Please note that although Gasunie Transport Services B.V. translated the Dutch network codes with utmost care, Gasunie Transport Services B.V. would like to point out that only the decisions of the Dutch Authority for Consumers and Markets establishing the codes as referred to in article 12f of the Dutch Gas Act, are legally binding. Gasunie Transport Services B.V. is not liable for any losses or damages of any kind arising out of possible errors or omissions.

Transmission Code Gas TSO Valid from 3 June 2020 to present

Decision of the Dutch Authority for Consumers and Markets of April 21, 2016, reference ACM/DE/2016/202163, regarding the adoption of the conditions as referred to in article 12b of the Dutch Gas Act (Transmission Code Gas – TSO)

The Dutch Authority for Consumers & Markets

In view of article 12f, paragraph 1, of Dutch the Gas Act;

Decides:

1. Scope and definitions

This code contains conditions relating to the transmission service and the gas processing, treatment and mixing service, as referred to in Article 10a, first paragraph, under p of the Dutch Gas Act. Terms defined in Regulation 715/2009, NC-BAL, NC-CAM, NC-TAR, Dutch Gas Act or in the Gas Code of Definitions, have the meaning as defined in Regulation 715/2009, NC-BAL, NC-CAM, NC-TAR, Dutch Gas Act, or Gas Code of Definitions.

2. Services

2.1. Transmission

2.1.1.

Transmission shall occur in accordance with an agreement concluded with the network operator of the transmission system, which entails the transmission system operator taking gas supplied at an entry point on the transmission system and making gas available at an exit point. Entry capacity and exit capacity may be contracted independently of each other with the network operator of the transmission system.

2.1.1a

- 1. For the implementation of Article 12b, paragraph 2a, under b and c, of the Gas Act, the following is determined.
- 2. The network operator of the national gas transmission network shall inform the network users in an appropriate manner about the current list of its entry and exit points, classified according to relevant market segments, and publishes the current list on its website.

- The network operator of the national transmission system determines entry points and exit points on the basis of objective, transparent and nondiscriminatory conditions and takes into account the interests of network users.
- 4. The determination of entry and exit points in this article includes the termination of entry and exit points.
- 5. If the entry or exit point is terminated due to the ending of physical gas flows or an entry or exit point arises due to new physical gas flows, the procedure as determined in this article does not apply.
- 6. An intention to change the determination of interconnection point (s) leading to the termination of all interconnection points between two entry-exit systems (market integration) will be announced by the network operator of the national gas transmission network at least 18 months prior to the planned implementation date, in collaboration with the other transmission system operator (s). This announcement takes place by publishing the intention on the network operator's website and by sending the intention to the ACM.
- 7. The intention, referred to in paragraph 6, contains at least:
 - a. an analysis of the costs and benefits of terminating the relevant interconnection points;
 - an analysis of the financial consequences of the termination of the relevant interconnection points for the network users of the relevant entry-exit systems. The network operator of the national transmission system provides insight into the financial consequences on the basis of a calculation specified by year for a period of at least five years;
 - c. information on the technical and operational provisions that must be made for the termination of the interconnection points concerned and the agreements made regarding these provisions with the other transmission system operator (s).
- 8. The network operator of the national transmission system shall give network users the opportunity to send a written response to the intention within six weeks of the publication of the intention. The network operator of the national transmission system sends the ACM a copy of the responses it received to the published intention.
- 9. The network operator of the national transmission system will not implement the intention until after:
 - a. ACM has assessed whether the termination of the interconnection points concerned takes place in accordance with the criteria referred to in paragraph 3;
 - b. ACM and the relevant foreign national regulatory authority (s) have established the technical and operational measures to be taken by the transmission system operators concerned;
 - c. ACM and the relevant foreign national regulatory authority (s) have determined whether and, if so, which compensation measure should be taken because of the principle of cost inducement to compensate for the transport of gas between the transmission system operators involved. The compensation measure limits the adverse effects on the revenues of the transmission system operators involved and prevents unauthorized cross-subsidies between network users. The reimbursement measure also contributes to cost-reflective tariffs.

- 10. The actions referred to in paragraphs 9, a, b and c will be implemented within a period of 12 months or faster if that is possible. Exceeding this term does not relieve the network operator of the national transmission system of the obligation not to implement the intention until the procedure described in subsection 9 in parts a, b and c has been completed. The ACM will announce the results of the procedures referred to in subsection 9 sections a up to and including c in a suitable manner.
- 11. If the network operator of the national transmission system intends to establish an entry or exit point, other than due to market integration, the following procedure applies:
 - a. The network operator of the national transmission system must notify the ACM of this intention no later than two months before it wishes to implement this intention.
 - b. The ACM assesses this intention on a material effect for the network users and shares the outcome of this assessment with the network users.
 - c. If there is a material effect, the network operator of the national transmission system will consult with the network users.
 - d. If there is a material effect, the ACM will, within a period of three months or faster if possible:
 - 1°. assess whether the entry or exit point is determined in accordance with the criteria referred to in paragraph 3;
 - 2°. determine whether and, if so, which compensatory measure should be taken because of the principle of cost inducement in order to prevent unauthorized cross-subsidies between network users. The compensatory measure contributes to cost-reflective rates.
- 12. The network operator of the national transmission system will not implement its intention, as referred to in paragraph 11, until the procedure in paragraph 11, sections a up to and including d, has been completed.

2.1.2. Entry and exit capacity

Description of the service

Contracted entry capacity grants the right to feed a quantity of gas per hour into the transmission system at an entry point. Contracted exit capacity grants the right to extract a quantity of gas per hour from the transmission system at an exit point.

Contracting and allocation

Entry and exit capacity are available in different capacity products. The capacity products differ with regard to the start date and start time, the duration for which entry or exit capacity is contracted, and the price that applies to the capacity product.

At interconnection points, the transmission system operator provides, in accordance with Article 9 of NC-CAM, standard yearly capacity products, standard quarterly capacity products, standard monthly capacity products, standard daily capacity products, and standard within-day capacity products. These standard capacity products are contracted and allocated to recognised programme-responsible parties by auction, as laid down in NC-CAM.

At domestic entry and exit points, a distinction is made between yearly capacity products, quarterly capacity products, monthly capacity products, daily capacity products, and within-day capacity products. Yearly, quarterly, monthly, daily, and within-day capacity products have the same start date, start time, and duration at domestic entry and exit points as the standard capacity products described in Article 9 of NC-CAM, with the exception of the start date of yearly capacity products, which can be on the first day of any gas month. At domestic entry and exit points, other than exit points that connect the transmission system and a distribution system, these capacity products are contracted and allocated to recognised programme-responsible parties or connected parties with exit capacity on a first-come-first-served basis. At domestic exit points that connect the transmission system and a distribution system, the exit capacity is contracted in accordance with the provisions of 2.1.2b to 2.1.2e.

If a recognised programme-responsible party or connected parties with exit capacity at domestic entry and exit points contract entry or exit capacity at an entry or exit point on the same day in any given combination of quarterly, monthly, and daily capacity products, the transmission system operator shall, at the request of the recognised programme-responsible party or connected parties with exit capacity, do the following for each tranche of the same quantity of contracted entry or exit capacity:

- a. If the payable price for the combination of contracted quarterly, monthly, and daily capacity products is greater than the price of a yearly capacity product, then the yearly capacity product shall be contracted for the tranche in question, provided the required capacity is available at the relevant entry or exit point;
- b. If the payable price for the combination of contracted monthly and daily capacity products in one gas quarter is greater than the price of the relevant quarterly capacity product, then the relevant quarterly capacity product shall be contracted, provided the required capacity is available at the relevant entry or exit point; or
- c. If the payable price for the combination of contracted daily capacity products in one month is greater than the payable price for the monthly capacity product, then the relevant monthly capacity product shall be contracted, provided the required capacity is available at the relevant entry or exit point.

Interruptible entry and exit capacity

Entry and exit capacity can be offered by the national gas transmission network operator in the form of interruptible transmission capacity. Contracted interruptible entry capacity grants a provisional right to feed a quantity of gas per hour into the transmission system at an entry point. Contracted interruptible exit capacity grants a provisional right to extract a quantity of gas per hour from the transmission system at an exit point. The transmission system operator only offers interruptible entry capacity or exit capacity if firm entry capacity or firm exit capacity is no longer available. Interruptible entry or exit capacity can only be used if the network users of the transmission system who have firm entry or exit capacity at the entry or exit point in question at their disposal or have earlier contracted interruptible entry or exit capacity do not (fully) use their entry capacity or exit capacity, respectively. If this condition is not met, the network user at the entry or exit point in question may be interrupted. The interruption shall be carried out in the sequence of the timestamps determined in 5.1.6, and in the case of identical timestamps, in proportion to the nominations.

Other conditions

At domestic entry and exit points, the transmission system operator shall, subject to the provisions of 2.1.12, to the extent existing firm entry capacity or existing firm exit capacity becomes available,

immediately upgrade contracted interruptible capacity to firm entry capacity or firm exit capacity. The upgrade will be executed in the sequence of the time stamps specified according to 5.1.6.

2.1.2a.

The transmission system operator shall retain exit capacity for exit points that are linked to the connection of a directly connected party. The transmission system operator shall only retain exit capacity that has been contracted for the period of one year or one month. The exit capacity for a directly connected party is retained for no longer than one month before expiry of the already contracted exit capacity at the exit point concerned.

2.1.2b

For all exit points that connect the transmission system and a distribution system, the transmission system operator shall jointly determine the planning parameters and publish them on its website prior to each calendar year. The planning parameters cover planned capacity, the planned capacity of profile end-users, the standard capacity of profile end-users, the planned capacity of telemetry industrial users, and the exit capacity needed for peak supply, as referred to and in the circumstances described in Article 2, first paragraph, of the Decision in Relation to Security of Supply Pursuant to the Dutch Gas Act. The transmission system operator publishes the way in which the planning parameters are determined in the document referred to in Article 8, second paragraph, of the Dutch Gas Act. In the provision referred to in the foregoing two sentences, the sum of the planning capacity of profile endusers and the planning capacity of telemetry industrial users equals the planning capacity. The standard capacity of profile end-users plus the planning capacity of telemetry industrial users is entirely contracted by the jointly recognised programme-responsible parties with LB license. The standard capacity of profile end-users and planning capacity of telemetry industrial users shall be contracted as firm exit capacity. The transmission system operator shall distribute the standard capacity of profile endusers, plus the planning capacity of telemetry industrial users among the recognised programmeresponsible parties with LB recognition based on data stemming from the distribution system operators' connection registers, according to the methodology of 2.1.2d or 2.1.2e, respectively.

2.1.2c

- 1. The distribution system operators submit monthly reports to the transmission system operator no later than the sixth business day following the first calendar day of the month. These reports contain the following data for the connections that are directly connected to the regional gas distribution network, valid as of the first calendar day of that month, per exit point per recognised programme-responsible party per supplier:
 - a. For profile customers:
 - i. the number of profile customers per profile category;
 - ii. ii. the sum of standard annual usage per profile category.
 - b. For telemetry large-scale users:
 - i. the number of telemetry large-scale users;
 - ii. the sum of the max usages for telemetry large-scale users as specified in the distribution system operators' connection registers.

For the network losses

- the sum of the hourly network losses volumes for the relevant calendar year

- 2. Distribution system operators must submit this data again to the transmission system operator no later than the tenth business day of the fourth month after the month to which the data relates, incorporating corrections made in response to comments submitted to the distribution system operators by recognised programme-responsible parties and suppliers.
- 3. On the same days, the distribution system operators also send this data to the relevant recognised programme-responsible parties. Recognised programme-responsible parties are obliged to check the information, provided pursuant to this article by the distribution system operator in the first month, for plausibility as soon as they receive it and to report any alleged errors as soon as possible, but in any event by five business days before the provision of new information in the fourth month pursuant to this article, to the distribution system operator.
- 4. The transmission system operator uses the resubmitted information to revise the division of the standard capacity of profile customers plus the planned capacity of telemetry large-scale users among the recognised programme-responsible parties.
- 5. The distribution system operator shall ensure that information provided to the network operator of the transmission system, recognised programme-responsible parties and suppliers, is consistent.

2.1.2d.

The network operator of the national gas transmission network determines the exit capacity contracted in a month by each recognised programme-responsible party with LB recognition for profile consumers and network losses, based on the details provided under Article 2.1.2b and 2.1.2c or the information from the regional distribution network operators' connection registers as follows:

$$OV_{PV,network\ area,profile}$$

$$= FF_{profile}$$

$$\times \left(SJV_{G1A,PV,network\ area} \times F_{G1A,month} + SJV_{G2A,PV,network\ area} \times F_{G2A,month} + (SJV_{G2C,PV,network\ area} + JV_{GMN,PV,network\ area}) \times F_{G2C,month}\right)$$

$$FF_{profile} = \frac{SC_{profile,country}}{MC_{profile,country}}$$

$$SC_{profile,country} = PC_{profile,country} - PC_{peak}$$

$$MC_{profile,country} = \sum_{network\ area}^{country} \sum_{Cat} SJV_{cat,PV,network\ area} \times F_{cat,month}$$

Where the monthly fraction for the profile offtake is determined by:

$$F_{G1A,month} = MAX \, (Hourly \, fraction_{G1A,reference \, temperature,month})$$
 $F_{G2A,month} = MAX \, (Hourly \, fraction_{G2A,reference \, temperature,month})$
 $F_{G1C,month} = MAX \, (Hourly \, fraction_{G1C,reference \, temperature,month})$

where:

 $OV_{PV,network\ area,profile}$ the DSO exit capacity for profile customers of a specified recognised

programme-responsible party for a specified network area;

 $SJV_{G1,PV,network\ area}$ the sum of the standard annual usages for all profile customers with a

specified customer category for a specified recognised programme-

responsible party for a specified network area;

Cat customer categories;

 $JV_{Gmn,PV,network\ area}$ sum of the yearly network losses volumes;

 $SC_{profile,country}$ the standard capacity of profile customers;

 $PC_{profile,country}$ the planned capacity of profile customers;

 PC_{peak} the peak capacity, being that part of the planned capacity of profile

customers that is intended for peak supply to small-scale users pursuant to article 2, paragraph 1, of the Decision on security of

supply;.

 $F_{Gx,month}$ the maximum hourly fraction for the profile methodology pursuant to

annex 3 of the Information Code electricity and gas for customer category x at the reference temperature corresponding to the month

concerned;

 $MC_{profile,country}$ the model capacity for all profile customers in the Netherlands,

specified with the above-mentioned formula (i.e. by adding the product of the standard annual usage per category and maximum hourly fraction across all recognised programme-responsible parties and all

network areas).

 $FF_{profile}$ The fit factor for profile customers.

The calculation is performed according to the following steps:

Step	Ву	Frequency	Definition of variable	Action
1a	TSO	year	PC	Define the planned capacity, planned capacity of profile customers and the
			PCtelemetry	planned capacity of telemetry large-scale users.
			PCprofile	
1b	TSO	year	SCprofile	Define the standard capacity of profile customers by deducting peak capacity for small-scale users from the planned capacity of profile customers.

2a	DSO	month	Number of profile customers, sum of SJV	Define the number of profile customers per profile category and the sum of the standard annual usages per profile category.
2b	DSO	month		Annual usage GMN
2c	DSO	month		Send the results of step 2a and 2b to the TSO
3a	TSO	month	MC _{profile} , country	Define the model capacity.
3b	TSO	month	FF _{profile}	Define the fit factor for profile customers (FF _{profile}) by dividing the standard capacity of the profile customers (SC _{profile}) by the model capacity.
4	TSO	month	OV _{PV} ,network area, profile	Define the contracted capacity for profile customers per recognised programme-responsible party per network area by multiplying the maximum profile fraction (according to annex 3 of the Information Code electricity and gas) per month at the reference temperature applicable for the month by the sum of the standard annual usage per recognised programme-responsible party and by the fit factor for profile customers.

2.1.2e.

The transmission system operator determines the quantity of exit capacity contracted in a month by each licensing LB recognised programme-responsible party for telemetry large-scale users on the basis of information specified and/or supplied pursuant to articles 2.1.2b and 2.1.2c or on information from the distribution system operators' connection registers, as described below:

$$\mathit{OV}_{\mathit{PV},network\;area,telemetry} = \mathit{FF}_{telemetry} \times \; \mathit{pf}_{telemety} \; \times \; \mathit{GC}_{\mathit{PV},network\;area}$$

with:

$$GC_{PV,network \ area} = \sum_{i=1}^{n} GC_x \ (PV,network \ area)$$

$$GC_{country} = \sum_{PV=1}^{country} \sum_{network\ area=1}^{country} GC_{PV,network\ area}$$

$$FF_{telemetry} = \frac{PC_{telemetry}}{GC_{country}}$$

where:

 $OV_{PV,network\ area,telemetry}$ the DSO exit capacity for telemetry large-scale users of a specified recognised programme-responsible party for a specified network area;

$pf_{telemetry}$	the telemetry large-scale use profile factor;
GC _{PV,network} area	the sum of the max usages of all telemetry large-scale users for which a recognised programme-responsible party exercises programme responsibility in a specified network area;
$GC_{x(PV,network\ area)}$	max usage for telemetry large-scale user x for which a recognised programme-responsible party exercises programme responsibility in a specified network area;
$GC_{country}$	the sum of the max usages of all telemetry large-scale users in the country = sum of $GC_{PV,network\;area}$ of all recognised programme-responsible parties and for all network areas;
$PC_{telemetry}$	the planned capacity of telemetry large-scale users;
$FF_{telemetry}$	fit factor of telemetry large-scale users.

The calculation is performed according to the following steps:

Step	Ву	Frequency	Definition of variable	Action	
1	TSO	year	PC	Define the planned capacity, planned capacity of profile customers and the	
			PC _{telemetry}	planned capacity of telemetry large-scale users (this is the same action as step 1a in	
			PCprofile	paragraph 2.1.2d)	
2a	DSO	month	GC _{PV,network} area	Define, per network area, the sum of the max	
				usages of all telemetry large-scale users per	
				recognised programme-responsible party	
2b	DSO	month		Send the results of step 2a to the TSO	
3	TSO	month	GC _{country}	Define the sum across all DSO exit points of	
				GC _{PV,network} area	
4	TSO	month	FF _{telemetry}	Define the fit factor for telemetry large-scale	
				users by dividing PC _{telemetry} by GC _{counry}	
5	TSO	month		Publish <i>FF</i> _{telemetry} on the website	
6	TSO	month		Define, per recognised programme-	
				responsible party per network area the	
				contracted capacity of telemetry large-scale	
				users per month by multiplying the sum of	
				$GC_{PV,network area}$ and $FF_{telemetry}$ by the telemetry	
				large-scale use profile factor pf _{telemetry}	

2.1.2f.

The transmission system operator publishes the fit factor for profile customers, the fit factor for telemetry large-scale users, the reference temperatures, the profile fractions for profile customers and the profile factors for telemetry large-scale use that are to be used on its website.

2.1.2g.

The transmission system operator reserves sufficient exit capacity for profile customers behind a non-DSO exit point.

2.1.2h Wheeling capacity

Description of wheeling

At entry and exit points situated at the same location, the transmission system operator provides wheeling capacity, in addition to the entry and exit capacity described in 2.1.2. Contracted wheeling capacity grants the right to feed a quantity of gas per hour into the transmission system at an entry point, and to extract it at an exit point at the same location from the transmission system at a reduced entry and exit tariff. The quantity of gas being fed in an hour has to be equal to the quantity of gas being extracted in the same hour. The contracted wheeling capacity shall be recorded in a separate portfolio by the network operator of the transmission system.

Contracting and allocation

Wheeling capacity is contracted and allocated to recognised programme-responsible parties on a first-come-first-served basis. Since 1 January 2014, it is not possible to contract wheeling capacity between a domestic entry or exit point and an interconnection point. Wheeling capacity contracted before 1 January 2014 shall be respected. The transmission system operator only offers wheeling capacity if the offered wheeling capacity does not affect the offered entry and exit capacity referred to in Article 2.1.2. Wheeling capacity can be distinguished in the same capacity products as entry and exit capacity referred to in 2.1.2. The combination of entry and exit points for which wheeling capacity is offered is published by the transmission system operator on its website.

Interruptible wheeling capacity

Wheeling capacity may be offered by the transmission system operator as interruptible capacity. Contracted interruptible wheeling capacity grants the provisional right to feed a quantity of gas per hour into the transmission system at an entry point, and to extract this gas at an exit point situated at the same location from the transmission system. The quantity of gas being fed in an hour shall be equal to the quantity of gas being extracted in the same hour. The transmission system operator only provides interruptible wheeling capacity if firm entry wheeling capacity is no longer available. Interruptible wheeling capacity may only be used if the network users of the transmission system who have firm entry capacity, firm exit capacity, or firm wheeling capacity, previously contracted interruptible entry capacity or previously contracted interruptible exit capacity respectively or previously contracted interruptible wheeling capacity at their disposal at the entry and exit point in question, do not (fully) use their entry capacity, exit capacity, or wheeling capacity. If this condition is not met, the network user may be interrupted. The interruption shall be carried out in the sequence of the timestamps determined in 5.1.6.

Other conditions

As more existing firm wheeling capacity becomes available, the transmission system operator shall immediately upgrade the contracted interruptible wheeling capacity to firm wheeling capacity at domestic entry and exit points, in compliance with 2.1.12. The upgrading shall be carried out in the sequence of the timestamps determined in 5.1.6.

2.1.3 Backhaul entry- and exit capacity

[Deleted as of 1-1-2019]

2.1.4

[Deleted]

2.1.5 Wheeling

[Deleted as of 1-1-2019]

2.1.6 Shorthaul

[Deleted as of 1-1-2019]

2.1.7 Diversion

2.1.7.1.

- 1. Diversion concerns the right of a recognised programme-responsible party to divert contracted entry capacity or exit capacity to another entry point or exit point respectively at the same location, on condition that no extra load is placed on the transmission capacity.
- In case of diversion between two virtual interconnection points at least one of the interconnection
 points that have been integrated into one of both virtual interconnection points has the same
 location as one of the interconnection points that have been integrated into the other virtual
 interconnection point.
- 3. In case of diversion between a virtual interconnection point and a domestic entry or exit point at least one of the interconnection points that have been integrated into the virtual interconnection point has the same location as the domestic entry or exit point.

2.1.7.2

- 1. Diversion is to be requested using a form published by the transmission system operator on its website.
- 2. The transmission system operator refuses the request if the requested diversion places an extra load on the transmission capacity.
- 3. The transmission system operator publishes on its website the combinations of entry and exit points for which diversion is provided.

2.1.7.3.

- Diversion from a domestic entry or exit point to an interconnection point or from an interconnection
 point to another interconnection point is contracted and allocated to a recognised programmeresponsible party by means of an auction on the interconnection point where the capacity is diverted
 to.
- 2. In addition to the reserve price, an auction premium will be charged if the auction results so require.
- 3. For the duration, size and price for which the recognised programme-responsible party applied for diversion and contracted entry or exit capacity for use in the diversion, he is released from his payment obligation on the domestic entry or exit point where the capacity is diverted from. If the reserve price is lower than the payable price at the point where the capacity is diverted from, the recognised programme-responsible party shall only be discharged from its payment obligation to the extent that the payable price at the point where the capacity is diverted to covers the costs.
- 4. Diversion, as meant in paragraph 1, may be contracted for a yearly, quarterly, or a monthly capacity product.

2.1.7.4

- 1. Diversion on other entry or exit points is contracted and allocated to recognised programmeresponsible parties based on the first come first serve principle.
- 2. The duration of the diversion as meant in paragraph 1 is no less than a day.
- 3. If the payable price on the entry or exit point where capacity is diverted to is lower than the payable price on the original entry or exit point, the recognised programme responsible party is only relieved of his payment obligation for the amount that is covered by the payable price on the entry or exit point where capacity is diverted to.
- 4. In order to calculate the payable price the multipliers and seasonal factors that apply on the original entry or exitpoint are used.

2.1.7.5.

The status of the entry or exit capacity moved as a result of diversion shall not be affected, unless this move would affect the status of the entry or exit capacity of another recognised programme-responsible party.

2.1.8 Shift of capacity

Description

Shift of capacity gives the right to transfer exit capacity from a domestic exit point to another domestic exit point for a certain period.

Contracting and allocation

A recognised programme-responsible party or connected party with exit capacity may submit a request for a shift of capacity to the network operator of the transmission system. The transmission system

operator shall assess the request for a shift of capacity. The transmission system operator shall honour the request for a shift of capacity if the request fulfils the following cumulative conditions:

- a. The shift of capacity is related to maintenance or incidents affecting the connected party that lead to a noticeable restriction of a technical, operational, and temporary nature on the possibility of extracting gas from the exit point at which the recognised programme-responsible party or connected party with exit capacity has contracted exit capacity;
- b. The shift of capacity relates to a continuous period that is no longer than the previously determined duration of the noticeable restriction referred to in part a;
- c. The recognised programme-responsible party or connected party with exit capacity may use the contracted exit capacity at the exit point where the noticeable restriction referred to in part a occurs, entirely or partly at a different exit point within the portfolio of the recognised programme-responsible party or connected party with exit capacity;
- d. In the calendar year to which the request for shift in capacity relates, the recognised programme-responsible party or connected party with exit capacity has used a shift of capacity at a specific exit point on fewer than two occasions;
- e. The contracted exit capacity to be shifted is available at the exit point to which the contracted exit capacity is to be shifted; and
- f. The recognised programme-responsible party or connected party with exit capacity has submitted its request for a shift in capacity as soon as possible after it became aware of the noticeable (imminent or actual) restriction.

Other conditions

The status of exit capacity that has been transferred through shifting shall not be affected, unless such transfer were to affect the status of the exit capacity of another recognised programme-responsible party or connected party with exit capacity.

2.1.9 Adjusting contracted exit capacity when starting up or expanding gas installations.

2.1.9.1

When starting up or expanding gas installations of an end-user with a connection to the transmission system, a recognised programme-responsible party or connected party with exit capacity may request the transmission system operator to initially contract an estimated quantity of exit capacity for a period of no more than four consecutive gas months, and to adjust the contracted exit capacity at the end of said period to the maximum used capacity per month.

2.1.9.2.

The adjustment or expansion referred to in Article 2.1.9.1 shall be determined in a separate agreement between the transmission system operator on the one hand and the recognised programme-responsible party or connected party with exit capacity on the other, which shall include the estimated exit capacity.

The estimated exit capacity must be a reasonable assessment of the exit capacity required and must be constant within a gas month. The estimated exit capacity forms the basis for the (provisional)

calculation of the amount to be charged to the recognised programme-responsible party or the end user with exit capacity

2.1.9.3.

The recognised programme-responsible party or the end user with exit capacity may exceed the estimated exit capacity. If permission for this is required in advance from the network operator of the transmission system, this will be included in the agreement.

2.1.9.4

The transfer of transmission capacity or the transfer of usage right in accordance with 2.1.10 for the estimated exit capacity, as referred to in Article 2.1.9.2, is only possible for the total estimated exit capacity and for the whole period for which the exit capacity is estimated.

2.1.9.5.

After the end of the period of no more than four months for which the exit capacity has been estimated, the transmission system operator shall determine, for each gas month of the period, a value for the exit capacity in the gas month in question. This value is equal to the maximum of the exit capacity used in the month, as measured on the basis of the Metering Code gas - TSO. The recognised programme-responsible party or end user with exit capacity concludes a revised agreement with the transmission system operator with whom this exit capacity is contracted and settled on the basis of the provisions of Article 3.2.3 of the Tariff Code gas.

If no permission in advance is required for exceeding the estimated exit capacity, the value of the exit capacity in the revised agreement is equal to the exit capacity used. If permission in advance is required for exceeding the estimated exit capacity, the value of the exit capacity in the revised agreement is equal to the exit capacity used insofar as the recognised programme-responsible party or end user with exit capacity has requested, and received from the network operator of the transmission system, permission in advance to exceed the estimated exit capacity.

2.1.9.6

In the case of exceeding the estimated exit capacity for which the recognised programme-responsible party or connected party with exit capacity has requested, but not obtained, permission, or for which prior permission was required but not requested, the excess shall be designated as an excess as referred to in Article 3.2.3.12 of the Tariff Code Gas, and be charged as such after the end of the period of no more than four months for which the exit capacity was estimated. This also applies if permission for overshoot is granted but the recognised programme-responsible party or end user with exit capacity uses more exit capacity than the quantity for which it obtained permission.

2.1.10. Transfer of transmission capacity or usage right

General points

2.1.10.1.

A recognised programme-responsible party or connected party with exit capacity has the right to transfer contracted transmission capacity or the usage right of transmission capacity (hereinafter: usage right) to another recognised programme-responsible party or connected party with exit capacity. The transfer of transmission capacity or usage right is possible between an end user with exit capacity and

a recognised programme-responsible party insofar as it concerns the exit capacity at the end user with exit capacity's exit point or is a mutual arrangement between recognised programme-responsible parties. The transfer of transmission capacity or the usage right refers to contracted transmission capacity or the usage right for one or more gas days or for one or more gas months in the future.

2.1.10.2.

Both parties submit a request to the transmission system operator to transfer transmission capacity or the usage right. The portfolio of the party who is having the usage right transferred to is expanded by the quantity of the transfer. In connection with the exposure referred to in article B1.5 of the Transmission Code gas - TSO, the transmission system operator tests whether this party's credit limit is still sufficient before assisting in the transfer. If a request is submitted by means of the electronic booking platform, then the transmission system operator shall send confirmation of its assistance on the same day; a request submitted by means of the standard form will be confirmed within 4 business days. The transferred transmission capacity or the transferred usage right may be used by the acquiring party no earlier than on the gas day after the transmission system operator has sent the confirmation. The acquiring party bears programme responsibility at the entry or exit point concerned.

Transmission capacity

2.1.10.3.

When transferring the transmission capacity for a gas day or a gas month the proportion of the transmission capacity with the highest tariff is given priority.

2.1.10.4.

The transmission system operator will send to the recognised programme-responsible party or end user with exit capacity an email with a link to the new agreements as confirmation of the transfer. If the electronic booking platform is not used, the transfer is confirmed by letter or e-mail containing the new agreements.

The usage right

2.1.10.5.

If the usage right alone is transferred, the acquiring recognised programme-responsible party obtains the right to use the transmission capacity at the entry or exit point concerned. The tariff for transmission remains chargeable to the party who transferred the usage right.

2.1.10.6.

If (prematurely) the agreement concerning transmission is terminated and the usage right has been wholly or partially transferred, then this usage right also ends. In such cases, the transmission system operator shall offer the party that has had the usage right transferred from the party which contracted the transmission capacity directly from the transmission system operator the possibility to contract the transmission capacity corresponding to the usage right. The party concerned must, within three business days of the network operator of the transmission system's offer, decide whether it wishes to make use of this possibility.

2.1.10.7.

Diversion as described in 2.1.7 cannot be contracted with regard to the usage right that a recognised programme-responsible party has acquired by means of a transfer.

2.1.10.8.

The transmission system operator shall confirm the transfer of the usage right by e-mail.

2.1.10.9.

Costs relating to the usage right are charged by the transmission system operator to the recognised programme-responsible party to whom the usage right was transferred. Costs relating to the usage right are costs relating to contracted capacity being exceeded, costs arising from balancing and costs relating to adjusting for corrections to allocations.

2.1.11.

[No longer applicable]

2.1.12

The transmission system operator shall upgrade contracted interruptible transmission capacity described in 2.1.2 and 2.1.2h to firm contracted transmission capacity, unless the recognised programme-responsible party states no later than five working days after concluding the agreement in question with the transmission system operator that, for the purpose of this agreement, it does not wish to have its contracted interruptible transmission capacity upgraded.

2.1.13

For exit points linked to the connection of a user to the transmission system, the network operator of the

transmission system will accept requests to contract exit capacity from two or more parties which in total exceed the exit capacity available at the exit point in question under the following conditions:

- the user has stated in writing that the maximum offtake at the exit point in question will never exceed the total exit capacity available; and
- each of the requests from either party is smaller than or equal to the total exit capacity available.

2.1.14. Surrendering contracted entry and exit capacity

In accordance with article 2.2.4 of Annex 1 to the Regulation, the transmission system operator shall facilitate the surrender of contracted, firm entry or exit capacity at interconnection points. The entry or exit capacity can be surrendered for a period of a year (starting on 1 October), a quarter or a month. The surrendered entry or exit capacity must be constant during the whole surrender period. During the period between the surrender of the entry or exit capacity and the closure of the corresponding auction, the recognised programme-responsible party may not enter into any other kind of trading with the entry or exit capacity concerned. If several recognised programme-responsible parties are surrendering entry or exit capacity, but not all the surrendered entry or exit capacity can be fully reallocated, reallocation per recognised programme-responsible party shall take place according to the timestamp of the request for the surrender of entry or exit capacity. If and insofar surrendered entry or exit capacity is resold by the network operator of the transmission system, the surrendered entry or exit capacity shall not be invoiced.

2.1.15. Buyback

In accordance with article 2.2.2 of annex 1 to the Regulation, the transmission system operator shall, where necessary, buy back the right to use entry or exit capacity.

2.1.15.1.

Annex 2 specifies how the transmission system operator determines the scope of the technical, firm entry or exit capacity and the oversubscription capacity.

2.1.15.2.

When, as a result of nominations above the technical capacity, the system integrity of the transmission system is at risk, the transmission system operator shall start a buyback auction at interconnection points, in order to prevent the anticipated bottleneck. The buyback auction means that recognised programme-responsible parties adjust the use of their transmission rights for the hours concerned.

2.1.15.3.

A notification is sent to recognised programme-responsible parties by the booking platform 3 hours prior to the hour (T) in which the bottleneck will occur. This notification states:

- to which entry and/or exit point(s) the buyback auction relates;
- the hourly quantity and the flow direction for which buyback is occurring;
- the consecutive hours for which buyback is occurring.

2.1.15.4.

The recognised programme-responsible party that wishes to participate in the buyback auction must place its bid(s) between T-2¾ and T- 2¼. The recognised programme-responsible parties shall bid such that:

- for contracted entry or exit capacity in the flow direction of the buyback, the nomination is increased (to a maximum of the contracted entry or exit capacity);
- for contracted entry or exit capacity against the flow direction of the buyback, the nomination is decreased.

2.1.15.5.

The auction will start at T-2¼ hours and will take place in accordance with the auction algorithm 'uniform price auction' as defined in NC-CAM, with, however, the following differences:

- the buyback auction can start at any random hour of the gas day;
- there will be no standard duration for the period that is the subject of the auction;
- the buyback auction has no regulated tariff and has a minimum price of zero;
- in their bids, recognised programme-responsible parties state a minimum price that they wish to receive.

2.1.15.6.

Immediately after the buyback auction, recognised programme-responsible parties who have bid successfully will receive a message to this effect and these recognised programme-responsible parties

are obliged to renominate the quantity referred to in the message for the hours concerned before T-2 hours, meaning the recognised programme-responsible party must adjust the nomination at T-2 with respect to the nomination applicable at T-3 in accordance with the quantity in the auction result message.

2.1.15.7.

Before starting the buyback auction, the transmission system operator will verify whether the anticipated bottleneck can be resolved in another way. To this end, the transmission system operator will investigate whether the anticipated bottleneck can be resolved by taking operational measures and, where necessary, the transmission system operator will consult with the adjacent network operators regarding whether the anticipated bottleneck can be resolved among themselves.

2.1.15.8.

The transmission system operator shall supply all necessary information to the Dutch Authority for Consumers and Markets annually such that the operation of the oversubscription- and buyback arrangements can be assessed.

2.2 Processing, treating and mixing of gas conform art. 10a, first paragraph, section 'p' of the Dutch Gas Act.

2.2.1. Description of the service

The processing, treating and mixing, by the transmission service operator, on the request of the customer, of gas which will be injected by a customer, in order to comply with the delivery specifications which are laid down in the ministerial regulation, stated in article 11 of the Dutch Gas Act, for a tariff conform article 10a, first paragraph, section 'p' of the Dutch Gas Act.

2.2.2 Stepwise plan

- a. The customer that wishes to use the service, will submit an application form on the website of the transmission system operator. The application form will at least specify the expected gas quality, quantity and location of the gas to be injected.
- b. After the customer has supplied the transmission service operator with sufficient information regarding the gas to be injected, the transmission service operator will process the request and will conclude an agreement on the scope, duration and possible costs of the study that the transmission service operator will conduct to investigate the potential to accommodate the gas and the potential investment costs.
- c. In consultation with the customer, the study can lead to a quotation. The quotation provides insight into the expected costs that lead to the tariff as described in Article 3.3.2 of the Tariff Code Gas. If the customer wishes to make use of the quotation, an investment agreement is concluded with regard to the expected investment costs. In the event that only operational costs are foreseen, a tariff agreement will be concluded as referred to under d. and f of this article.
- d. The investment agreement at least lays down agreements on the scope, nature and duration of the measures to be taken by the network operator of the national transmission system. Simultaneously with this investment agreement, a tariff agreement is submitted with regard to the charging of the tariff for the costs incurred and to be incurred by the network operator of the national transmission

system for performing the service. In the tariff agreement, except insofar as confidentiality reasons dictate otherwise, and respecting Article 3.3.2 of the Gas Tariff Code, insight is given into (the level of) the cost components used to provide insight into the (level and) structure of the rate.

- e. After signing the investment agreement and the tariff agreement, the transmission service operator will carry out the investment.
- f. When the investment is finished, the transmission service operator will send the following information to the customer:
 - 1°. the final tariff agreement which includes the final costs and elements conform article 3.3.2. Tariff Code Gas; and
 - 2°. the agreement which is adjusted based on this service as referred to in article 1.3 of the Injection Code Gas.

3. Recognised programme-responsible parties and end users with exit capacity

3.1. [No longer applicable]

3.2. Recognised programme-responsible parties

3.2.0.

Any party can apply to the transmission system operator to become a recognised programmeresponsible party, using the model specified by the transmission system operator and available on its website. The transmission system operator will accept as recognised programme-responsible party parties that

- a. are sufficiently creditworthy to meet their intended obligations, i.e. that meet the financial security requirements appropriate to the credit risk assigned to the party on the basis of rules laid down by the network operator of the transmission system. These rules are set out in Appendix 1 to the Transmission Code gas - TSO; and
- b. and meet the electronic message handling process requirements with regard to nominations, entry and exit programmes, portfolio imbalance signal and the use of WDM transactions; these are published on the network operator of the transmission system's website; and
- c. in all respects declares that it has the skill and care, and the technical, administrative and organisational facilities, required in order to be able to participate in gas transmission in the transmission system and that it will conduct itself accordingly.
- d. the party must have an EIC-code in order to be able to identify itself.

If the aforementioned conditions are met, the transmission system operator will grant the applicant a licence by publishing the licence on its website along with the date on which it takes effect.

The transmission system operator grants the recognised programme-responsible party permission to have the tasks related to the requirements set out in 3.2.0 b and c carried out by a third party which is

not itself a recognised programme-responsible party provided that this third party meets the requirements set out in b and c and that there are no significant reasons to refuse such consent. The correct and timely execution of these tasks will be conducted solely by or on behalf of the recognised programme-responsible party.

3.2.1

The transmission system operator handles three types of recognition for a recognised programmeresponsible party.

LA recognition: legal persons and natural persons with this recognition may contract transmission capacity with the network operator of the transmission system, except for exit capacity at an exit point between the transmission system and a distribution system. Legal persons or natural persons with this recognition can also trade gas at the virtual trading point. In addition to the requirements stated under 3.2.0a to 3.2.0d, the following conditions apply:

- a. the party shall have an EAN code in case the party bears programme responsibility at a domestic exit point;
- b. the party shall be able to communicate with the transmission system operator using the B2B online information service.

LB recognition: legal persons and natural persons with this recognition may contract transmission capacity with the network operator of the transmission system, including exit capacity at an exit point between the transmission system and a distribution system. Legal persons or natural persons with this recognition can also trade gas at the virtual trading point. In addition to the requirements stated under 3.2.0a to 3.2.0d, the following conditions apply:

- a. the party shall have an EAN code;
- b. the party shall take part in the exchange of messages in relation to allocation;
- c. the party contracts exit capacity in accordance with 2.1.2b;
- d. the party shall be able to communicate with the transmission system operator using the B2B online information service.

LC recognition: legal persons and natural persons with this recognition may not contract transmission capacity with the network operator of the transmission system. Legal persons or natural persons with this recognition may only trade gas at the virtual trading point. Apart from the requirements stated under 3.2.0a to 3.2.0d, there are no other conditions that apply.

3.2.2.

The transmission system operator publishes the current list of recognised programme-responsible parties including the type of licence held on its website.

3.2.3.

The recognised programme-responsible party has to ensure that his details known to the network operator of the transmission system, as set out under 3.2.0., are kept up to date.

3.3. Exemption and withdrawal of licences

3.3.1.

The transmission system operator may decide to grant exemption from one or more of the conditions laid down in 3.2 for a specific, limited period if it is temporarily impossible for these conditions to be met. The said exemption is granted in response to a written request, giving reasons, which must be received no later than one month before the start of the contracted transmission capacity.

3.3.2.

Licences are valid until they are withdrawn. The transmission system operator will only withdraw a licence at the request of the recognised programme-responsible party or if the recognised programme-responsible party no longer meets the conditions laid down in 3.2., or, in consultation with the Dutch Authority for Consumers and Markets, if the recognised programme-responsible party is reasonably considered to be unable to fulfil his obligations under this Transmission Code gas – TSO. Licences may be withdrawn at the request of the recognised programme-responsible party only if the recognised programme-responsible party does not use, or no longer uses, the transmission capacity of the transmission system operator and no longer bears programme responsibility. The provisions set out in 3.3.4 and 3.3.5 apply to the withdrawal of licences on the grounds that the obligations under this Transmission Code gas – TSO are no longer fulfilled. The transmission system operator will notify each distribution system operator without delay of the withdrawal of a licensing LB.

3.3.3.

The transmission system operator publishes on its website a separate list of legal persons or natural persons who have had their licensing LB withdrawn, giving the date on which the licences have been withdrawn. The reason for the withdrawal is not mentioned.

3.3.4. Provision in the event of the withdrawal of a licence of a recognised programmeresponsible party

3.3.4.1.

If the transmission system operator has decided to withdraw the licence of a recognised programme-responsible party, he will notify the Dutch Authority for Consumers and Markets. The transmission system operator will decide, after consulting the Dutch Authority for Consumers and Markets, whether, and if so under what conditions, it is willing to offer the recognised programme-responsible party, or the administrator and the recognised programme-responsible party together, or the trustee in bankruptcy, deferral of withdrawal of the recognised programme-responsible party licence for up to 10 business days. In that case the transmission system operator can offer to stand surety for the costs related to this deferral in as far as reasonably necessary. The said conditions can amongst others include: requirements regarding the purchase of energy during the suspension and surety for any costs.

3.3.4.2.

The costs referred to in 3.3.4.1 consist of any costs for the purchase of gas, costs as a result of the recognised programme-responsible party not being balanced and other activities that directly arise from the obligations of the recognised programme-responsible party. These costs include any levies imposed by the government.

3.3.4.3.

If the consultation referred to in 3.3.4.1 leads to the withdrawal of the licence of the recognised programme-responsible party in question being deferred, all individual requests for the transfer of programme responsibility to the recognised programme-responsible party in question will be rejected during the deferral period.

3.3.5. Distribution of programme responsibility for large-scale and small-scale users in the event of licence withdrawal

3.3.5.1.

If a recognised programme-responsible party licence is withdrawn, and this withdrawal cannot be attributed to the large-scale users concerned, programme responsibility is distributed among the recognised programme-responsible parties as follows:

- a. programme responsibility for small-scale users for which the licence holder has arranged programme responsibility: to the recognised programme-responsible party which is immediately declared to the network operator of the small-scale users concerned by the licence holder;
- b. programme responsibility for small-scale users for which the licence holder referred to in sub a has not arranged programme responsibility: to recognised programme-responsible parties of small-scale users in proportion to the number of small-scale users for which a recognised programme-responsible party bears programme responsibility. The distribution is expressed as a percentage, rounded off to tenths of a percent;
- c. programme responsibility for large-scale users for which the supplier, having received specific authorisation from the large-scale user, has arranged programme responsibility: to the recognised programme-responsible party which is immediately declared to the network operator of the large-scale users concerned by the supplier;
- d. programme responsibility for large-scale users who appoint a recognised programme-responsible party themselves: to the recognised programme-responsible party communicated without delay by the large-scale user to the network operator of the large-scale users involved;
- e. programme responsibility for large-scale users for whom the supplier under c and/or largescale user under d has not appointed a recognised programme-responsible party:
 - to recognised programme-responsible parties in proportion to the exit capacity as established on the grounds of 2.1. The distribution will be expressed as a percentage, rounded off to tenths of a percent. In the distribution of large-scale users with a substantial contracted capacity, the transmission system operator may contact the recognised programme-responsible party involved in advance, to adjust the distribution.

Recognised programme-responsible parties which have been allocated programme responsibility on the basis of point b and/or point e will inform the large-scale users concerned, and the licence holders of the small-scale users concerned, regarding this allocation as soon as possible, but at the latest within three business days of the distribution, and will also inform them regarding the conditions in force and of their cancellation options.

If the programme responsibility of small-scale or large-scale users is allocated on the grounds of point b or point e as a consequence of the withdrawal of a licence from a recognised programme-responsible party, the transmission system operator ensures that the allocation of programme responsibility is processed in its connection register within one business day, and asks the distribution system operators concerned to process this allocation in their connection register within one business day.

3.3.5.2.

Large-scale users that have been assigned a different recognised programme-responsible party for their connection as a result of the allocation referred to in this section have the right to change recognised programme-responsible party without giving notice for two months after allocation.

3.3.5.3.

[no longer applicable]

3.3.5.4.

The allocation referred to in 3.3.5.1 will take account of requests from recognised programme-responsible parties for connections allocated to them to be assigned to a different recognised programme-responsible party if both of these recognised programme-responsible parties have submitted a joint request to this effect to the network operator of the transmission system. Such requests will take at the most two weeks to process.

3.3.6. Provision for cases in which suppliers can no longer meet their supply obligations

If a supplier has been granted suspension of payment (Dutch: surseance van betaling) or has been declared bankrupt, supplies from the supplier concerned that are not covered by the Dutch Decision on security of supply shall continue, with the recognised programme-responsible party that has programme responsibility for the connected parties in question continuing to bear programme responsibility for a limited time at reasonable tariffs. The parties concerned will immediately notify one another of the situation that has arisen. In the context of continued programme responsibility, the recognised programme-responsible party and network operator involved will immediately notify the connected parties concerned of the situation that has arisen. The recognised programme-responsible party retains its programme responsibility for the connected parties in question until the connected party in question has entered into a new supply agreement or until supply to that connected party has been terminated.

3.3.7. Coincidence of withdrawal of supply licence and withdrawal of licence

If the decision is made to withdraw the supply licence and the licence of the same party, the additional provision applies that the decision to withdraw the supply licence is deemed to have been taken before the decision to withdraw the licence of the recognised programme-responsible party.

3.3.8. Coincidence of withdrawal of licence and withdrawal of supplier

In the event that the recognised programme-responsible party whose licence has been withdrawn also acted as the supplier, in the distribution of programme responsibility in accordance with 3.3.5.1., the recognised programme-responsible party who is attributed programme responsibility for large-scale users will notify the network operator involved which supplier will become responsible for the supply for the attributed large-scale users.

3.4. End user with exit capacity

3.4.1.

Connected parties that comply with the provisions of 3.2.0.a are only entitled to contract exit capacity at the connection which is connected to the transmission system.

3.4.2.

These connected parties are not entitled to make use of the other services of the network operator of the transmission system, including participation in gas transmission. This is reserved for parties that meet the conditions set out in 3.2.0.a to 3.2.0.c.

3.5. Execution of programme responsibility

3.5.1.1.

Connected parties that do not wish to execute programme responsibility for their connection themselves inform their network operator of the name of the recognised programme-responsible party(s) to which they have transferred programme responsibility. This can be done by means of a switch report from the authorised supplier or by means of a written notification.

3.5.1.2.

At a border point and at an installation for the storage of gas or LNG, the party that has the right to use entry and/or exit capacity has programme responsibility.

3.5.1.3.

At an entry point where an upstream pipeline network is connected to the transmission system, the parties connected to the upstream pipeline network have programme responsibility.

3.5.2.

Recognised programme-responsible parties are required to execute programme responsibility with regard to the connections for which they are at a particular time listed as recognised programme-responsible parties in the connection registers of network operators.

3.5.3.

Network operators may rely on the information given in the connection registers regarding programme responsibility for a connection, without prejudice to the rights of recognised programme-responsible parties to have inaccurate information corrected.

4. Operational conditions

4.1. Balancing regime

4.1.0.

The recognised programme-responsible party is responsible for monitoring the balance per portfolio.

4.1.1. Submitting programmes

4.1.1.1.

Recognised programme-responsible parties must submit an entry programme and/or exit programme for the following gas day to the transmission system operator by 14.00 hours each day.

4.1.1.2.

The transmission system operator publishes a formula on its website to clarify the relationship between entry and exit quantities per hour for exit programmes. Recognised programme-responsible parties are required to apply the formula in exit programmes that relates wholly or partly to the supply of gas to small-scale users. The formula may not be applied to the net sales position through transactions at the virtual trading point. The transmission system operator publishes the parameters for this formula which apply to the next gas day on its website by 09.00 hours each day. The formula is designed in such a way that, after the formula has been applied, the entry quantity per gas day is equal to the exit quantity.

4.1.1.3.

The transmission system operator will notify the recognised programme-responsible party whether the entry and/or exit programmes have been approved within one hour after the time when the entry and/or exit programmes referred to in 4.1.1.1 needs to be submitted.

The transmission system operator will always reject exit programmes that do not comply with the requirements described in 4.1.1.2. If the recognised programme-responsible party does not apply the formula referred to in 4.1.1.2 in its exit programme, the transmission system operator will always reject exit programmes in which the entry and exit quantities do not match in each specific hour.

The transmission system operator will always reject entry programmes in which the entry and exit quantities do not match on each specific hour.

The transmission system operator will always reject entry or exit programmes if it observes inconsistency on the VPPV with other exit or entry programmes of the same recognised programme-responsible party and/or another recognised programme-responsible party.

The fact that another exit or entry programme has not yet been fully approved does not enforce inconsistency in a programme in which programme responsibility is passed from or to the programme that has not yet been approved.

4.1.1.4.

Once the recognised programme-responsible party has been informed by the transmission system operator that its entry and/or exit programme has been rejected, the recognised programme-responsible party submits an improved entry and/or exit programme which also requires approval by the network operator of the transmission system.

4.1.1.5.

If no approved entry and/or exit programme is available at 22.00 hours on the day before the gas day, the transmission system operator determines this entry and/or exit programme based on the information available.

If at this time the transmission system operator observes inconsistency on the VPPV between the programme of an exchange designated in accordance with article 66b of the Dutch Gas Act, or a clearing house which holds a licence in accordance with the Dutch Act "Wet op het financieel toezicht (Wft)" and an exit and/or entry programme of another recognised programme-responsible party, the transmission system operator will determine the concerning programmes in accordance with the programme submitted by an exchange or clearing house.

4.1.2. Provision of information for balance enforcement

4.1.2.1.

The transmission system operator publishes the hourly values of the borders of the zones for balance enforcement purposes no later than two hours before the start of the gas day. These values are accessible to any party and are based on the approved entry and exit programmes. The concerning borders are:

- the border between the dark green zone and the light green zone;
- the border between the light green zone and the orange zone;
- the border between the orange zone and the red zone.

4.1.2.2.

The transmission system operator publishes the following information per hour as soon as it is available. The information is accessible to any party, and comprises:

- a. [no longer applicable];
- b. the quantity of gas that has been purchased/sold through WDM transactions, the hours when the gas is delivered/withdrawn and the WDM transaction price;
- c. [no longer applicable];
- d. the sum of the positions of the causers of the imbalance;
- e. [no longer applicable];
- f. the system balance signal.

4.1.2.3.

The transmission system operator publishes the following information per portfolio per hour as soon as it is available. The information is only accessible to authorised employees of the concerning recognised programme-responsible parties, and comprises:

- a. the approved entry- and/or exit programme;
- b. the hourly imbalance, i.e. the established net discrepancy between the near real time allocations relating to the approved entry and/or exit programme;
- c. after a WDM transaction: the quantity of gas that, as a result of the WDM transaction, has been bought by the transmission system operator from the recognised programmeresponsible party, or sold by the transmission system operator to the recognised programme-responsible party causing the imbalance as referred to in 4.1.4.2. and 4.1.4.3., the hour of the WDM transaction and the price;
- d. the cumulation of all hourly imbalances, being the portfolio imbalance signal.

4.1.3.

[no longer applicable]

4.1.4. Daily balance enforcement

4.1.4.1.

In the first half of each hour, the transmission system operator predicts the position of the system balance signal at the end of that hour.

If this prediction ends up in the dark green zone, then the transmission system operator takes no action with regard to balance enforcement.

If this prediction ends up in the light green zone and the system imbalance is increasing in respect of the prediction of the previous hour, then the transmission system operator will issue a WDM title transaction in order to reduce the system imbalance. The quantity for which the transmission system operator issues a WDM title transaction is the difference between the predicted value of the system balance signal at the end of the hour and the boundary between the dark green zone and the light green zone, decreased by the quantity of gas the transmission system operator has bought/sold in earlier WDM title transactions and that still has to be delivered/withdrawn.

If this prediction ends up in the orange zone or the red zone, then the transmission system operator will issue a WDM temporal transaction in order to reduce the system imbalance. The quantity for which the transmission system operator issues a WDM temporal transaction is the difference between the predicted value of the system balance signal at the end of the hour and the boundary between the dark green zone and the light green zone.

If this prediction ends up in the red zone and the transmission system operator anticipates that using a WDM transaction will not be sufficiently effective, the transmission system operator may declare an emergency situation and act in accordance with the instructions in 4.1.4.4.

A WDM transaction affects the portfolio imbalance signal of the respective portfolio.

4.1.4.2. Actions relating to balance enforcement in a shortage situation

The quantity of gas that the transmission system operator buys pursuant to 4.1.4.1 is sold by the transmission system operator at the hour of delivery or withdrawal at the WDM transaction price to the causer(s) in proportion to the quantity of its portfolio imbalance signal relating to the start of the hour of the WDM transaction. This affects the portfolio imbalance signal at the hour of delivery or withdrawal of this gas.

4.1.4.3. Actions relating to balance enforcement in a surplus situation

The quantity of gas that the transmission system operator sells pursuant to 4.1.4.1, is bought by the transmission system operator in the hour of delivery or withdrawal at the WDM transaction price referred to in 4.1.5.1 from the causer(s), in proportion to the quantity of its portfolio imbalance signal relating to the start of the hour of the WDM transaction. This affects the portfolio imbalance signal in the hour of delivery or withdrawal of this gas.

4.1.4.4. Actions relating to balance enforcement in an emergency situation

If the transmission system operator has declared an emergency situation as described in 4.1.4.1 or 4.1.4.5 then the transmission system operator may decide on taking one (or more) of the following measures:

- postponement of the process initiating the WDM transaction as described in 4.1.4.1;
- deployment of any contracted resources for emergency situations;
- instructions regarding installations for the storage of gas or LNG and at transmission system entry points;
- instructions at transmission system exit points.

Recognised programme-responsible parties are obliged to follow the instructions given.

When the emergency situation has ended, the transmission system operator and the recognised programme-responsible party concerned discuss how to resolve the situation that has arisen.

If the transmission system operator has declared an emergency situation as described in 4.1.4.1, then the transmission system operator will publish this, stating the hour in which the emergency situation started. In this situation, instructions from the transmission system operator have an effect on the portfolio imbalance signal of the portfolio concerned. A quantity of gas bought or sold by the transmission system operator by means of an instruction, additional to the WDM transaction, is settled against the WDM transaction price for the respective hour.

If the transmission system operator has declared an emergency situation as described in 4.1.4.5 then the transmission system operator will publish this as soon as possible, stating the hour in which the emergency situation started. In this situation, instructions from the transmission system operator have no effect on the portfolio imbalance signal of the portfolio concerned, but are settled via transactions between the transmission system operator and the recognised programme-responsible party at a virtual point at the neutral gas price as referred to in 4.1.6.4.

If the emergency situation declared by the transmission system operator has ended, the transmission system operator will publish this as soon as possible, stating the time when the emergency situation ended.

In the event of an emergency situation, the transmission system operator will not charge the recognised programme-responsible party concerned any tariff for overshooting the contracted entry or exit capacity pursuant to article 3.2.1.5 of the Tariff Code gas if and insofar as this overshoot is the consequence of an instruction given by the transmission system operator in accordance with this article.

4.1.4.5.

- If the transmission system operator encounters unexpected major disruptions, the transmission system operator may declare an emergency situation and act in accordance with the instructions in 4.1.4.4. Unexpected major disruptions could include a disruption in the supporting communication and control systems that are part of the transmission system, which compromise or could compromise system integrity.
- 2. When resolving this type of emergency situation that is described in the first paragraph of this article, any difference between the quantity of entry gas and the quantity of exit gas, after deducting the

difference between entry and exit gas pursuant to 4.1.1.2, will be settled against the neutral gas price referred to in 4.1.6.4.

3. If the transmission system operator issues a WDM transaction in the situation that is described in the first paragraph of this article, a financial imbalance occurs because of the price difference between the neutral gas price under 4.1.6.4. and the WDM transaction price. This financial imbalance is settled pursuant to 4.1.8.

4.1.4.6.

- 1. If the transmission system operator encounters disruptions in the information supply systems regarding the balancing regime (meant to provide the recognised programme-responsible parties with information), the transmission system operator may decide to postpone the process which initiates the WDM transaction, as described in 4.1.4.1.
- 2. If the transmission system operator has postponed the process which initiates the WDM transaction, the transmission system operator will publish this as soon as possible, stating the time the postponement commences.
- 3. During a situation in which the information supply system is disrupted, a possible WDM transaction with the causer is settled against the neutral gas price pursuant to 4.1.6.4.
- 4. If the transmission system operator issues a WDM transaction in this situation, a financial imbalance occurs because of the price difference between the neutral gas price under 4.1.6.4. and the WDM transaction price. This financial imbalance is settled pursuant to **4.1.8**.
- 5. If the information supply system is restored, the postponement ends; the transmission system operator will publish this as soon as possible, stating the time the postponement ends.

4.1.5. Balance of the imbalance settlement

4.1.5.1.

[no longer applicable]

4.1.5.2.

[no longer applicable]

4.1.5.3.

[deleted as of 23 May 2020]

4.1.6. Settling of deviations from near-real-time allocation by the network operator of the

transmission system

4.1.6.1.

The difference between the near-real-time allocations and the off-line allocations is determined after the off-line allocations have been declared final in the month following the month the data relates to.

4.1.6.2.

The difference between the near-real-time allocations and the off-line allocations will be charged for each gas day against the neutral gas price referred to in 4.1.6.4.

4.1.6.3.

The correction of the offline allocations of the exit points where the transmission network is connected to the distribution network, in the fourth month after the end of the month to which the data relates and corrections of the offline allocations of the other entry and exit points in a month after the end of the month to which the data relates, will also be settled against the neutral gas price as referred to in 4.1.6.4.

4.1.6.4.

1. The neutral gas price is the volume-weighted average price of all contracts concluded on the gas exchange designated by the Dutch Minister in accordance with the Dutch Gas Act on D-2, D-1 or D for delivery on D (balance day). This means that the index calculation is a continuous and real-time process and the index is published on a 'near-real-time' basis and the historical data is published on the Internet. The formula for the neutral gas price is shown below:

$$INDEX_D = \frac{\sum_{i=1}^{x} V_i P_i}{\sum_{i=1}^{x} V_i}$$

Where:

*INDEX*_D 'Neutral Gas Price for the 'balance day' (D) on which contracts are delivered;

 P_i to P_x Prices of contracts for gas deliveries on balance day (D);

 V_i to V_r Volumes of contracts for gas deliveries on balance day (D)

x Number of contracts concluded from D-2 to D inclusive.

- 2. If the neutral gas price cannot be calculated on the basis of paragraph 1, the last calculated neutral gas price will count as the neutral gas price for balance day D.
- The PEGAS trading platform of the European Energy Exchange AG stock exchange designated by the Minister of Economic Affairs and Climate is used for the calculation of the neutral gas price referred to in paragraph 1.

4.1.7. Settlement at the end of day

Pursuant to Chapter 5 of NC-BAL, the transmission system operator will settle the position ("daily imbalance quantity") with the recognised programme-responsible parties at the end of the day. For this purpose, the transmission system operator will make use of the possibility offered in Chapter 9 of NC-BAL, being a linepack flexibility service. The quantity of linepack made available to the market by the transmission system operator is equal to the dark green zone pursuant to 4.1.2.1. As a result, the daily imbalance quantity, as mentioned in Article 21 of NC-BAL, equals zero. For the linepack flexibility service, the transmission system operator will charge a rate pursuant to the 'minor adjustment' from Article 22 of NC-BAL. On introduction of the linepack flexibility service, the rate (LFS rate) is established

at 0.4% of the neutral gas price under 4.1.6.4. The transmission system operator can evaluate this rate and, if this evaluation gives just cause, submit an amended rate to the Dutch Authority for Consumers and Markets. If this results in a rate change, the changed rate will be published on the website of the network operator of the transmission system.

The evaluation as referred to in this article can take place on the initiative of the transmission system operator and/or the Dutch Authority for Consumers and Markets. The evaluation will, in any case, look at the following factors:

- the degree in which the LFS rate contributes to the development of the within day market;
- the degree in which the balancing costs for recognised programme-responsible parties is caused by the LFS rate.

4.1.8

- Every calendar year, the network operator of the national gas transmission network will charge network users, as defined in Article 2(5) NC-BAL, a neutrality charge, as per Chapter VII of the NC-BAL.
- 2. The neutrality charge is made up of the sum of:
 - a. the balance calculated as specified in Article 4.1.4.5 paragraph 3
 - b. the balance calculated as specified in Article 4.1.4.6 paragraph 4
 - c. revenues from the end-of-day settlement as specified in Article 4.1.7
 - d. losses incurred due to non-payment as specified in Article 31 NC-BAL corrected after any subsequent revenues.
- 3. The neutrality charge for calendar year t is, in principle, charged to network users in calendar year t+2, using the same methodology as the capacity-based entry and exit tariffs, as specified in Articles 3.2.1.1 to 3.2.3.10 inclusive of the Tariff Code Gas TSO, whereby the allowed revenues (TI) used in Articles 3.2.2.2 and 3.2.2.4 of the Tariff Code Gas TSO are replaced with the amount of the neutrality charge.
- The invoice issued by the network operator of the national gas transmission network for the neutrality charge will specify the elements listed in the second paragraph and the capacity contracted.
- Before invoicing a network user for the neutrality charge, the network operator of the national gas
 transmission network will submit the intended charge and the specification specified in the fourth
 paragraph to the Netherlands Authority for Consumers and Markets (ACM) for information
 purposes.

4.2. Provision of transmission services

4.2.1. General points

4.2.1.1.

The transmission system operator assigns a unique identification code to every recognised programmeresponsible party for each portfolio.

4.2.1.2.

Message interchange between the recognised programme-responsible party and the transmission system operator relating to the provision of transmission services will take place via a communication protocol that is established and tested in advance and approved by this network operator.

4.2.2. Nomination

4.2.2.1.

Nominations from recognised programme-responsible parties specify the desired quantity of gas to be transported by the recognised programme-responsible party at an entry point or exit point. The transmission system operator uses the nominations for planning gas transmission (in order to ensure that the transmission system operates efficiently), for assigning interruptible entry or exit capacity, if applicable, and in the allocation process.

4.2.2.2.

Recognised programme-responsible parties submit nominations to the transmission system operator for each gas day for each entry point and each exit point for each portfolio. Nominations must be received by the transmission system operator no later than 14.00 hours on the day before the gas day to which the nomination relates. If a nomination is not received by this network operator, then it is assumed that the nomination is zero for the hour and entry point or exit point concerned.

4.2.2.3.

The recognised programme-responsible party is authorised to send renominations to the network operator of the transmission system. Upon receipt of a renomination, the transmission system operator will only handle changes that relate to hours in the gas day occurring after the time of receipt of the renomination, taking into account the lead time for renominations. The lead time can be either half an hour or two hours. The transmission system operator publishes on its website a list of points for which the lead time is half an hour and the conditions applicable per point. A lead time of two hours applies to all other points where renominations are possible.

4.2.2.4.

For an entry point a nomination for a gas day specifies a quantity of gas for each hour of the gas day, the recognised programme-responsible party's portfolio, the entry point and the party from which gas is being taken (possibly administratively). For an exit point a nomination for a gas day specifies a quantity of gas for each hour of the gas day, the recognised programme-responsible party's portfolio, the exit point and the party to which gas is being transferred (possibly administratively).

4.2.2.5.

The transmission system operator may grant the recognised programme-responsible party temporary exemption from the obligation to make nominations in respect of certain entry points or exit points. The conditions under which the transmission system operator grants this exemption will be published on its website in advance. The transmission system operator will not grant an exemption insofar as such exemption should not be compatible with maintaining the integrity (safety, effectivity and reliability) of the transmission system or if the nominations are required for the allocation process.

4.2.3. Matching and confirmation

4.2.3.1.

Confirmations from the transmission system operator set out the quantities of gas that it will transport for the recognised programme-responsible party. The transmission system operator determines the content of the confirmations based on the recognised programme-responsible party's nominations and the results of a validation procedure.

4.2.3.2.

The validation procedure consists of one or two stages: the transmission system operator validates each (re)nomination made by the recognised programme-responsible party against the conditions of the relevant agreement and – if applicable – compares these with the (re)nominations made by other recognised programme-responsible parties in the transmission system or with information obtained from adjacent network operators.

4.2.3.3.

The transmission system operator sends – as soon as possible in the time period between 14.00 and 18.00 hours on the day before the gas day to which the (re)nomination relates, which has been received by the transmission system operator no later than 14.00 hours on that day – a confirmation to the recognised programme-responsible party. Insofar as more entry or exit capacity than has been contracted is nominated, the transmission system operator will reject the recognised programme-responsible party's (re)nomination. In case of an interruption of the transmission service, the recognised programme-responsible party will be informed by means of an interruption report. This interruption report may form part of the confirmation.

4.2.3.4.

In the event of a renomination, the transmission system operator will send a confirmation to the recognised programme-responsible party as soon as possible, but in any case prior to the start of the hour to which the renomination relates.

4.2.3.5.

The quantities of gas stated in the nominations are confirmed in the confirmation if it is proved by the validation procedure in 4.2.3.2 that this is permitted and possible. In other cases, the data in the confirmation will deviate from the data in the nominations. It is the recognised programme-responsible party's responsibility to check whether a confirmation has been received and to be aware of the content of the confirmation.

4.3. Allocation

4.3.1. General points

4.3.1.1.

The transmission system operator uses allocation data to ascertain how the transmission system is used hour by hour by network users.

4.3.1.2.

The transmission system operator uses allocation data determined pursuant to the conditions laid down in the Allocation Code gas.

4.4. Maintenance and restrictions to transmission

4.4.1.

Activities carried out by the transmission system operator that would in his reasonable opinion lead to restricted transmission capacity, shall only be implemented following consultation with the affected recognised programme-responsible party(s) about the time period and duration of the restriction, unless circumstances are such that there is insufficient time to do this. When establishing the time period and duration of the restriction, the transmission system operator will take notice of the recognised programme-responsible party's interests insofar as that is reasonably possible.

Planned maintenance work will be announced at least two months prior to the gas day on which this could affect the performance of transmission capacity by the network operator of the transmission system. If it is necessary to restrict transmission capacity, the transmission system operator is entitled to reduce the transmission service concerned. The rights of the recognised programme-responsible parties to use transmission capacity contracted by them from the transmission system operator will be reduced correspondingly. If the transmission system operator considers planned maintenance, moving a pipeline or new construction to be necessary, it will provide suitable evidence of this necessity at the request of the recognised programme-responsible party. The transmission system operator will make every effort to minimize restrictions to the transmission capacity.

4.4.2.

Insofar as the transmission system operator is not, in any hour, due to a cause not attributable to the recognised programme-responsible party, in a position to carry out the contracted transmission, or part thereof, and this leads to a noticeable restriction in the use of the contracted transmission capacity, the amount payable for entry and/or exit capacity contracted from the transmission system operator will be reduced in proportion to the restriction.

In the event of unplanned maintenance/incidents, restitution will only be made after the duration of the noticeable restriction has exceeded a threshold value of 24 hours, being the length of each consecutive period that the noticeable restriction occurs. This threshold value applies to each separate entry or exit point.

Restitution is based on one hundred percent of the amount payable for the contracted transmission capacity, taking into account the duration of the restriction (insofar as this exceeds the threshold value) and the quantity of the restriction.

4.4.3.

In the event of restrictions to entry or exit capacity, the entry or exit capacity available to the recognised programme-responsible parties will be allocated by the transmission system operator in proportion to the entry- or exit capacity contracted by the recognised programme-responsible parties.

4.4.4.

4.4.2 does not apply to interruptible entry or exit capacity in the event of a restriction to entry or exit capacity through the use of firm entry or exit capacity.

4.4.5.

The transmission system operator monitors the quantity of available quality conversion. The transmission system operator can carry out quality conversion until the resources available to it are exhausted. Where quality conversion is for the purpose of lowering the calorific value, the process requires the availability of gas with a lower calorific value than the target value, including synthetically produced nitrogen. Where quality conversion is for the purpose of increasing the calorific value, the process requires the availability of gas with a higher calorific value than the target value. In such cases, the transmission system operator does not have synthetically produced gas at its disposal. Whenever there is the danger of a shortage of quality conversion, the transmission system operator will, where possible, notify the relevant recognised programme-responsible parties, giving prior notice of at least 4 hours. The transmission system operator may, after this notification, get in contact with recognised programme-responsible parties adjust the use of the transport capacity it has contracted in such a way that the imminent shortage of quality conversion is averted.

4.4.6.

In exceptional cases, the transmission system operator may, due to restricted availability of quality conversion, not meet (re)nominations for the use of firm transport capacity. In such cases, the transmission system operator is entitled to give instructions to recognised programme-responsible parties for adjusting their (re)nominations, as prescribed by the network operator of the transmission system, in such a way that the system integrity of the transmission system can be maintained. Recognised programme-responsible parties are obliged to follow these instructions. Where possible, the transmission system operator will give the instructions to the causers of the problem in proportion.

5. Transmission agreements.

5.1. Entering into transmission agreements.

5.1.1.

Without prejudice to the provisions of 2.1.2b, and 3.2.1, last paragraph, an interested party may contract transmission capacity by submitting a request to the transmission system operator for this purpose. The request must be complete and must be submitted in good time, taking account of the settlement period, prior to the desired starting date in a manner specified by the transmission system operator on its website. The processing period is the period of a maximum of 10 business days from the date that a request to offer or contract transmission capacity, which meets all the requirements, is received by the network operator of the transmission system. The processing period begins on the day of receipt, provided the request is received before 12.00h. If the request is received after 12.00h, then the settlement period will begin on the following business day.

5.1.2.

An agreement concerning a daily capacity product may be concluded up to the start of the gas day in question.

5.1.3

The transmission system operator shall allocate transmission capacity to interested parties on the basis of transparency, non-discrimination, and efficient use of the transmission system. Chapter 2 states how the transmission capacity is allocated to interested parties by the network operator of the transmission system.

5.1.4.

For each request for transmission capacity, the transmission system operator checks the available creditworthiness and the entry or exit capacity available at that moment.

5.1.5.

The transmission system operator responds to a request within the processing period referred to in 5.1.1 by sending the contract documentation to the interested party or – if the request is refused – by a rejection of the request supported by good reasons.

5.1.6

The network operator of the national gas transmission will give every complete request a timestamp upon receipt. The network operator will use this timestamp, in the case of interruptible transmission capacity, for determining the interruption sequence. A complete request shall at least include the capacity product, the entry point or exit point if relevant, the identity of the interested party, and, if relevant, an indication whether said party will accept interruptible transmission capacity.

5.1.7.

Where there are drastic changes in the gas market, the transmission system operator may deviate temporarily from the rules laid down in 5.1 for certain categories of market parties. For example, in the past, the transmission system operator applied transitional rules such as 'learning years' in order to give the market the chance to prepare for changes in the gas market.

5.2. Periods

[Deleted as of 1-1-2019]

5.3 Consequences of termination of transmission agreements.

5.3.1.

On the basis of 3.3, from the moment that the transmission system operator withdraws a licence from recognised programme-responsible party or terminates an agreement, this network operator is under no further obligation to provide transmission to this party nor has it any further obligation with regard to the terminated transmission agreement.

6. Provision of information

6.1.

All parties affected by an interruption to the transmission system will be informed by the transmission system operator as soon as possible with regard to the nature, scope and duration of the interruption.

6.2.

The transmission system operator will provide information about imminent scarcity in the gas transmission network on its website. This information will be updated every month.

6.3.

The transmission system operator publishes the following information as a minimum on its website (except for the data that must be kept confidential pursuant to article 37 of the Dutch Gas Act):

- a. a list and description of all entry points and exit points;
- b. a list of all entry points and exit points used in the tariff system; and
- c. of the entry points and exit points situated on the Dutch border:

Type of information	Past	Future	Period
Firm entry and/or exit capacity			
Total	3 years	5 years	per day
Booked	3 years	5 years	per day
Available	3 years	5 years	per day
Nominated		sum of nominations	per hour
Used (sum of allocations)	3 years		per hour
Interruptible entry and/or exit capacity			
Total	3 years	5 years	per day
Booked	3 years	5 years	per day
Available	3 years	5 years	per day
Nominated		sum of nominations	per hour
Used (sum of allocations)	3 years		per hour
Conversion capacity			
Booked		5 years	per day
Available		5 years	per day

6.4

[Deleted as of 1-1-2019]

6.5

The transmission system operator will publish an up-to-date overview of all entry and exit points of the transmission system on its website conform article 6.3

7. Other provisions

7.1.

The transmission system operator will do everything that is reasonably within its power to prevent interruption to the transmission system, or if an interruption occurs, to rectify this as quickly as possible.

7.2.

The transmission system operator will record the quality indicators as referred to in the regulations on the Quality Aspects of Electricity and Gas Grid Management ("Regeling kwaliteitsaspecten netbeheer elektriciteit en gas.")

7.3.

[No longer applicable]

7.4.

The transmission system operator will not keep any reserve capacity for gas transmission, except for peak supplies.

7.5.

The operator of a closed distribution system, connected to the transmission system, who wishes to realise the right to choose a supplier via the electronic messaging system for one or more users, connected to the closed distribution system, should contact the network operator of the transmission system.

7.6.

The Transmission Code gas – TSO, as established by the Decision of 27 June 2006, and subsequently amended several times, is withdrawn.

7.7.

This Decision enters into force with effect from the day after the date of issue of the Dutch Government Gazette ("Staatscourant") in which it has been published.

7.8.

This Decision is cited as "Transportcode gas LNB".

This Decision and its explanatory notes shall be published in the Dutch Government Gazette ("Staatscourant").

The Hague, April 21, 2016

On behalf of the Dutch Authority for Consumers and Markets,

F.J.H. Don

Member of the board

Annexes

Annex 1. Creditworthiness requirements

B1.1.

A party who wishes to become a recognised programme-responsible party or end user with exit capacity must satisfy the creditworthiness requirements arising from a credit analysis performed by the transmission system operator in accordance with the provisions laid down in this Annex 1, depending on the risk category to which this party is assigned based on the credit analysis. **B1.2.**

The transmission system operator will carry out the credit analysis as follows:

- a. When determining the risk category, relationships with parent companies or affiliated companies are also taken into account;
- b. If a published credit rating is available, the lowest credit rating as published by Moody's or Standard & Poors shall be used;
- c. If there is no published credit rating concerning the party, then the risk category shall be determined on the basis of the annual reports (annual report + annual accounts) regarding the last three years. For this purpose, the most important financial ratios are liquidity, solvency and profitability;
- d. Where there is no published credit rating or annual reports regarding the last three years, the recognised programme-responsible party or end user with exit capacity will be assigned to the high risk category.

Table 1: Published credit ratings and risk categories

Mooddy's Credit rating	Standard & Poors credit rating	Risk category
Aaaa, Aa, A	AAA, AA, A	Low
Baa1, Baa2	BBB+, BBB	Medium
Baa3 or lower	BBB- or lower	High

B1.3.

In exceptional cases, such as where there is a "negative outlook" from Moody's or Standard & Poors, large obligations that are not included in the balance sheet, extreme outcomes produced by financial ratios, or unusual developments within the company or business sector, the transmission system operator will place the party in a higher or lower risk category.

B1.4. Financial security

- A recognised programme-responsible party or end user with exit capacity which is assigned to the high risk category by the transmission system operator must provide financial security. In such cases, the amount of the credit limit will be equal to the amount of the financial security issued.
- A recognised programme-responsible party or end user with exit capacity which is assigned to the medium or low risk category by the transmission system operator may choose to provide additional financial security in order to increase its credit limit.

The transmission system operator publishes on its website the types of financial security it accepts in each case. The financial security must continue to be valid for at least 4 months beyond the expiry date of the contract.

B1.5. Exposure

The total exposure consists of:

- 1. exposure relating to the contracting of entry and exit capacity; and
- 2. exposure relating to balancing.

Ad 1.

For recognised programme-responsible parties, the exposure under contracts having a term of more than 3 months is equivalent to the value of 3 times the maximum monthly invoice (including VAT) and, for the end user with exit capacity, is equivalent to the value of 3 times the maximum monthly invoice (including VAT) minus €20,000 per month.

For shorter contracts, the exposure is lower in proportion to the length of the term compared to the period of 3 months.

The end user with exit capacity must provide financial security no later than two months prior to the date of commencement of the contract. Exposure under contracts is increased with the amount of any invoices past due for longer than two months.

Ad 2.

The balancing exposure is calculated as the net result of the sum of:

- 1. the current value of the portfolio imbalance signal multiplied by the gas price as described in 4.1.6.4; and
- 2. outstanding amounts (whether these have been invoiced or not) (including VAT) as a result of WDM transactions; and
- 3. outstanding amounts (including VAT) relating to the settlement of deviations between accountable allocations and the near-real-time values pursuant to 4.1.6; and
- 4. the outstanding amounts (whether invoiced or not) (including VAT) relating to the Linepack Flexibility Service.

B1.6. Credit limit

- 1. The transmission system operator will, for each recognised programme-responsible party or end user with exit capacity, set an initial credit limit based on an analysis of financial documents.
- 2. So that the financial analysis can be performed, the recognised programme-responsible party or end user with exit capacity provides information to the transmission system operator concerning
 - a. the structure of the group of companies to which the recognised programme-responsible party or end user with exit capacity belongs, and

- b. the ultimate parent company, and
- c. the annual accounts regarding the last 3 years approved by an accountant (including balance sheet, income statement, cash flow statements and notes to the annual accounts).
- 3. A recognised programme-responsible party or end user with exit capacity may conclude contracts with the transmission system operator until its credit limit is reached.
- 4. A recognised programme-responsible party or end user with exit capacity that is assigned to the high risk category has a credit limit equivalent to the financial security issued.
- 5. A recognised programme-responsible party or end user with exit capacity that is assigned to the medium risk category has an initial credit limit corresponding to a percentage of 3% of shareholder's equity minus intangible fixed assets and may potentially increase its credit limit further by providing additional financial security.
- 6. A recognised programme-responsible party or end user with exit capacity that is assigned to the low risk category has an initial credit limit corresponding to a percentage of 6% of shareholder's equity minus intangible fixed assets and may potentially increase its credit limit further by providing additional financial security.
- 7. The transmission system operator will charge €100,000 to the calculated credit limit as a standard imbalance reservation.
- 8. In exceptional cases, such as extreme results for financial ratios or unusual developments within the company or sector, the transmission system operator may assign a higher or lower credit limit to the party.
- 9. The transmission system operator will, upon request, provide the recognised programmeresponsible party or end user with exit capacity with information about the current credit limit.
- 10. A higher or lower credit limit may be assigned to recognised programme-responsible parties and end users with exit capacity in the medium or low risk category based on operational cash flow and profits:
 - a. if net profit is positive, the initial credit limit is increased by 10%;
 - b. if net profit is negative, the initial credit limit is decreased by 10%;
 - c. if the operational cash flow is positive, the initial credit limit is increased by 5%;
 - d. if the operational cash flow is negative, the initial credit limit is decreased by 5%.

B1.7. Provision of information

The recognised programme-responsible party or end user with exit capacity must inform the transmission system operator immediately of any change or situation that may be reasonably expected to lead to a different result for the credit analysis.

B1.8. Significant change in creditworthiness

A recognised programme-responsible party or end user with exit capacity must, within five business days of receipt of a request from the network operator of the transmission system, submit additional security if a significant deterioration in creditworthiness, determined on the basis of the information supplied under B1.7 and leading to an assignment to a higher risk category in accordance with B1.2,

occurs in respect of the recognised programme-responsible party or end user with exit capacity, an affiliated company or a party who is acting as guarantor, as a result of which it is reasonable to assume that the recognised programme-responsible party or end user with exit capacity would be less able to meet its financial obligations or which leads to a deterioration in the extent to which the transmission system operator can make a claim on the recognised programme-responsible party or end user with exit capacity or on parties acting as their guarantors. For this purpose, the transmission system operator may require additional financial security as mentioned in B1.4.

If information becomes available to the network operator of the transmission system, supplied in accordance with B1.7, indicating that a significant improvement in the creditworthiness of the recognised programme-responsible party or end user with exit capacity has occurred, as a result of which this party will be assigned to a lower risk category in accordance with B1.2 and the requirement for security (or supplementary security) is no longer applicable (in full or in part), the transmission system operator will permit the recognised programme-responsible party or end user with exit capacity to withdraw the security provided for that proportion of the risk.

B1.9. Licensing LB

For a recognised programme-responsible party with a licensing LB, the transmission system operator will determine the monthly invoice, as referred to in B1.4, by multiplying the recognised programme-responsible party's estimated exit capacity, based on the contracted exit capacity of the recognised programme-responsible party for the previous year, by the average tariff at exit points linked to a distribution network. If a recognised programme-responsible party had not contracted any exit capacity at exit points linked to a distribution network during the previous year, the transmission system operator will charge €50,000 to the existing credit margin; in such cases, the transmission system operator will adjust the recognised programme-responsible party's credit limit every quarter as a result of changes to the contracted exit capacity at exit points linked to a distribution network. The financial security must be valid from the moment that the recognised programme-responsible party is granted licensing LB until 2 months after withdrawal of the licence.

B1.10

- 1. The level of the credit limit must at least cover the exposure.
- 2. Parties in each risk category must immediately provide additional financial security as soon as exposure exceeds the credit limit.
- 3. If exposure exceeds the credit limit at any time, the network operator of the national gas transmission network can reject nominations and renominations by recognised programme-responsible parties in full or in part, so as to prevent the credit limit from being exceeded even more and thus prevent or limit financial losses for the market. If the network operator of the national gas transmission network decides to proceed to reject nominations and renominations, it will endeavour to notify all recognised programme-responsible parties within 4 hours.
- 4. If exposure substantially exceeds the credit limit at any time, the programme-responsible party no longer complies with the conditions specified in Article 3.2.0 of the Transmission Code Gas TSO (*Transportcode gas LNB*), authorising the network operator of the national gas transmission network to revoke the licence with immediate effect based on Article 3.3.2.
- 5. The exceeding of the credit limit will be considered to be substantial if:
 - a. exposure exceeds the credit limit by EUR 100,000 or more; or

- b. exposure exceeds the credit limit by over 5%; or
- c. exposure exceeds the credit limit for over 24 hours.
- 6. If the network operator of the national gas transmission network proceeds to revoke the licence, it will notify all recognised programme-responsible parties, all suppliers and the Netherlands Authority for Consumers and Markets (ACM) as soon as possible prior to doing so.

Annex 2. Determining the scope of technical entry and exit capacity and oversubscription capacity

B2.1.

This Annex 2 specifies how the transmission system operator determines the size of the technical, firm entry or exit capacity and the oversubscription capacity, which is published prior to the auction in accordance with the NC-CAM auction calendar.

B2.2.

- 1. The transmission system is constantly being adapted to cope with changing circumstances. Several procedural steps, as described in B2.2.1 to B2.2.6, are carried out when determining the entry and exit capacity of the existing transmission system or when determining expansions to the transmission system. The mutual relationship between these procedural steps is as follows: snapshots are set up on the basis of forecasts, basic principles and impact selection. A calculation is made of the extent to which the firm entry or exit capacity corresponding to each snapshot can be transported with the existing transmission system or with the anticipated expansions to the transmission system. The existing transmission system or the extensions to the existing transmission system are assessed on the basis of these calculations.
- 2. A one-off assessment of the technical firm entry and exit capacity is made every year in good time before the NC-CAM auction, for the first upcoming gas year and the second until the fifteenth gas years inclusive. The technical firm entry and exit capacity for the sixth until fifteenth upcoming years are based on extrapolations of the technical firm entry and exit capacity calculated for the fifth year. The calculated technical firm capacity for the first future year will also be used for auctions for the four quarters in the first year.
- 3. The technical firm entry and exit capacity for the month is determined within the 4 weeks before the publication date of the relevant monthly auction. The technical firm entry and exit capacity for dayly and hourly products corresponds to the entry and exit capacity of the month in which the relevant day falls.

B2.2.1. Forecasts

Forecasts are the predicted figures for entry or exit capacity over the coming years. These forecasts are obtained via a method that uses estimates to project the entry or exit capacity contracted by the market.

The forecasts largely determine how the transmission system is designed. Therefore the reasons for adjusting the design of the transmission system can usually be traced back to changes in forecasts at

entry and exit points. The transmission system operator publishes on its website the methods it uses to arrive at its forecasts.

B2.2.2. Basic principles

Basic principles are qualified choices with respect to the technical qualities of the transmission system or parts thereof, the physical qualities of the gas to be transported and expectations regarding the use of entry and/or exit capacity at an entry and/or exit point and/or combinations of entry and exit points.

Technical qualities relate to the features of the network or of network installations or of installation components. Examples of these are maximum gas pressure or gas velocity ensuing from safety requirements, working envelopes of installations or installation components, backup installations or installation components and agreements with network users regarding the conditions under which the gas is supplied.

Physical qualities of the gas relate to, amongst others, superior calorific value, Wobbe index, pressure, density and gas composition, taking account of both desirable and undesirable components.

Use at an entry or exit point can, in principle, vary between the forecast (the highest value) and zero (the minimum value). After all, the transmission system operator does not restrict the use of the entry or exit point by the recognised programme-responsible party. This makes it important, when determining technical firm entry or exit capacity, to estimate as carefully as possible the extent of the usage at an entry or exit point under certain conditions, what the mutual relationships are between entry and exit points and the relationship with external factors, such as temperature and season.

The transmission system operator publishes on its website all the basic principles that are important for the design of the transmission system

B2.2.3. Impact selection

After applying the basic principles there are still a many combinations involving the use of entry or exit capacity. The most severe transport condition is chosen for every transport direction. Here 'transport direction' means the direction of a main gas flow through the Netherlands, for example from North to South. The most severe transport conditions are the conditions producing the greatest impact on the design of the transmission system, for example the biggest pressure drop or the highest quality conversion. If the most severe transport conditions in a transport direction can be met then all the less severe conditions in that direction are viable.

B2.2.4. Snapshots

After applying the basic principles and worst case scenario, a limited set of scenarios remains from the range of all the possible uses of entry or exit capacity. The use at all entry and exit points is specified for a particular scenario such that the total quantity of energy at the entry points must be in balance with the total quantity of energy at the exit points. Such a scenario is called a snapshot. This methodology results in less than 100 snapshots.

B2.2.5. Calculations

The transmission system operator calculates, for every snapshot, whether the firm entry or exit capacity can be transported. When performing the calculations, the figures take account of the transmission system in the year in question after completing measures initiated in the past.

B2.2.6. Assessment

In the opinion of the network operator of the transmission system, the transmission system is robust enough to supply firm entry or exit capacity if the calculations, based on the set of snapshots, show that the firm entry or exit capacity can be transported.

If the calculations, based on the set of snapshots, show that the firm entry or exit capacity cannot be transported, measures are identified for expanding the transmission system to such an extent that the firm entry or exit capacity can be transported. The calculations referred to under B2.2.5 are then performed subject to consideration of the identified measures.

If there proves to be potential for transporting more interruptible entry or exit capacity than on the basis of the set of snapshots as described in B2.2.4 then calculations are repeated, this time increasing entry and exit capacity at entry and exit points such that the snapshots are still just successful. In performing the recalculations, the transmission system operator chooses the entry and exit points where it expects to be able to sell extra firm entry or exit capacity.

B2.3. Oversubscription capacity

The following provisions only apply to interconnection points if there is contractual congestion and/or where the transmission system operator expects contractual congestion.

B2.3.1. Gas day in advance

The transmission system operator determines the oversubscription capacity for the daily auction on the basis of statistical scenarios of the anticipated quantity of unused physical entry or exit capacity and the estimated risk of excessive buyback obligations for the respective gas day.

B2.3.2. Gas month in advance

The transmission system operator determines the oversubscription capacity for the monthly auction on the basis of statistical scenarios of the anticipated quantity of unused physical entry or exit capacity and the estimated risk of excessive buyback obligations for the respective gas month.

B2.3.3. Gas quarter ahead

The transmission system operator determines the oversubscription capacity for the quarterly auction on the basis of statistical scenarios of the anticipated quantity of unused physical entry or exit capacity and the estimated risk of excessive buyback obligations for the respective quarter.

B2.3.4. Gas year in advance

The transmission system operator determines the oversubscription capacity for the yearly auction on the basis of statistical scenarios of the anticipated quantity of unused physical entry or exit capacity and the estimated risk of excessive buyback obligations for the respective year.

B2.3.5.

The transmission system operator reports every year to the Dutch Authority for Consumers and Markets, prior to the date referred to in the NC-CAM calendar for the respective auction, regarding the way in which it has implemented the method described in this paragraph B2.3. If there is any reason for adjusting the method in between the reporting intervals, the transmission system operator will report these changes and the reasons for the changes within a month from the time that it changed the method.