



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. $\sum_{\text{indice}} \text{variable}_i$), *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;
- 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 ~~(formerly known as grid user)~~,

- indices qcs = Quality Conversion Service; bl = base load; pl = peak load; sl = seasonal load; pr = local 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 5.25.2 .
$ASGP_{d,z,g}$	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 5.2.
$ASGS_{d,z,g}$	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 5.2.
$CE_{d,g}$	Confirmed Energy – daily value in MWh per Network User which is the nominated energy for ZTP Trading Services as provided for in section 6.2.10.2.
$CGCVz$	Conversion Gross Calorific Value – fix conversion factor per Zone z, expressed in kWh/m ³ (n) for conversion of a MTSR subscribed in m ³ (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 6.2.1.36-2.1.3 .
EA'_h	Energy (final) Allocation – hourly value per Network User and per Connection Point; expressed in kWh.
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.
$EEEN'_h$	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 Attachment B.
$EEEN''_h$	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 3.5.3.

$EIMTSR_h$	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 3.1.13-1.1 .
EM'_h	Energy (final) Measurement – hourly value per Connection Point; expressed in kWh; as provided for in section 4.
EM_h	Energy (provisional) Measurement – hourly value per Connection Point; expressed in kWh; as provided for in section 4.
$EMTSR_d$	Energy MTSR – daily value per Connection Point; expressed in kWh/h; as provided for in section 3.1.23-1.2 .
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 3.1.33-1.3 .
$EXE_{m,np}$	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 3.1.33-1.3 .
$EXE_{m,p}$	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 3.1.33-1.3 .
GCV'_h	Gross Calorific Value (final) – hourly value per Connection Point; expressed in kWh/m ³ (n); as provided for in section 3.1.23-1.2 .
GCV_h	Gross Calorific Value (provisional) – hourly value per Connection Point; expressed in kWh/m ³ (n); as provided for in section 3.1.23-1.2 .
GP_d	Gas Price – reference price for Gas Day d – daily value; expressed in €/kWh. Fluxys Belgium will publish on its website – transmission tariff webpage – 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.
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 5.1.
$IEXE_{m,np,XP}$	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 .
$IEXE_{m,p,XP}$	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 3.1.3.
$IPTh,z,g$	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

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 L → H 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 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 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 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.

<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_{1m}</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_{2m}</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_b</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_{cbds}</i>	Maximum Transmission Services Right – Cross Border Delivery Service – value per Network User and per Interconnection Point or Installation Point; expressed in kWh/h; as provided in section 3.2.23-2.2 .
<i>MTSR_d</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_{d,ct,y,XP,g}</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.
<i>MTSR_{d,ct,s,XP,g}</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 6.2.1.
<i>MTSR_{d,ct,st,XP,g}</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 6.2.1.
<i>MTSR_{d,dl,y,XP,g}</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_{d,dl,s,XP,g}</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_{d,ip1,ip2,ocuc,g}</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 6.2.1.56-2.1-5 .
<i>MTSR_{d,ip1,ip2,w,g}</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 6.2.1.46-2.1.4 .

$MTSR_{d,QCH \rightarrow L,bl,g}$	Maximum Transmission Services Right – Quality Conversion H→L, for the Quality Conversion Service Base Load bl , value per Network User for Installation Point “QC” for Gas Day d ; expressed in kWh/h; as provided for in section 6.2.36.2.3 .
$MTSR_{d,QCH \rightarrow L,pl,ct,g}$	Maximum Transmission Services Right – Quality Conversion H→L, for the Quality Conversion Service Peak Load pl , for Capacity Type ct , value per Network User for Installation Point “QC” for Gas Day d ; expressed in kWh/h; as provided for in section 6.2.36.2.3 .
$MTSR_{d,QCH \rightarrow L,sl,g}$	Maximum Transmission Services Right – Quality Conversion H→L, for the Quality Conversion Service Seasonal Load sl , value per Network User for Installation Point “QC” for Gas Day d ; expressed in kWh/h; as provided for in section 6.2.36.2.3 .
$MTSR_{d,QCtoL \rightarrow H,g}$	Maximum Transmission Services Right – Quality Conversion L→to H – value per Network User for Gas Day d ; as provided for in section 6.2.46.2.4 .
$MTSR_{d,ts,ct,s,IP,g}$	Maximum Transmission Services Right for Gas Day d for Transmission Service ts , of Capacity Type ct , of the Seasonal Rate Type, at Interconnection Point or Installation Point IP for Network User g ; expressed in kWh/h; as provided for in section 6.
$MTSR_{d,ts,ct,y,IP,g}$	Maximum Transmission Services Right for Gas Day d for Transmission Service ts , of Capacity Type ct , of the Yearly Rate Type, at Interconnection Point or Installation Point IP for Network User g ; expressed in kWh/h; as provided for in section 6.
$MTSR_e$	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 3.1.23.1.2 .
$MTSR_f$	Maximum Transmission Services Right – Firm – value per Network User and per Connection Point; expressed in kWh/h; as provided for in section 3.
$MTSR_{h,ts,ct,s,IP,g}$	Maximum Transmission Services Right for Gas Hour h for Transmission Service ts , of Capacity Type ct , of the Seasonal Rate Type, at Interconnection Point or Installation Point IP for Network User g ; expressed in kWh/h; as provided for in section 6.
$MTSR_{h,ts,ct,y,IP,g}$	Maximum Transmission Services Right for Gas Hour h for Transmission Service ts , of Capacity Type ct , of the Yearly Rate Type, at Interconnection Point or Installation Point IP for Network User g ; expressed in kWh/h; as provided for in section 6.
$MTSR_i$	Maximum Transmission Services Right – Interruptible – value per Network User and per Connection Point; expressed in kWh/h; as provided for in section 3.
$MTSR_{io}$	Maximum Transmission Services Right – Interruptible Operational – value per Network User and per Installation Point; expressed in kWh/h; as provided for in section 3.
$MTSR_{ITS}$	Maximum Transmission Services Right – Imbalance Transfer Service – value per Network User; expressed in kWh/h; as provided for in section 3.5.2.

$MTSR_{ITSia}$	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.
$MTSR_{LHCS,Y}$	Maximum Transmission Services Right eligible for L/H Capacity Sswitch Service for Gas Year Y as provided for in section 3.6.2.
$MTSR_{ONia}$	Maximum Transmission Services Right – Implicit Allocation through overnomination – value per Network User; expressed in kWh/h; as provided for in Attachment B.
$MTSR_{QCH \rightarrow L}$	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.
$MTSR_{QCtoL \rightarrow H}$	Maximum Transmission Services Right – Quality Conversion L→to H – value per Network User; expressed in kWh/h; as provided for in section 3.4.2.
$MTSR_s$	Maximum Transmission Services Right – Seasonal – value per Network User and per Connection Point, expressed in kWh/h; as provided for in section 3.
$MTSR_{st}$	Maximum Transmission Services Right – Short Term – value per Network User and per Domestic Point, expressed in kWh/h; as provided for in section 3.
$MTSR_x$	Maximum Transmission Services Right – Exit – value per Network User and per Connection Point; expressed in kWh/h; as provided for in section 3.
$MTSR_y$	Maximum Transmission Services Right – Yearly – value per Network User and per Connection Point; expressed in kWh/h; as provided for in section 3.
$MTSR_{zpf}$	Maximum Transmission Services Right – Yearly – unlimited MTSR per Network User to transmit natural gas between Zee Platform Interconnection Points and Installation Point; on the conditions as set out in section 3.2.2.
$NCTT_{h,g,z}$	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.
$NCTT'_{h,g,z}$	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.

$NCTN_{h,g,z}$	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.
$NCTN^1_{h,g,z}$	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 6.2.96-2.9 .
$OF_{m,JPorXP,g}$	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 Connected Point, as provided for in section 3.1.33-1.3 .
$P_{BB,g}$	Price for buy back paid by the TSO – daily; expressed in €/kWh/h/d as provided for in section 6.2.16-2.1 .
$P_{LH,Y}$	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 6.
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 $T_{flex,ff,XP,2}$ such as described in section 6.

PS_{XP}	Pressure Service - value per Domestic Point; physical characteristic of a Domestic Point; equals 1 if the Domestic Point is equipped with a PS, and 0 otherwise, for Distribution Domestic Points, please refer to section 6.2.1.26-2.1.2 .
SC_m	Seasonal Coefficient – monthly value; factor used for defining the seasonal capacity tariff versus the yearly capacity tariff, using a quarterly factor for any (sub)period that represents a standard quarterly product, and a monthly factor for all other periods, as defined in the Regulated Tariffs, as provided for in section 6.16.1 . In case of a capacity service obtained through a transaction such as secondary market or a substitution service, the Seasonal Coefficient is determined by the original service period.
Shipper Code	A code that identifies a Network User when submitting a nomination for its Transmission Services. Such code is related to the operational systems of the TSO.
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.
$T_{ct,PS,XP}$	Tariff for PS Supply of Capacity Type ct at Domestic Point XP – Regulated Tariff; expressed in € / kWh/h / year, as provided for in section 6.
$T_{dt,ct}$	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_{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.
$T_{IP1,IP2,OCUC}$	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 6.2.5.
T_{ODO}	Tariff for Odorisation – variable term – Regulated Tariff; expressed in €/MWh; as provided for in section 6.2.96-2.9 .

$T_{QCH \rightarrow L, bl}$	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.
$T_{QCToL \rightarrow H}$	Tariff for Quality Conversion L→to <u>to</u> H Service – 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.
$TI^1_{h, g}$	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 6.2.86.2.8 .
$TXEA_{h, z, g}$	Total Exit Energy Allocations – hourly value per Zone, per Network User, expressed in kWh, as provided for in Attachment C section 5.1.4.
XEA^1_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^1_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 Attachment 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 Interconnection Points or Installation Point (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, completed the integration of their respective H market zones on 1 October 2015. The resulting BelLux area 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 Exit Points for each Zone. Each Interconnection Point, Installation Point and Domestic Exit Point is located in one Zone¹.

Each Transmission Service is characterized by respectively a ~~Location~~ **Connection Point** (Interconnection Point, Installation Point or Domestic Point), by a Capacity Type, a Rate Type and a Service Duration (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 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.
- Interruptible capacity ($MTSR_i$, $MTSR_{io}$) can be interrupted by the TSO, following the rules described in ACT – Attachment C1.
- Backhaul capacity ($MTSR_b$) can be 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:

¹ Except for the Installation Point “Quality Conversion” which is located both in the H Zone and the L Zone.

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 (1)	H	X		O	X		O
Eynatten 2 (1)	H	X		O	X		O
IZT	H	X		O	X		O
Hilvarenbeek L	L	X		O		X	
VIP-BENE (1)	H	X		O	X		O
VIP THE-ZTP (1)	H	X		O	X		O
Virtualys (1)	H	X		O	X		O
Zeebrugge	H	X		O	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					
<u>H₂-IN²</u>	<u>H</u>	<u>X</u>					

- 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.
- 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)	New IP (name) "virtual"
- Blaregnies Segeo	- Virtualys
- Blaregnies Troll	- Virtualys
- Alveringem	- Virtualys
- 's Gravenvoeren	- VIP-BENE
- Zandvliet H	- VIP-BENE
- Zelzate 1	- VIP-BENE
- Zelzate 2	- VIP-BENE
- Eynatten 1	- VIP THE-ZTP (as from 01/04/2022, subject to a pre notice of 4 weeks)
- Eynatten 2	- VIP THE-ZTP (as from 01/04/2022, subject to a pre notice of 4 weeks)

The Quality Conversion Service H→L³ 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.

² [aAs from 01/07/2023, subject to a pre notice of 4 weeks](#)

³ [Service will be stopped as from 01/04/2023](#)

The Quality Conversion Service ~~L~~to H ~~consists of~~offers the possibility to inject ~~Natural-H₂ or L-gas~~Gas into the H Zone ~~where it can be blended with H-gas so that the mix is a Compatible Gas~~. The Capacity Type is Interruptible.

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	-	○
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 ($MTSR_{st}$);

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:

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= $x < 1$ 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	$MTSR_{d,x,ct,y,XP}$
	1 month = $x < 1$ 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	$MTSR_{d,e,ct,y,XP}$
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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.

Exit Transmission Services on Domestic Points always include the high pressure (HP) Exit Service and may include the Pressure Service (PS) and odorisation (ODO).

- Via the Pressure Service (PS), Fluxys Belgium reduces the pressure at a Domestic Point within the contractual minimum and maximum pressure limits.
- 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 6) of these services in function of the respective coefficients PS_{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 website⁴.

Entry Transmission Services on Domestic Points always include the Entry Service and may include the Pressure Service (PS). Via the Pressure Service, Fluxys Belgium increases the pressure to the operating pressure of the network at which a Domestic Point is connected.

The subscription of Entry Capacity at Domestic Points ($MTSR_{d,e,ct,y,XP}$) implies the delivery (and the payment, according to section 6) of these services in function of the coefficient PS_{XP} . This coefficient is set per Domestic Point, has a value between 0 and 1 and is published on Fluxys Belgium's website⁵.

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, 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 Gas Day.

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

⁴ <http://www.fluxys.com/belgium/en/Services/Transmission/TransmissionTariffs/TransmissionTariffs>

⁵ <http://www.fluxys.com/belgium/en/Services/Transmission/TransmissionTariffs/TransmissionTariffs>

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.

The Energy Exit Exceeding ($EXE_{d,XP,g}$)⁶, 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:

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

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

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

⁶ In the case where the Allocation Agreement between the Network Users and the End User allows the pooling of Subscribed Transmission Services at an End User Domestic Exit Point, the Exit Energy's Exceeding will take it into account.

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).

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 1⁷

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

- Entry Eynatten 1 or Eynatten 2⁸, with Exit 's VIP BENE⁹
- Entry VIP BENE, with Exit Eynatten 1 or Eynatten 2¹⁰
- Entry VIP-BENE, with Exit IZT or Zeebrugge
- Entry IZT or Zeebrugge, with Exit VIP-BENE
- Entry Dunkirk LNG Terminal or Virtualys, 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 Connection Point:

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

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

⁷ As from 01/04/2022 the service will be stopped (subject to a pre notice of 4 weeks)

⁸ [As from 01/04/2022 Entry Eynatten 1 or Eynatten 2 will be replaced by Entry VIP THE-ZTP \(subject to a pre notice of 4 weeks\)](#)

⁹ [As from 01/04/2022 Entry Eynatten 1 or Eynatten 2 will be replaced by Entry VIP THE-ZTP \(subject to a pre notice of 4 weeks\)](#)

¹⁰ As from 01/04/2022 Exit Eynatten 1 or Eynatten 2 will be replaced by Exit VIP THE-ZTP (subject to a pre notice of 4 weeks)

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 kWh/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 ZPT 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	>= 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→L¹¹

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→L¹² ($MTSR_{QCH \rightarrow L, sl}$) 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→L¹³ ($MTSR_{QCH \rightarrow L, bl}$) 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→L¹⁴:

Peak load	Firm	177.000 m ³ (n)/h = 1.734.600 kWh/h	1.734.600 bundles
	Interruptible	23.010 m ³ (n)/h = 225.498 kWh/h	
Base load	Firm	100.000 m ³ /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 - Attachment C.3). The Nominations shall not exceed the Real Conversion Capacity of Network User.

¹¹ Service will be stopped as from 01/04/2023

¹² Seasonal load quality conversion service will only be available until 31 March 2023 for Gas Year 2022-2023, afterwards the Service will no longer be available.

¹³ Base load quality conversion service will only be available until 31 March 2023 for Gas Year 2022-2023, afterwards the Service will no longer be available.

¹⁴ 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.

3.4.2 Quality Conversion Services ~~L~~→to H

The Quality Conversion Service ~~L~~to H ~~consists of enables~~ the ~~possibility to injection of L Natural H₂ or L-gas (L gas or H₂)~~ into the H Zone ($MTSR_{QC\to L\to H,i}$) ~~where it can be blended with H-gas so that the mix is a Compatible Gas.~~

Quality Conversion to H service is offered at following Installation Points :

<u>Installation Points</u>	<u>Gas injected</u>
<u>Quality Conversion-(“QC”)</u>	<u>L-gas</u>
<u>“H₂-IN¹⁵”</u>	<u>H₂</u>

Quality Conversion Services ~~to H~~ can be subscribed as set out in Subscription & Allocation of Services (ACT - Attachment B). ~~No additional Transmission Services 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 Pooling Service and 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 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 ($IP_{T,h,z,g}$) as follows:

- the Imbalance Transferor shall authorise that the (whole) hourly Net Confirmed Title Transfer for ZTP Physical Trading Services ($NCTP_{h,g,z}$) being positive as well as negative shall be transferred to the Imbalance Transferee;
- the Imbalance Transferee shall authorise that the (whole) hourly Net Confirmed Title Transfer for ZTP Physical Trading Services ($NCTP_{h,g,z}$) of the Imbalance Transferor, if any, being positive as well as negative shall be transferred from the Imbalance Transferor to the Imbalance Transferee;
- 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 for in section 3.5.3;

¹⁵ As from 01/07/2023, subject to a pre notice of 4 weeks

- 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 Physical Trading Services and will be accounted for as transactions for both Parties in accordance with Section 6.2.10.2;
- a Network User can only perform the role of either Imbalance Transferor or Imbalance Transferee;

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.

Balansys offers also an imbalance pooling service which allow Network Users to pool their hourly imbalance. This transfer of the hourly imbalance of the network user balancing position will be performed by Balansys for which Balansys instructs Fluxys Belgium on behalf of the network user to perform an implicit Nomination on the ZTP Notional Trading Services for the amount of such hourly imbalance in order to transfer the hourly imbalance from the transferor to the transferee hence Network Users will be accounted for by Fluxys Belgium as transactions for both Parties in accordance with Section 6.2.10.2.

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 ($EEN^{tm}_{h,g}$, $XEN^{tm}_{h,g}$) 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 at 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, and 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.

3.6.2.1 L Capacity Switch Service for Entry Transmission Services

The L/H Capacity Switch Service for Entry Transmission Services is offered each Gas Year, free of charge, to Network Users having a $MTSR_{d,t,y,IP}$ Entry on a L-gas Interconnection Point 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 for Entry Transmission Services. 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 the 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 for Entry Transmission Services on a L-gas Interconnection Point 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 Grid-Network User holds on that Interconnection Point IP on the 1st of January 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 for Entry Transmission Services, TSO shall offer to the Network User holding $MTSR_{LHCS,Y+1}$ on a L-gas IP 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.

Once the conversion in Belgium is done and $P_{LH,Y}$ is equal to 100%, the Network User holding $MTSR_{LHCS,Y+1}$ on a L-gas IP has the possibility to transfer (part of) the underlying existing Transmission Services for the remaining period of the contract as from 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 and the same contract duration as the existing Transmission Services to be transferred. For contracts not ending on a Gas Year, the last remaining period can be spread out over a Gas Year to be equal in quantity.

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

3.6.2.2 L Capacity Switch Service for Exit Transmission Services

The L Capacity Switch Service for Exit Transmission Services is offered each Month, free of charge, to Network Users having a $MTSR_{d,t,IP}$ Exit with a booking date before October 1st 2021 on a L-gas Interconnection. Only unbundled Firm Exit Transmission Services with a Yearly rate type are eligible for the L Capacity Switch Service for Exit Transmission Services. Moreover, Transmission Services that are assigned with retained payment obligation cannot be transferred under the L Capacity Switch Service by the assignor nor the assignee.

The quantity that will be eligible for the L Capacity Switch Service for Exit Transmission Services on a L-gas Interconnection Point for Month M shall be equal to the $MTSR_{M,IP,x}$ such Network User holds on that Interconnection Point IP for the concerned Month M multiplied by the applicable percentage as shown in the table below. The percentage represents the conversion rate in France and is based on the available information in the Winter Report 2021 Task Force Monitoring L-Gas Market Conversion.

<u>Gas Year</u>	<u>Percentage for L Capacity Switch Service for Exit Transmission Services</u>
<u>2021-2022</u>	<u>10,3%</u>
<u>2022-2023</u>	<u>19,9%</u>
<u>2023-2024</u>	<u>41,5%</u>

In the framework of the L Capacity Switch Service for Exit Transmission Services, TSO shall offer to the Network User holding $MTSR_{d,t,IP}$ Exit with a booking date before October 1st 2021 on a L-gas IP the possibility to transfer (part of) the underlying existing Transmission Services for the next Month under the strict condition that the Network User subscribes new Exit Transmission Services on Interconnection Points of the L-Zone for the same period that

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 L Capacity Switch 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 Month, a Quarter or a Gas Year between the following Interconnection Points or Installation Point that are at the same grid location :

- Eynatten 1 and Eynatten 2¹⁶
- 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 website¹⁷.

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.

3.7.2 Additional Shipper Code Service

Without prejudice to the existing rules in the ACT for nominations and the Shipper Codes, Network Users have the possibility to request one additional Shipper Code (in addition to the standard Shipper Code for an activity) for the purpose of Nominations for Entry-Exit activities on the Transmission Network.

This additional Shipper Code shall follow the existing rules for nominations and balancing in force for transmission and Network Users shall apply them accordingly. For the avoidance of doubt, in case of unbalanced services, the Network User's imbalance shall consist of the aggregated confirmations of the applicable Shipper Codes.

¹⁶ As from 01/04/2022 this service will no longer be available for (subject to a pre notice of 4 weeks)

¹⁷ 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

No tariff is currently charged for the additional Shipper Code, but the TSO reserves the right to apply a fee in the Regulated Tariffs to this Service in the future.

The Network User can request an additional Shipper Code by providing the Request Form for Additional Shipper Code Service to the TSO, as published on the Fluxys Belgium website.

4 Nominations, Metering and Allocations

4.1 Overview

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

		Connection Point	
		Entry	Exit
Nominations	Last accepted	EEN^L_h	XEN^L_h
	Last confirmed	EEN^{m}_h	XEN^{m}_h
Allocations	Provisional	EEA_h	XEA_h
	Final	EEA'_h	XEA'_h
Metering	Provisional	EM_h & GCV_h	EM_h & GCV_h
	Validated	EM'_h & GCV'_h	EM'_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, Installation Point or End User Domestic Point, the Network User shall send Nominations and renominations, if applicable, ~~renominations~~ to the TSO, according to the Operating Procedures (ACT – Attachment C.1 ; ACT – Attachment C.3 for Quality Conversion Services).

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 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 Connection 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 the latest on M+3months+ for every hour.

5 Balancing and Allocation settlement

Balancing Services are operated by the Balancing Operator, 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 between the Network User and the concerned TSO of the BeLux Area.

5.1 Hourly exchange of information between the TSO and the Balancing Operator

For the purposes of enabling Balancing Operator to provide the Balancing Services, the concerned TSOs of the BeLux Area shall send hourly imbalance information by Network User g , for each Zone z and for each hour h to the Balancing Operator.

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 Allocations¹⁸ for Network User for the Connection Points of the considered Zone ($EEA_{h,z,g}$) increased by the provisional hourly Exit Energy Allocations¹⁸ (negative values) for Network User g for the Connection Points of the considered Zone ($XEA_{h,z,g}$), increased by the Net Confirmed Title Transfers for ZTP Notional Trading Services¹⁹ ($NCTTN_{h,z,g}$):

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

5.2 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).

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

The following cases can occur:

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

5.2.1 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):

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

¹⁸ Entry and Exit Services submitted to an OCUC 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).

¹⁹ 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

5.2.2 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 2 monthly invoices:

- Monthly Invoice;
- Monthly Self-billing Invoice.

The following Fees are invoiced with the Monthly Invoice:

- Monthly Capacity Fees;
- Monthly Zee Platform Fee;
- Monthly Capacity Fee Quality Conversion H→L;
- Monthly Variable Fee for Quality Conversion H→L;
- Monthly Capacity Fee Quality Conversion L→to H;
- Monthly Fixed Fees for ZTP Trading Services;
- 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 Odorisation Fee;
- Monthly Variable 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.

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 allocated²⁰ 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 the Network User or; 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 IP²¹, the Monthly Capacity Fee is the sum, for each Gas Hour 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 , of Capacity Type ct , with Rate Type yearly (y), for Interconnection Point IP , for Gas Day d ($MTSR_{h,ts,ct,y,IP,g}$);
- multiplied by the corresponding Regulated Tariff ($T_{ts,ct,IP}$)
- divided by the number of Hours in the considered Year ($N_{h,y}$).

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

For Seasonal Transmission Services at an Interconnection Point or Installation Point IP²², the Monthly Capacity Fee is the sum, for each Gas Hour 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 ($MTSR_{h,ts,ct,s,IP,g}$);
- 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) described in the Regulated Tariff;
- divided by the number of Hours in the considered Year (N_y).

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

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 an Auction, the

²⁰ In the framework of Loenhout implicit capacity allocation or through overnomination ($MTSR_{ONIG}$), or on Distribution Domestic Points

²¹ For OCUC and Wheeling Services, IP refers to “from IP1 to IP2”

²² For OCUC and Wheeling Services, IP refers to “from IP1 to IP2”

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,

$$= \sum_{\text{all days } d \text{ of month } m} \left[\sum [M T S R B_d] \times P_{BB,g} \right]$$

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 ($MTSR_{h,ct,y,XP,g}$);
- multiplied by the corresponding Regulated Tariff(s), taking into account the physical PS characteristics of the considered Domestic Point ($T_{ts,ct,HP,XP}$, PS_{XP} , $T_{ct,PS,XP}$, i);
- divided by the number of Days in the considered Year (N_y).

$$= \sum_{\text{all days } d \text{ of month } m} [MTSR_{d,ts,ct,y,XP,g} \times \frac{(T_{ts,ct,HP,XP} + PS_{XP} \times T_{ct,PS,XP})}{N_y}]$$

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 ($MTSR_{d,ct,s,XP,g}$);
- multiplied by the corresponding Regulated Tariff(s), taking into account the physical PS characteristics of the considered Domestic Point ($T_{ct,HP,XP}$, PS_{XP} , $T_{ct,PS,XP}$);
- multiplied by the Seasonal Coefficient of the considered month m (SC_m);
- multiplied by the Non-Yearly Multiplier (NYM) described in the Regulated Tariff ;
- divided by the number of Days in the considered Year (N_y).

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

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 PS characteristics of the considered Domestic Point ($T_{ct,HP,XP}$, PS_{XP} , $T_{ct,PS,XP}$);
- 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) described in the Regulated Tariff
- multiplied by the Short Term Multiplier (STM).

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

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 de Distance of the Direct Line (D_{dl}) and the Direct Line Distance Tariff ($T_{dl,d}$).

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

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 ($MTSR_{d,dl,ct,s,XP,g}$).
- 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 Non-Yearly Multiplier ("NYM") included in the tariff sheet
- 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 ($T_{IP1,IP2,OCUC}$).

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

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 $MTSR_{f,cbsd}$.

6.2.2 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 .

6.2.3 Monthly Quality Conversion H→L Capacity Fee

6.2.3.1 Monthly Capacity Fee for 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 ($T_{QCH→L,qcs}$).

$$= \sum_{\text{all } qcs} \left[\sum_{\text{all days } d \text{ of mont } m} [MTSR_{d,QCH→L,qcs,ct,g}] * \frac{T_{QCH→L,qcs}}{N_y} \right]$$

6.2.3.2 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:

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

6.2.4 Monthly Capacity Fee for Quality Conversion L→to H

The Monthly Capacity Fee for Quality Conversion L→to H Service 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→to H for Network User g , for Gas Day d ($MTSR_{d,QCL→toH,g}$);
- divided by the number of Days in the considered Year (N_y)
- multiplied by the Regulated Tariff ($T_{QCL→toH}$).

~~$$= \sum_{\text{all days } d \text{ of month } m} \left[MTSR_{d,QCL→toH,g} * \frac{T_{QCL→toH}}{N_y} \right] = \sum_{\text{all days } d \text{ of month } m} [MTSR_{d,QCLtoH,g} * \frac{T_{QCLtoH}}{N_y}]$$~~

6.2.5 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 Hour 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 d ($MTSR_{ITSia,h,ts,ct,g}$);
- 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) described in the Regulated Tariff, 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 Hours in the considered Year (N_y)

$$= \sum_{\text{all hours } h \text{ of month } m} \left[MTSR_{ITSia,h,entry,firm,g} \times \left(\frac{T_{entry,firm,Zeebrugge} * SC_m * NYM + T_{ITS,excess}}{N_{y,h}} \right) + MTSR_{ITSia,h,exit,firm,g} \times \left(\frac{T_{exit,firm,Zeebrugge} + T_{ITS,shortfall}}{N_{y,h}} \right) \right]$$

6.2.6 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 ²³ $EEA'_{h,g}$ ²⁴ and $XEA'_{h,g}$ 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).

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

6.2.7 Monthly Allocation Settlement Fees

The calculation of the Allocation Settlement Fees is described in Section 5.2.2. of this Attachment:

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

²³ Including Entry, Exit, Wheeling, Entry and Exit subject to Operational Capacity Usage Commitment, Zee Platform, and Direct Line.

²⁴ In case of Domestic Points the $EEA'_{h,g}$ is equal to $EEA'_{h,g,pr}$

6.2.8 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.

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.

$$= \sum_{\text{all days } d \text{ of month } m} \left[\sum_{\text{All hours } h \text{ of day } d} TI'_{h,g} \times GP_d \right]$$

6.2.9 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 Exit Energy Allocations ($XEA'_{h,XP}$) of the considered Domestic Point for the considered Month and by the Regulated Tariff for Odourisation (T_{ODO}).

$$= \sum_{\text{all days } d \text{ of month } m} \left(\frac{\sum_{\text{All hours } h \text{ of day } d} - XEA'_{h,XP}}{1000} \right) \times ODO_{XP} \times T_{ODO}$$

6.2.10 Monthly ZTP Trading Services Fee

6.2.10.1 Monthly Fixed fees for ZTP Trading Services Fee

The Monthly Fix 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).

6.2.10.2 Monthly Variable Fees for ZTP Trading Services and transactions

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

$$= \sum_{\text{all days } d \text{ of month } m} CE_{d,g} \times T_{VarZTP} = \sum_{\text{all days } d \text{ of month } m} CE_{dg} \times T_{VarZTP}$$

Where:

- $CE_{d,g}$ represents the confirmed energy (explicit or implicit – see Section 3.5), in MWh, during day “d” on ZTP Services.
- T_{VarZTP} is the regulated variable tariff for ZTP Trading Services

6.2.11 Capacity Exceedings

The calculation of the following Capacity Exceedings is described in section [3.1.33.1-3](#):

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

6.2.12 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

~~6.3.1.16.3.1~~ Monthly Allocation Settlement Network User Sales Fees

The calculation of the Allocation Settlement Fees is described in section 5.2 of this Attachment:

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