly Balancing Settlement Fee;
- If applicable, Monthly Balancing Neutrality Charge Fee.

For the sake of convenience, a summary of the consolidated invoices by Due Date shall be communicated to the Network User each Month, including a summary note indicating the balance to be paid to the TSO or to be reimbursed to the Network User.

## 6.2 Monthly Invoice

### 6.2.1 Monthly Capacity Fees

The Monthly Capacity Fee (*MCAF*) is calculated for the *MTSR* subscribed by or implicitly allocated<sup>18</sup> to Network User for each Connection Point, for each Transmission Service, for each Capacity Type and for each Rate Type.

Monthly Capacity Fees can either be:

- positive, for the *MTSR* subscribed by or implicitly allocated to the Network User or;
- negative, Network User will be credited by the TSO in case of buy-back, surrender of capacity or long-term use-it-or-lose-it, as described in section 6.2.1.1.

#### 6.2.1.1 Monthly Capacity Fees at Interconnection Points and Installation Points

For Yearly Transmission Services at an Interconnection Point or Installation Point IP<sup>19</sup>, the Monthly Capacity Fee is the sum, for each Gas Day of the considered Gas Month, of the terms that are the result of the following calculations:

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<sup>18</sup> In the framework of Loenhout implicit capacity allocation or through overnomination (*MTSR<sub>ONia</sub>*), or on Distribution Domestic Points

<sup>19</sup> For OCUC and Wheeling Services, IP refers to “from IP1 to IP2”

- The quantity for Network User  $g$ , of Transmission Service  $ts$ , of Capacity Type  $ct$ , with Rate Type yearly ( $y$ ), for Interconnection Point or Installation Point  $IP$ , for Gas Day  $d$  ( $MTSR_{d,ts,ct,y,IP,g}$ )<sup>20</sup>;
- multiplied by the corresponding Regulated Tariff ( $T_{ts,ct,IP}$ )
- divided by the number of Days in the considered Year ( $N_y$ ).

$$= \sum_{\text{alldays } d \text{ of month } m} \left[ MTSR_{d,ts,ct,y,IP,g} \times \frac{T_{ts,ct,IP}}{N_y} \right]$$

For Seasonal Transmission Services at an Interconnection Point or Installation Point  $IP$ <sup>23</sup>, the Monthly Capacity Fee is the sum, for each Gas Day<sup>21</sup> of the considered Month of the terms that are the result of the following calculations:

- The quantity of Network User  $g$ , for Transmission Service  $ts$ , of Capacity Type  $ct$ , with Rate Type seasonal ( $s$ ), at Interconnection Point or Installation Point  $IP$ , for Gas Day  $d$  ( $MTSR_{d,ts,ct,s,IP,g}$ )<sup>22</sup>;
- multiplied by the corresponding Regulated Tariff ( $T_{ts,ct,IP}$ );
- multiplied by the Seasonal Coefficient of the considered month  $m$  ( $SC_m$ );
- multiplied by the Non-Yearly Multiplier (NYM) where NYM=1 until 31/12/2019 and is described in the Regulated Tariff as from 01/01/2020;
- divided by the number of Days in the considered Year ( $N_y$ ).

$$= \sum_{\text{alldays } d \text{ of month } m} \left[ MTSR_{d,ts,ct,s,IP,g} \times \frac{T_{ts,ct,IP}}{N_y} \times SC_m \right]$$

In addition to the invoicing of the Regulated Tariffs as described in the first two paragraphs of this section, for Transmission Services subscribed by Network User via

<sup>20</sup> As specified in the Regulated Tariffs, for the Transmission Services booked during Within-Day Auctions, the highest hourly MTSR of the Gas Day is taken into account as  $MTSR_d$ .

<sup>21</sup> From 2020 onwards and in line with NC TAR regulation, the Monthly Capacity Fee for Seasonal Transmission Services at Interconnection Points or Installation Points

- for quarterly, monthly and daily standard capacity products will be the result of a sum of each Gas Day of the considered Gas Month as described in following formula.

$$= \sum_{\text{all days } d \text{ of month } m} \left[ MTSR_{d,ts,ct,s,IP,g} \times \frac{T_{ts,ct,IP}}{N_m} \times SC_m \times NYM \right]$$

- for within-day standard capacity products will be the result of a sum of each Gas Hour of the considered Gas Month as described in following formula.

$$= \sum_{\text{all hours } h \text{ of month } m} \left[ MTSR_{h,ts,ct,s,IP,g} \times \frac{T_{ts,ct,IP}}{N_{h,y}} \times SC_m \times NYM \right]$$

<sup>22</sup> As specified in the Regulated Tariffs, for Transmission Services booked during Within-Day Auctions, the highest hourly MTSR of the Gas Day is taken into account as  $MTSR_d$ .

an Auction, the Monthly Capacity Fee is increased by the sum of the Auction Premiums for the delivered Transmission Services of this monthly period.

Network User will be credited for an amount corresponding with the Transmission Services bought back through the buy-back procedure(s), taking into account, for each Gas Day of the considered Month, the following elements:

- The sum of the quantities per day of Firm Transmission Services ( $MTSR_{BB,d}$ ) bought back through the relevant buy-back procedure(s); multiplied with
- Price ( $P_{BB,g}$ ) for the relevant buy-back procedure,

$$= \sum_{\text{alldaysd of monthm}} \left[ \sum [MTSR_{BB,d}] \times P_{BB,g} \right]$$

In case of long term use-it-or-lose-it or surrender as described in Attachment E, Network User will also be credited.

#### 6.2.1.2 Monthly Capacity Fees at Domestic Points

For Yearly Transmission Services at a Domestic Point  $XP$ , the Monthly Capacity Fee is the sum, for each Gas Day of the considered Month, of the terms that are the result of the following calculations:

- The quantity of Network User  $g$ , of Capacity Type  $ct$ , with Rate Type yearly ( $y$ ), at Domestic Point  $XP$ , for Gas Day  $d$  ( $MTSR_{d,ct,y,XP,g}$ );
- multiplied by the corresponding Regulated Tariff(s), taking into account the physical MP and DPRS characteristics<sup>23</sup> of the considered Domestic Point ( $T_{ct,HP,XP}$ ,  $MP_{XP}$ ,  $T_{ct,MP,XP}$ ,  $DPRS_{XP}$ ,  $T_{DPRS}$ );
- divided by the number of Days in the considered Year ( $N_y$ ).

$$= \sum_{\text{alldaysd of monthm}} \left[ MTSR_{d,ts,ct,y,XP,g} \times \frac{(T_{ts,ct,HP,XP} + MP_{XP} \times T_{ct,MP,XP} + DPRS_{XP} \times T_{DPRS})}{N_y} \right]$$

For Seasonal Transmission Services at a Domestic Point  $XP$ , the Monthly Capacity Fee is the sum, for each Gas Day of the considered Month, of the terms that are the result of the following calculations:

- The quantity for Network User  $g$ , of Capacity Type  $ct$ , with Rate Type seasonal ( $s$ ), at Domestic Point  $XP$ , for Gas Day  $d$  ( $MTSR_{d,ct,s,XP,g}$ );

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<sup>23</sup> From 2020 onwards, the medium pressure and Dedicated Pressure Reduction Station service will be replaced by the Reduced Pressure Service. This service will reduce the pressure at a Domestic Point within the contractual minimum and maximum pressure limits. Hence from that date  $MP_{XP}$  and  $DPRS_{XP}$  coefficients will be replaced by  $RPS_{XP}$  and accordingly the  $T_{ct,RPS,XP}$  will be applied.

- multiplied by the corresponding Regulated Tariff(s), taking into account the physical MP and DPRS characteristics<sup>24</sup> of the considered Domestic Point ( $T_{ct,HP,XP}$ ,  $MP_{XP}$ ,  $T_{ct,MP,XP}$ ,  $DPRS_{XP}$ ,  $T_{DPRS}$ );
- multiplied by the Seasonal Coefficient of the considered month  $m$  ( $SC_m$ );
- multiplied by the Non-Yearly Multiplier (NYM) where NYM=1 until 31/12/2019 and is described in the Regulated Tariff as from 01/01/2020;
- divided by the number of Days in the considered Year ( $N_y$ ).

$$= \sum_{\text{all days } d \text{ of month } m} \left[ MTSR_{d,ct,s,XP,g} \times \frac{(T_{ts,ct,HP,XP} + MP_{XP} \times T_{ct,MP,XP} + DPRS_{XP} \times T_{DPRS})}{N_y} \times SC_m \times NYM \right]$$

For Short Term Transmission Services at a Domestic Point  $XP$ , the Monthly Capacity Fee is the sum, for each Gas Day of the considered Month, of the terms that are the result of the following calculations:

- The quantity for Network User  $g$ , of Capacity Type  $ct$ , with Rate Type Short Term (st), at Domestic Point  $XP$ , for Gas Day  $d$  ( $MTSR_{d,ct,st,XP,g}$ );
- multiplied by the corresponding Regulated Tariff(s), taking into account the physical MP and DPRS characteristics<sup>25</sup> of the considered Domestic Point ( $T_{ct,HP,XP}$ ,  $MP_{xp}$ ,  $T_{ct,MP,XP}$ ,  $DPRS_{xp}$ ,  $T_{DPRS}$ );
- multiplied by the Seasonal Coefficient of the considered month  $m$  ( $SC_m$ );
- divided by the number of Days in the considered Year ( $N_y$ );
- multiplied by the Non-Yearly Multiplier (NYM) where NYM=1 until 31/12/2019 and is described in the Regulated Tariff as from 01/01/2020;
- multiplied by the Short Term Multiplier ( $STM$ ).

$$= \sum_{\text{all days } d \text{ of month } m} \left[ MTSR_{d,ts,ct,st,XP,g} \times \frac{(T_{ts,ct,HP,XP} + MP_{XP} \times T_{ct,MP,XP} + DPRS_{XP} \times T_{DPRS})}{N_y} \times SC_m \times NYM \times STM \right]$$

<sup>24</sup> From 2020 onwards, the medium pressure and Dedicated Pressure Reduction Station service will be replaced by the Reduced Pressure Service. This service will reduce the pressure at a Domestic Point within the contractual minimum and maximum pressure limits. Hence from that date  $MP_{XP}$  and  $DPRS_{XP}$  coefficients will be replaced by  $RPS_{XP}$  and accordingly the  $T_{ct,RPS,XP}$  will be applied.

<sup>25</sup> From 2020 onwards, the medium pressure and Dedicated Pressure Reduction Station service will be replaced by the Reduced Pressure Service. This service will reduce the pressure at a Domestic Point within the contractual minimum and maximum pressure limits. Hence from that date  $MP_{XP}$  and  $DPRS_{XP}$  coefficients will be replaced by  $RPS_{XP}$  and accordingly the  $T_{ct,RPS,XP}$  will be applied.

For Fix/Flex Transmission Services at a Domestic Point  $XP^{26}$ , the Monthly Capacity Fee is the sum, for each Gas Day of the considered Month, of the terms that are the result of the following calculations:

- The quantity for Network User  $g$ , of Capacity Type  $ct$ , with Rate Type Fix/Flex ( $ff$ ), at Domestic Point  $XP$ , for Gas Day  $d$  ( $MTSR_{d,ct,ff,XP,g}$ );
- multiplied by the corresponding Regulated Tariff(s), taking into account the physical MP and DPRS characteristics<sup>27</sup> of the considered Domestic Point ( $T_{ff,HP,XP}$ ,  $MP_{XP}$ ,  $T_{ct,MP,XP}$ ,  $DPRS_{XP}$ ,  $T_{DPRS}$ );
- divided by the number of Days in the considered Year ( $N_y$ );

$$= \sum_{\text{all days } d \text{ of month } m} \left[ MTSR_{d,ts,ct,ff,XP,g} \times \frac{(T_{ff,HP,XP} + MP_{XP} \times T_{ct,MP,XP} + DPRS_{XP} \times T_{DPRS})}{N_y} \right]$$

### 6.2.1.3 For Direct Line Services

The Yearly Monthly Capacity Fee for Direct Line Services for a Direct Line  $dl$  is calculated as the sum, for each Gas Day  $d$  of the considered Month  $m$ , of the terms that are the result of the following calculations:

- The direct line quantity for Network User  $g$ , of Capacity Type  $ct$ , with Rate Type yearly ( $y$ ), at Domestic Point  $XP$ , for Gas Day  $d$  ( $MTSR_{d,dl,ct,y,XP,g}$ );
- divided by the number of Days in the considered Year ( $N_y$ ).
- multiplied by the sum of the following parameters:
  - the fix Direct Line Tariff ( $T_{dl,ct}$ ),
  - the multiplication of the Distance of the Direct Line ( $D_{dl}$ ) and the direct Line Distance Tariff ( $T_{dl,d}$ ).

$$= \sum_{\text{all days } d \text{ of month } m} \left[ \frac{MTSR_{d,dl,ct,y,XP,g} \times (T_{dl,ct} + D_{dl} \times T_{dl,d})}{N_y} \right]$$

The Seasonal Monthly Capacity Fee for Direct Line Services for a Direct Line  $dl$  is calculated as the sum, for each Gas Day  $d$  of the considered Month  $m$ , of the terms that are the result of the following calculations:

- The direct line quantity of Network User  $g$ , of Capacity Type  $ct$ , with Rate Type seasonal ( $s$ ), at Domestic Point  $XP$ , for Gas Day  $d$  ( $MTSR_{d,dl,ct,s,XP,g}$ ).

<sup>26</sup> [Service stopped from being offered as from 2020](#)

<sup>27</sup> From 2020 onwards, the medium pressure and Dedicated Pressure Reduction Station service will be replaced by the Reduced Pressure Service. This service will reduce the pressure at a Domestic Point within the contractual minimum and maximum pressure limits. Hence from that date  $MP_{XP}$  and  $DPRS_{XP}$  coefficients will be replaced by  $RPS_{XP}$  and accordingly the  $T_{ct,RPS,XP}$  will be applied.

- divided by the number of Days in the considered Year ( $N_y$ );
- multiplied by the Seasonal Coefficient of the considered month  $m$  ( $SC_m$ );
- multiplied by the sum of the following parameters:
  - the fix Direct Line Tariff ( $T_{dl,ct}$ ),
  - the multiplication of de Distance of the Direct Line ( $D_{dl}$ ) and the Direct Line Distance Tariff ( $T_{dl,d}$ ).

$$= \sum_{\text{all days } d \text{ of month } m} \left[ MTSR_{d,dl,ct,s,XP,g} \times \frac{(T_{dl,ct} + D_{dl} \times T_{dl,d})}{N_y} \times SC_m \times NYM \right]$$

#### 6.2.1.4 For Entry and Exit Services subject to a Wheeling

For Entry and Exit Services subject to a Wheeling, a Wheeling Tariff is charged instead of an Entry and an Exit Tariff.

The monthly Wheeling Fee is calculated as the sum, for each Gas Day  $d$  of the considered Month  $m$ , of the terms that are the result of the following calculations:

- The quantity of Network User  $g$ , for Entry at Interconnection Point  $IP1$  and Exit at Interconnection Point  $IP2$ , for Gas Day  $d$  ( $MTSR_{d,IP1,IP2,w,g}$ );
- divided by the number of Days in the considered Year ( $N_y$ );
- multiplied by the Wheeling Tariff ( $T_{IP1,IP2,w}$ ).

$$= \sum_{\text{all days } d \text{ of month } m} \left[ \frac{MTSR_{d,IP1,IP2,w,g} \times T_{IP1,IP2,w}}{N_y} \right]$$

#### 6.2.1.5 For Entry and Exit Services subject to an Operational Capacity Usage Commitment

For Entry and Exit Services subject to an Operational Capacity Usage Commitment, an OCUC Tariff is charged instead of an Entry and an Exit Tariff.

The monthly OCUC Fee is calculated as the sum, for each Gas Day  $d$  of the considered Month  $m$ , of the terms that are the result of the following calculations:

- The quantity of Network User  $g$ , for Entry at Interconnection Point  $IP1$  and Exit at Interconnection Point  $IP2$ , for Gas Day  $d$  ( $MTSR_{d,IP1,IP2,ocuc,g}$ );
- divided by the number of Days in the considered Year ( $N_y$ );
- multiplied by the OCUC Tariff ( $T_{IP1,IP2,OCUC}$ ).

$$= \sum_{\text{alldaysd of monthm}} \left[ \frac{MTSR_{d,IP1,IP2,ocuc,g} \times T_{IP1,IP2,OCUC}}{N_y} \right]$$

### 6.2.1.6 For Cross Border Delivery Services

As specified in the Regulated Tariffs, the applicable tariff for the implicit allocation of the Cross Border Delivery Service shall be approved by the regulator which is competent with regards to the associated Cross Border Capacity. The invoices sent to Fluxys Belgium by the Adjacent TSO which operates the Cross Border Capacity shall be invoiced “pass-through” to the Network Users having implicitly allocated the associated Cross Border Delivery Service pro rata to their respective  $MTSR_{cbds}$ .

Any potential fee reduction granted to Fluxys Belgium by the Adjacent TSO which operates the Cross Border Capacity as a result of such Cross Border Capacity interruption or any other reason including Force Majeure shall be passed through pro rata to the interrupted part of  $MTSR_{f,cbds}$ .

### 6.2.2 Monthly Variable Flex Fee<sup>28</sup>

The Monthly Variable Flex Fee ( $MVFF_{g,XP,y,m}$ ) is only applicable on Transmission Services on End User Domestic Points  $XP$  with the Fix/Flex Rate Type. This fee is calculated by taking the difference between the Total Variable Flex Fee in year  $y$  up to and including month  $n$  ( $TVFF_{g,XP,y,n}$ ) and the Total Variable Flex Fee in year  $y$  up to and including month  $n-1$  ( $TVFF_{g,XP,y,n-1}$ ) as follows:

$$MVFF_{g,XP,y,n} = TVFF_{g,XP,y,n} - TVFF_{g,XP,y,n-1}$$

The number of Running Hours of a Domestic Point  $XP$ , of Network User  $g$ , in year  $y$  up to and including month  $n$  ( $RH_{g,XP,y,n}$ ) is calculated as follows:

$$RH_{g,XP,y,n} = \frac{\sum_{\text{All months } m \in \{1, \dots, n\} \text{ in year } y} (\sum_{\text{All days } d \text{ of month } m} (\sum_{\text{All hours } h \text{ of day } d} -XEA'_{h,XP,g}))}{MTSR_{d,ff,XP,g}}$$

Based on the number of Running Hours up to and including month  $n$  ( $RH_{g,XP,y,n}$ ), on the Regulated Tariff ( $T_{flex, XP, 1 \text{ and } 2}$ ), on the subscribed capacities ( $MTSR_{d,ff,XP,g}$ ) and on the GCV of the Zone in which the Domestic Point is located ( $CGCV_z$ ), the Total Variable Flex Fee up to and including month  $n$  ( $TVFF_{g,XP,y,n}$ ) can be calculated as follows:

- For  $RH_{g,XP,y,n} \leq RH-TRH$ :

$$TVFF_{g,XP,y,n} = \frac{MTSR_{d,ff,XP,g}}{1000} * RH_{g,XP,y,n} * T_{flex,XP,1} * \frac{CGCV_{zone H}}{CGCV_z}$$

<sup>28</sup> Service stopped from being offered as from 2020



- For  $RH-TRH < RH_{g,XP,y,n}$ :

$$TVFF_{g,XP,y,n} = \frac{MTSR_{d,ff,y,XP,g}}{1000} * (RH-TRH * T_{flex,XP,1} + (RH_{g,XP,y,n} - RH-TRH) * T_{flex,XP,2}) * \frac{CGCV_{zone H}}{CGCV_z}$$

In case a pooling of capacity is facilitated under the Allocation Agreement in place on a Domestic Point  $XP$ , the Capacity Responsible Network User (as defined in the Allocation Agreement as published on the Fluxys Belgium website) has to pay the Monthly Variable Flex Fee for all Running Hours on this Domestic Point  $XP$ . These Running Hours will be based on the sum of all Allocations and the sum of subscribed MTSR for all Network Users active on this Domestic Point  $XP$ .

For the avoidance of doubt, in case of transfer of all rights and obligations except for the payment obligation of the Monthly Capacity Fee (assignment with retained payment obligation, as described in ACT – Attachment B), the MVFF remains due by the initial holder and will be calculated based on the sum of the Allocations of both the initial and final capacity holder.

### 6.2.3 Monthly Zee Platform Fee

The Monthly Zee Platform Fee for Network User  $g$  for Month  $m$  is a Fix Fee, in function of the number of Zee Platform Interconnection Points and/or Installation Point for which Network User has Zee Platform Services during the considered Month  $m$ .

### 6.2.4 Monthly Quality Conversion H->L

#### 6.2.4.1 Monthly Capacity Fee Quality Conversion H->L

The Monthly Capacity Fee for the different H→L Quality Conversion Services  $qcs$  is calculated as the sum, for each Gas Day  $d$  of the considered Month  $m$ , of the terms that are the result of the following calculations:

- The quantity of the Quality Conversion H->L Service of Network User  $g$ , of Quality Conversion Service  $qcs$  of the Capacity Type  $ct$ , for Gas Day  $d$  ( $MTSR_{d,QCH->L,qcs,ct,g}$ );
- divided by the number of Days in the considered Year ( $N_y$ ).
- Multiplied by the Regulated Tariff ( $T_{QCH->L,qcs}$ ).

$$= \sum_{all\ qcs} \left[ \sum_{all\ days\ d\ of\ month\ m} [MTRS_{d,QCH->L,qcs,ct,g}] * \frac{T_{QCH->L,qcs}}{N_y} \right]$$

#### 6.2.4.2 Monthly Variable Fee for Quality Conversion H->L

The Monthly Variable Fee for Peak Load  $pl$  Quality Conversion H->L Service is calculated as follows:

$$= \sum_{\text{all days } d \text{ of month } m} \left( \frac{\sum_{\text{All hours of day } d} - XEA'_{h,QCH \rightarrow L,pl}}{1000} \right) x T_{\text{var } QCH \rightarrow L,pl}$$

### 6.2.5 Monthly Capacity Fee Quality Conversion L->H

The Monthly Capacity Fee for Quality Conversion L->H is calculated as the sum, for each Gas Day  $d$  of the considered Month  $m$ , of the terms that are the result of the following calculations:

- The quantity for Quality Conversion L->H for Network User  $g$ , for Gas Day  $d$  ( $MTSR_{d,QCL \rightarrow H,g}$ );
- divided by the number of Days in the considered Year ( $N_y$ )
- multiplied by the Regulated Tariff ( $T_{QCL \rightarrow H}$ ).

$$= \sum_{\text{all days } d \text{ of month } m} \left[ MTSR_{d,QCL \rightarrow H,g} x \frac{T_{QCL \rightarrow H}}{N_y} \right]$$

### 6.2.6 Monthly Fee for implicitly allocated Transmission Services at the Zeebrugge Interconnection Point for Imbalance Transfer Service

The Monthly Fee for implicitly allocated Transmission Service at the Zeebrugge Interconnection Point for Imbalance Transfer Service, for Network User  $g$  for Month  $m$  is calculated as the sum, for each Gas Day of the considered Gas Month, of the terms that are the result of the following calculations:

- The quantity for Network User  $g$ , of Transmission Service  $ts$  (entry or exit) of Capacity Type  $ct$  (firm), for Gas Day ( $MTSR_{ITSia,d,ts,ct,g}$ )<sup>29</sup>  $d$ ;
- multiplied by the sum of:
  - the corresponding Regulated Tariff for IP Zeebrugge ( $T_{ts,ct,IP}$ ), multiplied by the eventually applicable Seasonal Coefficient of the considered Month  $m$  ( $SC_m$ ), multiplied by the Non-Yearly Multiplier (NYM) where NYM=1 until 31/12/2019 and is described in the Regulated Tariff as from 01/01/2020, and
  - the corresponding Regulated Tariff for implicit allocation of Transmission Services at the Zeebrugge Interconnection Point for Imbalance Transfer Service ( $T_{ITS,shortfall}$  or  $T_{ITS,excess}$ ),
  - divided by the number of Days in the considered Year ( $N_y$ )

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<sup>29</sup> As specified in the Regulated Tariffs, for the Within Day Transmission Services, the highest hourly MTSR of the Gas Day is taken into account as  $MTSR_d$  (valid until 31/12/2019).

$$= \sum_{\text{all days } d \text{ of month } m} \left[ \begin{aligned} & MTSR_{ITSia,d,entry,firm,g} \times \left( \frac{T_{entry,firm,Zeebrugge} * SC_m * NYM + T_{ITS,excess}}{N_y} \right) \\ & + MTSR_{ITSia,d,exit,firm,g} \times \left( \frac{T_{exit,firm,Zeebrugge} + T_{ITS,shortfall}}{N_y} \right) \end{aligned} \right]$$

### 6.2.7 Monthly Energy In Cash Fee

The Monthly Energy In Cash Fee is applicable on all Connection Points, except for Zeebrugge and the Installation Point “QC” and is calculated as follows:

- the sum of the final hourly Energy Allocations<sup>30</sup> EEA’<sub>h,g</sub><sup>31</sup> and XEA’<sub>h,g</sub> of the considered Gas Day for each Connection Point
- multiplied by the Energy In Cash Tariff ( $T_{EIC}$ ),
- multiplied by the Gas Price for Gas Day  $d$  ( $GP_d$ ).

$$= \sum_{\text{all days } d \text{ of month } m} \left[ \left( \sum_{\text{All hours } h \text{ of day } d} ABS(EEA'_{h,g} + XEA'_{h,g}) \right) \times T_{EIC} \times GP_d \right]$$
~~$$= \sum_{\text{all days } d \text{ of month } m} \left[ \left( \sum_{\text{All hours } h \text{ of day } d} EEA'_{h,g} \right) \times T_{EIC} \times GP_d \right] + \sum_{\text{all days } d \text{ of month } m} \left[ \left( \sum_{\text{All hours } h \text{ of day } d} XEA'_{h,g} \right) \times T_{EIC} \times GP_d \right]$$~~

### 6.2.8 Monthly Allocation Settlement Fees

The calculation of the Allocation Settlement Fees is described in Section 8 of this Attachment:

- Allocation Settlement Network User Purchase ( $ASGP_{d,z,g}$ ).

### 6.2.9 Monthly Transmission Imbalance Fees

The Monthly Transmission Imbalance Fees for the considered Month  $m$  consist of the settlement of the Transmission Imbalance for the following Services:

- Services submitted to an Operational Capacity Usage Commitment;
- Wheeling Services;
- Direct Line Services;
- Zee Platform Services.

<sup>30</sup> Including Entry, Exit, Wheeling, Entry and Exit subject to Operational Capacity Usage Commitment, Zee Platform, and Direct Line.

<sup>31</sup> In case of Domestic Points the EEA’<sub>h,g</sub> is equal to EEA’<sub>h,g,pr</sub>

These Services are normally balanced on an hourly basis, but there can be small differences, for example but not excluded to the matching process.

The Transmission Imbalance ( $TI'_{h,g}$ ) for a Network User  $g$  for a Hour  $h$  is the sum of all final Entry Allocations for the abovementioned Services increased by the final Exit Energy Allocations (negative values) for the abovementioned Services for the considered Network User for the considered Hour.

The Monthly Transmission Imbalance Settlement Fee is calculated as, for each Gas Day  $d$ , the sum of the hourly Transmission Imbalances ( $TI'_{h,g}$ ) for Network User  $g$  multiplied by the Gas Price ( $GP_d$ ) for the considered Gas Day.

$$= \sum_{\text{alldaysd of monthm}} \left[ \sum_{\text{Allhourshof day}} TI'_{h,g} \times GP_d \right]$$

### 6.2.10 Monthly Odourisation Fees

The Monthly Odourisation Fee is applicable for Domestic Points other than Distribution Domestic Points, and is calculated by multiplying the odourisation coefficient of the considered Domestic Point ( $ODO_{XP}$ ) by the sum of the final Domestic Energy Allocations ( $XEA'_{h,XP}$ ) of the considered Domestic Point for the considered Month and by the Regulated Tariff for Odourisation ( $T_{ODO}$ ).

$$= \sum_{\text{alldaysd of monthm}} \left( \frac{\sum_{\text{Allhourshof dayd}} -XEA'_{h,g,XP}}{1000} \right) \times ODO_{XP} \times T_{ODO}$$

### 6.2.11 Monthly Fixed ZTP Trading Services

#### 6.2.11.1 Monthly Fixed fees for ZTP Trading Services Fee

The Monthly Fixed ZTP Trading Services Fee, for Network User  $g$  for Month  $m$ , is equal to the Regulated Tariff “ZTP Trading Services Monthly Fixed Fee”:  $T_{FixZTP}$ .

This tariff is charged only once per Network User and per month independently of the number of ZTP Trading Services subscribed by Network User (ZTP Physical Trading Services, ZTPL Notional Trading Services and/or ZTP Notional Trading Services).

#### 6.2.11.2 Monthly Variable Fees for ZTP Trading Services and transactions

The Monthly Variable Fee for ZTP Trading Services is calculated as follows:

$$= \sum_{\text{alldaysd of monthm}} CE_{d,g} \times T_{VarZTP}$$

Where:

- $CE_{d,g}$  represents the confirmed energy (explicit or implicit – see Section 3.5), in MWh, during day “d” on ZTP Services. If for a given Day or part thereof several Nominations or Renominations have been received, the highest nominated figures shall apply for said Day and ZTP Trading Services.
- $T_{varZTP}$  is the regulated variable tariff for ZTP Trading Services

### 6.2.12 Capacity Exceedings

The calculation of the following Capacity Exceedings is described in section [3.1.33-1.3](#):

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- Peak Incentive for Exceeding of Exit Energy ( $IEXE_{m,p,rXP,g}$ );
- Non-Peak Incentive for Exceeding of Exit Energy ( $IEXE_{m,np,XP,g}$ )

### 6.2.13 Monthly Administrative Fees

- (i) Assignment on behalf of the Network User:

In case the TSO assigns a Transmission Service on the Secondary Market on behalf of the Network User, an administrative fee is due in accordance with the Regulated Tariff “Transfer of capacity – Transaction realised by Fluxys Belgium on behalf of”.

- (ii) Surrender of capacity:

In case a Network User surrenders a Transmission Service, an administrative fee for the reallocated Transmission Services is due in accordance with the Regulated Tariff “Transfer of capacity – Transaction realised by Fluxys Belgium on behalf of”.

- (iii) Cancellation of non-used capacity in case of congestion:

In case the TSO suspends a non-used capacity in case of congestion, based on a decision of the CREG as set out in Congestion Management (ACT - Attachment E), an administrative fee is charged for each cancellation for Network User g, during Month m, as set out in the Regulated Tariffs.

- (iv) Real time data delivery services on the Electronic Data Platform

In case Network User has subscribed the real time data delivery services on the Electronic Data Platform, the fix monthly Regulated Tariff for this service is due, in accordance with the Regulated Tariffs.

## 6.3 Monthly Self-billing Invoice

### 6.3.1 Monthly Allocation Settlement Network User Sales Fees

The calculation of the Allocation Settlement Fees is described in section 5.4 of this Attachment:

- Allocation Settlement Network User Sale ( $ASGS_{d,z,g}$ )

## 6.4 Monthly COM2 Invoice

### 6.4.1 Shortfall Monthly Balancing Settlement Fee

The calculation of the following Balancing Settlement Fees is described in section 5.3:

- Within-Day Network User Shortfall Balancing Settlement ( $GSBS_{h,z,g}$ );
- End-of-Day Network User Shortfall Balancing Settlement ( $GSBS_{d,z,g}$ );

The Shortfall Monthly Balancing Settlement Fee is calculated as the sum of the Shortfall Balancing Settlements for all the Hours of all the days in the Month.

### 6.4.2 Monthly Balancing Neutrality Charge Fee

The Neutrality Charge Fee and the applicable Allocation rule are determined in accordance with the Regulated Tariffs.

## 6.5 Monthly COM2 Self-Billing Invoice

### 6.5.1 Excess Monthly balancing settlement Fee

The calculation of the following Balancing Settlement Fees is described in section [5.35.3](#):

- Within-Day Network User Excess Balancing Settlement ( $GEBS_{h,z,g}$ );
- End-of-Day Network User Excess Balancing Settlement ( $GEBS_{d,z,g}$ );

The Excess Monthly Balancing Settlement Fee is calculated as the sum of the Excess Balancing Settlements for all the Hours of all the days in the Month.

### 6.5.2 Monthly Balancing Neutrality Charge Fee

The Neutrality Charge Fee and the applicable Allocation rule are determined in accordance with the Regulated Tariffs.

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