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Transmission Code Gas TSO

Valid from 12-05-2016 – 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;

Decision:

1. Scope and definitions

This code lays down conditions for transmission, quality conversion and flexibility in the national grid and programme responsibility in the national grid and a distribution network. Terms that are defined in the Regulation 715/2009, NC-BAL, Dutch Gas Act or the Definitions Code Gas have the meaning defined in the Regulation 715/2009, NC-BAL, Dutch Gas Act or the Definitions Code Gas.

2. Services

2.1. Transmission

2.1.1.

Transmission takes place on the basis of an agreement to be concluded with the network operator of the national grid, and means that the network operator of the national grid accepts gas offered at an entry point to the national grid and makes it available at an exit point. Transmission takes place using the entry capacity and exit capacity services. These services can be contracted with the network operator of the national grid independently of each other.

2.1.2. Entry and exit capacity

Description of the service

The entry capacity service confers the right to inject a quantity of gas per hour into the national grid at an entry point. The exit capacity service confers the right to take off a quantity of gas per hour from the national grid at an exit point.

Contracting and allocation

Entry and exit capacity are contracted and allocated to shippers on the first come, first served principle. At interconnection points, entry and exit capacity are contracted and allocated to shippers by means of an auction as laid down in NC-CAM.

Interruptible service

The interruptible entry capacity and interruptible exit capacity services confer the conditional right to entry capacity and exit capacity and are offered if non-interruptible entry capacity or non-interruptible exit capacity is no longer available. The condition is that the right to this service can only be used if the national grid network users that have access to non-interruptible capacity at the relevant entry point or exit point, or to previously contracted interruptible capacity, do not (fully) use their entry capacity or exit capacity. If this condition is not met, the service to the network user may be (partly) interrupted at the relevant entry or exit point. Interruption shall be performed in the sequence of the time stamps specified according to 5.1.6 and, where time stamps are equal, in proportion to the nominations.

Other conditions

At entry and exit points that are not interconnection points, the network operator of the national grid shall, subject to the provisions of 2.1.12, to the extent existing non-interruptible entry capacity or existing non-interruptible exit capacity becomes available, immediately upgrade contracted interruptible capacity to non-interruptible entry capacity or non-interruptible exit capacity. The upgrade will be executed in the sequence of the time stamps specified according to 5.1.6.

2.1.2a.

The network operator of the national grid shall retain exit capacity for exit points that are linked to the connection of a directly connected party. The network operator of the national grid 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 link the national grid to a distribution network, the network operator of the national grid jointly determines the planned parameters and publishes these on its website before each calendar year. The planned parameters include the planned capacity, the planned capacity of profile customers, the standard capacity of profile customers, the planned capacity of telemetry large-scale users and the exit capacity required for peak supply, as referred to and under circumstances as described in article 2, paragraph 1, of the Decision on security of supply. The network operator of the national grid publishes the way in which the planned parameters are determined in the document referred to in article 8, paragraph 2 of the Dutch Gas Act. When determining the parameters as referred to in the previous two sentences, the sum of the planned capacity of the profile customers and the planned capacity of the telemetry large-scale users is equivalent to the planned capacity. In addition to 2.1.2, the standard capacity of profile customers plus the planned capacity of telemetry large-scale users is fully contracted by the joint licensing LB shippers. This capacity is contracted as firm (not interruptible) capacity. The network operator of the national grid divides the standard capacity of profile customers plus the planned capacity of telemetry large-scale users among the licensing LB shippers on the basis of data from the distribution network operators' connection registers according to the methodology in 2.1.2d or 2.1.2e as applicable.

2.1.2c.

The distribution network operators submit monthly reports to the network operator of the national grid no later than the sixth business day following the first calendar day of the month. These reports contain the following data, correct as of the first calendar day of that month, per exit point per shipper per supplier:

For profile customers:

- the number of profile customers per profile category;
- the sum of standard annual usage per profile category.

For telemetry large-scale users:

- the number of telemetry large-scale users;

the sum of the max usages for telemetry large-scale users as specified in the distribution network operators' connection registers.

Distribution network operators must submit this data again to the network operator of the national grid 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 network operators by shippers and suppliers.

On the same days, the distribution network operators also send this data to the relevant shippers. Shippers are obliged to check the information, provided pursuant to this article by the distribution network 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 network operator.

The network operator of the national grid 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 shippers.

The distribution network operator shall ensure that information provided to the network operator of the national grid, shippers and suppliers, is consistent.

2.1.2d.

The network operator of the national grid determines the quantity of exit capacity contracted in a month by each licensing LB shipper for profile customers 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 network operators' connection registers, as described below:

$$OV_{PV,netgebied,profiel} = FF_{profiel} \cdot [SJV_{G1,PV,netgebied} \cdot F_{G1,maand} + SJV_{G2,PV,netgebied} \cdot F_{G2,PV,maand}] \quad FF_{profiel} = \frac{SC_{profiel,land}}{MC_{profiel,land}}$$

$$SC_{profiel,land} = PC_{profiel,land} - PC_{piek}$$

$$MC_{profiel,land} = \sum_{netgebied} \sum_{PV} \sum_{Cat} SJV_{Cat,PV,netgebied} \cdot F_{Cat,maand}$$

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

$$F_{G1,maand} = MAX(Uurfracties_{G1,referentietemperatuur,maand})$$

$$F_{G2,maand} = MAX(Uurfracties_{G2,referentietemperatuur,maand})$$

where:

$OV_{PV,netgebied,profiel}$ = The DSO exit capacity for profile customers of a specified shipper for a specified network area

$SJV_{Cat, PV, netgebied}$ = The sum of the standard annual usages for all profile customers with a specified customer category for a specified shipper for a specified network area.

Cat = Customer categories

$SC_{profiel,land}$ = The standard capacity of profile customers

$PC_{profiel,land}$ = The planned capacity of profile customers

PC_{piek} = 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,

$F_{Gx,maand}$ = 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

$MC_{profiel,land}$ = 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 shippers and all network areas).

$FF_{profiel}$ = The fit factor for profile customers

The calculation is performed according to the following steps:

Step	By	Frequency	Definition of variable	Action
1a	TSO	year	PC PC _{telemetrie} PC _{profiel}	Define the planned capacity, planned capacity of profile customers and the planned capacity of telemetry large-scale users
1b	TSO	year	SC _{profiel}	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		Send the results of step 2a to the TSO
3a	TSO	month	MC _{profiel, land}	Define the model capacity
3b	TSO	month	FF _{profiel}	Define the fit factor for profile customers (FF _{profiel}) by dividing the standard capacity of the profile customers (SC _{profiel}) by the model

				capacity
4	TSO	month	$OV_{PV,netgebiet,profil}$	Define the contracted capacity for profile customers per shipper 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 shipper and by the fit factor for profile customers.

2.1.2e.

The network operator of the national grid determines the quantity of exit capacity contracted in a month by each licensing LB shipper 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 network operators' connection registers, as described below:

$$OV_{PV,netgebiet,telemetry} = FF_{telemetry} \cdot pf_{telemetry} \cdot GC_{PV,netgebiet}$$

With:

$$GC_{PV,netgebiet} = \sum_{x=1}^n GC_{x(PV,netgebiet)}$$

$$GC_{land} = \sum_{PV=1}^{land} \sum_{netgebiet=1}^{land} GC_{PV,netgebiet}$$

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

where:

$OV_{PV,netgebiet,telemetry}$ = The DSO exit capacity for telemetry large-scale users of a specified shipper for a specified network area

$pf_{telemetry}$ = The telemetry large-scale use profile factor

$GC_{PV,netgebiet}$ = The sum of the max usages of all telemetry large-scale users for which a shipper exercises programme responsibility in a specified network area.

$GC_{x(PV,netgebiet)}$ = Max usage for telemetry large-scale user x for which a shipper exercises programme responsibility in a specified network area

GC_{land} = The sum of the max usages of all telemetry large-scale users in the country = sum of $GC_{PV,netgebiet}$ of all shippers 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	By	Frequency	Definition variable	Action
1	TSO	year	PC $PC_{telemetry}$ $PC_{profile}$	Define the planned capacity, planned capacity of profile customers and the planned capacity of telemetry large-scale users (this is the same action as step 1a in paragraph 2.1.2d)
2a	DSO	month	$GC_{PV,netgebiet}$	Define, per network area, the sum of the max usages of all telemetry large-scale users per shipper
2b	DSO	month		Send the results of step 2a to the TSO
3	TSO	month	GC_{land}	Define the sum across all DSO exit points of $GC_{PV,netgebiet}$
4	TSO	month	$FF_{telemetry}$	Define the fit factor for telemetry large-scale users by dividing $PC_{telemetry}$ by GC_{land}
5	TSO	month		Publish $FF_{telemetry}$ on the website
6	TSO	month		Define, per shipper per network area the contracted capacity of telemetry large-scale users per month by multiplying the sum of $GC_{PV,netgebiet}$ and $FF_{telemetry}$ by the telemetry large-scale use profile factor $pf_{telemetry}$

2.1.2f.

The network operator of the national grid 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 network operator of the national grid reserves sufficient exit capacity for profile customers behind a non-DSO exit point.

2.1.2h. Entry and exit capacity storage

Description of the service

The entry capacity storage service confers the right to inject a quantity of gas per hour into the national grid at an entry point storage. The exit capacity storage service confers the right to take off a quantity of gas per hour from the national grid at an exit point storage.

Contracting and allocation

Entry and exit capacity storage are contracted and allocated to shippers on the first come, first served principle.

Interruptible service

The interruptible entry capacity storage or interruptible exit capacity storage services confer the conditional right to entry capacity storage or exit capacity storage and are offered if non-interruptible entry capacity storage or non-interruptible exit capacity storage is no longer available. The condition is that the right to this interruptible service may only be used if the national grid network users that have access to non-interruptible entry capacity storage or non-interruptible exit capacity storage at the relevant entry point storage or exit point storage or to previously contracted interruptible capacity storage do not (fully) use their entry capacity storage or exit capacity storage. If this condition is not met, the network user may be (partly) interrupted at the relevant storage entry or exit point. Interruption shall be performed in the sequence of the time stamps specified in accordance with 5.1.6 and, where time stamps are equal, in proportion to the nominations.

Other conditions

The network operator of the national grid shall, subject to the provisions of 2.1.12, to the extent existing non-interruptible entry capacity storage or existing non-interruptible exit capacity storage becomes available, immediately upgrade contracted interruptible capacity storage to non-interruptible entry capacity storage or non-interruptible exit capacity storage. The upgrade will be executed in the sequence of the time stamps specified in accordance with 5.1.6.

The service entry and exit capacity storage shall be offered exclusively at the following entry and exit points.

Number	Description
301114	GRIJPSKERK (NAM - UGS)
301116	NORG (NAM - UGS)
301118	ALKMAAR (TAQA-PGI)
301185	OUDE STATENZIJL RENATO (OGE)
301198	ENSCHEDÉ (ESSENT-UGS EPE)
301276	VLIEGHUIS (RWE-UGS KALLE)
301309	ENSCHEDÉ (NUON-UGS EPE)
301320	ZUIDWENDING (UGS)
301348	BERGERMEER (TAQA UGS)
301360	OUDE STATENZIJL (ETZEL-EKB-H)
301361	OUDE STATENZIJL (EWE-H)
301391	OUDE STATENZIJL (ASTORA JEMGUM)
301397	ENSCHEDÉ (ENECO-UGS EPE)
301400	OUDE STATENZIJL (ETZEL-CRYSTAL-H)
301401	OUDE STATENZIJL (ETZEL-FREYA-H)

2.1.3. Backhaul entry and exit capacity

Description of the service

The backhaul entry capacity service confers the right to take off a quantity of gas per hour administratively from the national grid at entry points at which gas crosses the Dutch border specified by the network operator of the national grid, in the opposite direction to the physical flow. The backhaul exit capacity service confers the right to take off a quantity of gas per hour administratively from the national grid at exit points at which gas crosses the Dutch border specified by the network operator of the national grid, in the opposite direction to the physical flow.

Contracting and allocation

Backhaul entry and exit capacity are contracted and allocated to shippers on the first come, first served principle. At interconnection points, backhaul entry and exit capacity are contracted and allocated to shippers by means of an auction as laid down in NC-CAM.

Non-Interruptible service

The non-interruptible backhaul entry capacity and non-interruptible backhaul exit capacity services can only be contracted at interconnection points.

Interruptible service

The interruptible backhaul entry capacity or interruptible backhaul exit capacity services confer the conditional right to backhaul entry capacity or backhaul exit capacity and are offered if non-interruptible backhaul entry capacity or non-interruptible backhaul exit capacity is not or is no longer available. The condition is that the right to the interruptible service may only be used if the national grid network users that have access to non-interruptible capacity at the relevant entry point or exit point or to previously contracted interruptible backhaul capacity do not (fully) use their backhaul entry capacity or backhaul exit capacity or if sufficient forward flow is available at the entry point or exit point concerned. If this condition is not met, the service to the network user may be (partly) interrupted at the relevant entry or exit point.. Interruption shall be performed in the sequence of the time stamps specified in accordance with 5.1.6 and then, where necessary, in proportion to the nominations.

2.1.4.

[No longer applicable]

2.1.5. Wheeling

Description of the service

The wheeling service confers the right to inject a quantity of gas per hour into the national grid at an entry point and to take off this gas from the national grid at an exit point at the same location. The quantity of gas to be injected in an hour must be equal to the quantity of gas to be taken off in the same hour. The service is recorded by the network operator of the national grid in a separate portfolio.

Contracting and allocation

Wheeling is contracted and allocated to shippers on the first come, first served principle. As from 1 January 2014, the wheeling service cannot be contracted between an entry or exit point to which the first come first served principle applies and an interconnection point. Wheeling services contracted prior to 1 January 2014 will be honoured. The network operator of the national grid publishes the combination of entry and exit points for which the wheeling service is offered on its website.

Interruptible service

The interruptible wheeling service confers the conditional right to wheeling and is offered if non-interruptible wheeling is no longer available. The condition is that the right to the interruptible wheeling service can only be used if the national grid network users that have access to non-interruptible entry capacity or non-interruptible exit capacity at the relevant entry point or exit point, or to previously contracted interruptible entry capacity or interruptible exit capacity, do not (fully) use their entry capacity or exit capacity. If this condition is not met, the interruptible wheeling service to the network user may be (partially) interrupted. The interruption will be executed in the sequence of the time stamps specified in accordance with 5.1.6.

Other conditions

Subject to the provisions of 2.1.12, the network operator of the national grid shall, to the extent existing non-interruptible wheeling becomes available, immediately upgrade contracted interruptible wheeling to non-interruptible wheeling at entry and exit points that are not interconnection points. The upgrade will be executed in the sequence of the time stamps specified in accordance with 5.1.6.

2.1.6. Shorthaul

Description of the service

The shorthaul service confers the right to inject a quantity of gas per hour into the national grid at a specified entry point and to take off this gas from the national grid only at a specified exit point. The distance between the entry and exit points may not exceed 50 kilometres as the crow flies. The quantity of gas to be injected in an hour must be equal to the quantity of gas to be taken off in the same hour. The service is recorded by the network operator of the national grid in a separate portfolio. *Contracting and allocation*

Shorthaul takes place on the basis of an agreement to be concluded between the network operator of the national grid and a shipper, with a minimum duration of three years. The shorthaul service is offered as a customised service.

2.1.7. Diversion

Description of the service

The diversion service confers the right to move contracted entry capacity or exit capacity to another entry point or exit point at the same location, provided that no additional demand is placed on transmission capacity.

Contracting and allocation

Diversion is contracted and allocated to shippers on the first come, first served principle. As from 1 January 2014, the diversion service cannot be contracted between an entry or exit point to which the first come first served principle applies and an interconnection point. The network operator of the national grid publishes the combination of entry and exit points for which the diversion service is offered on its website.

Other conditions

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 shipper.

2.1.8. Shift of capacity

Description of the service

The shift of capacity service confers the right to move the exit capacity of an exit point to another exit point for a specified period.

Contracting and allocation

The shift of capacity service is assessed by the network operator of the national grid and offered as a customised service.

Other conditions

The status of the exit capacity moved as a result of shift of capacity shall not be affected, unless this move would affect the status of the exit capacity of another shipper.

2.1.9. Start-up service

2.1.9.1.

The start-up service can be contracted by a shipper or an end user with exit capacity in order to facilitate the start-up or expansion of a gas installation of an end user with a connection to the national grid. The start-up service confers on the shipper or end user with exit capacity the right to contract an estimated quantity of exit capacity for a maximum of four consecutive gas months. The start-up service may not be contracted in a winter month.

2.1.9.2.

The start-up service is laid down in a separate agreement setting out 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 shipper or the end user with exit capacity.

2.1.9.3.

The shipper 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 national grid, this will be included in the agreement.

2.1.9.4.

The transfer of transmission capacity or the use of transmission capacity pursuant to 2.1.10 with regard to the estimated exit capacity as contracted under the start-up service is only possible for the whole of the estimated exit capacity and for the whole period of the start-up service.

2.1.9.5.

After expiry of the start-up service, the network operator of the national grid determines, for each gas month of the start-up service, a value for the exit capacity in the gas month concerned. 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 shipper or end user with exit capacity concludes a revised agreement with the network operator of the national grid with whom this exit capacity is contracted and settled on the basis of article 3.2.1.4 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 shipper or end user with exit capacity has requested, and received from the network operator of the national grid, permission in advance to exceed the estimated exit capacity.

2.1.9.6.

If the estimated exit capacity for which the shipper or end user with exit capacity requested, but has not been granted permission, or for which permission in advance was required but has not been requested, is exceeded, this capacity overshoot is deemed to be an overshoot as referred to in article 3.2.1.5 of the Tariff Code gas, and, as such, settled after expiry of the start-up service. This also applies if permission for overshoot is granted but the shipper 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 rights

General points

2.1.10.1.

The network operator of the national grid facilitates the transfer of transmission capacity and the transfer of the use of transmission capacity (hereinafter also referred to as 'the usage right'). The transfer of transmission capacity or usage right is possible between an end user with exit capacity and a shipper insofar as it concerns the exit capacity at the end user with exit capacity's exit point or is a mutual arrangement between shippers. The transfer of transmission capacity or the usage right refers to booked 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 network operator of the national grid to transfer transmission capacity or the usage rights. The portfolio of the party who is having the usage right transferred is expanded by the amount of the transfer. In connection with the exposure referred to in article B1.5 of the Transmission Code gas - TSO, the network operator of the national grid 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 network operator of the national grid 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 rights may be used by the acquiring party no earlier than on the gas day after the network operator of the national grid 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 network operator of the national grid will send to the shipper or end user with exit capacity an e-mail 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 shipper 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 (in the meantime) 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 network

operator of the national grid shall offer the party which has had the usage right transferred from the party which contracted the transmission capacity directly from the network operator of the national grid 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 national grid's offer, decide whether it wishes to make use of this possibility.

2.1.10.7.

The diversion service as described in 2.1.7 cannot be contracted with regard to the usage right that a shipper has acquired by means of a transfer.

2.1.10.8.

The network operator of the national grid 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 network operator of the national grid to the shipper 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 network operator of the national grid upgrades the services referred to under 2.1.2, 2.1.3 and 2.1.5 unless the shipper notifies the network operator of the national grid within five business days after conclusion of the agreement in question that it does not wish to be offered an upgrade of the interruptible service for this agreement.

2.1.13.

For exit points linked to the connection of a user to the national grid, the network operator of the national grid 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 capacity

In accordance with article 2.2.4 of Annex 1 to the Regulation, the network operator of the national grid shall facilitate the surrender of contracted, non-interruptible (backhaul) entry or exit capacity at interconnection points. The (backhaul) entry or exit capacity can be surrendered for a period of a year (beginning on 1 October), a quarter or a month. The (backhaul) entry or exit capacity must be constant during the whole surrender period. During the period between the surrender of the (backhaul) entry or exit capacity and the closure of the corresponding auction, the shipper may not enter into any other kind of trading with the (backhaul) entry or exit capacity concerned. If several shippers are surrendering (backhaul) entry or exit capacity, but not all the surrendered (backhaul) entry or exit capacity can be fully reallocated, reallocation per shipper shall take place according to the timestamp of the request for the surrender of (backhaul) entry or exit capacity. If and insofar surrendered

(backhaul) entry or exit capacity is resold by the network operator of the national grid, the surrendered (backhaul) 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 network operator of the national grid shall, where necessary, buy back the right to the use of entry or exit capacity.

2.1.15.1.

Annex 2 specifies how the network operator of the national grid determines the scope of the technical, non-interruptible 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 national grid is at risk, the network operator of the national grid shall start a buyback auction at interconnection points, in order to prevent anticipated bottlenecks. The buyback auction means that shippers adjust the use of their transmission rights for the hours concerned.

2.1.15.3.

A notification is sent to shippers 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 amount of the hourly quantity and the flow direction for which buyback is occurring;
- the consecutive hours for which buyback is occurring.

2.1.15.4.

Shippers who wish to participate in the buyback auction must place their bids between T-2³/₄ and T-2¹/₄. Shippers must 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-2¹/₄ 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 of the auction;
- the buyback auction has no regulated tariff and has a minimum price of zero;
- in their bids, shippers state a minimum price that they wish to receive.

2.1.15.6.

Immediately after the buyback auction, shippers who have bid successfully will receive a message to this effect and these shippers are obliged to renominate the quantity referred to in the message for the hours concerned before T-2 hours, or the shipper 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 network operator of the national grid will verify whether the anticipated bottleneck can be resolved in another way. To this end, the network operator of the national grid will investigate whether the anticipated bottleneck can be resolved by taking operational measures and, where necessary, the network operator of the national grid will consult with the adjacent network operators regarding whether the anticipated bottleneck can be resolved among themselves.

2.1.15.8.

The network operator of the national grid shall supply all necessary information to the Dutch Authority for Consumers and Markets annually so that the operation of the oversubscription- and buyback arrangements can be assessed.

2.2. Quality conversion

2.2.1. Description of the service

The quality conversion service confers the right, on a portfolio basis, to inject gas with a specified calorific value (reference figure Wobbe index) into the national grid and to take off gas with a different calorific value from the national grid. The network operator of the national grid bridges the difference between the calorific value of the gas injected and the calorific value of the gas taken off.

Contracting and allocation

The right to the quality conversion service is obtained by contracting non-interruptible and interruptible entry or exit capacity as described in article 2.1.2, and backhaul entry and/or exit capacity as described in article 2.1.3. The quality conversion service therefore does not need to be contracted in advance.

3. Shippers and end users with exit capacity

3.1.

[No longer applicable]

3.2. Shippers

3.2.0.

Any party can apply to the network operator of the national grid to become a shipper, using the model specified by the network operator of the national grid and available on its website. The network operator of the national grid will accept as shipper 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 national grid. These rules are set out in Appendix 1 to the Transmission Code gas - TSO; and

- b. 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 national grid'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 national grid 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 network operator of the national grid will grant the applicant a licence by publishing the licence on its website along with the date on which it takes effect.

The network operator of the national grid grants the shipper 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 shipper 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 shipper.

3.2.1.

The network operator of the national grid distinguishes three different types of shipper licences.

Licence LA: legal persons and natural persons holding this licence can use the services of the network operator of the national grid, with the exception of exit capacity at an exit point between the national grid and a distribution network. The following conditions apply in addition to the requirements set out under 3.2.0a to 3.2.0d:

- a. the party must have an EAN code if it bears programme responsibility at a domestic exit point;
- b. the party must be able to communicate with the network operator of the national grid through the online information service B2B.

Licence LB: legal persons and natural persons holding this licence can use the services of the network operator of the national grid, including exit capacity at an exit point between the national grid and a distribution network. The following conditions apply in addition to the requirements set out under 3.2.0a to 3.2.0d:

- a. the party must have an EAN code;
- b. the party must participate in the message handling process with regard to allocation;
- c. the party contracts exit capacity in accordance with 2.1.2b;
- d. the party must be able to communicate with the network operator of the national grid through the online information service B2B.

Licence LC: Legal persons and natural persons holding this licence can only use the services of the network operator of the national grid at the virtual trading point. No further conditions apply in addition to the requirements set out under 3.2.0a to 3.2.0d.

3.2.2.

The network operator of the national grid publishes the current list of shippers including the type of licence held on its website.

3.2.3.

The shipper has to ensure that his details known to the network operator of the national grid, as set out under 3.2.0., are kept up to date.

3.3. Exemption and withdrawal of licences

3.3.1.

The network operator of the national grid 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 service.

3.3.2.

Licences are valid until they are withdrawn. The network operator of the national grid will only withdraw a licence at the request of the shipper or if the shipper no longer meets the conditions laid down in 3.2., or, in consultation with the Dutch Authority for Consumers and Markets, if the shipper 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 shipper only if the shipper does not use, or no longer uses, the services of the network operator of the national grid 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 network operator of the national grid will notify each distribution network operator without delay of the withdrawal of a licensing LB.

3.3.3.

The network operator of the national grid 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 shipper

3.3.4.1.

If the network operator of the national grid has decided to withdraw the licence of a shipper, he will notify the Dutch Authority for Consumers and Markets. The network operator of the national grid will decide, after consulting the Dutch Authority for Consumers and Markets, whether, and if so under what conditions, it is willing to offer the shipper, or the administrator and the shipper together, or the trustee in bankruptcy, deferral of withdrawal of the shipper licence for up to 10 business days. In that case the network operator of the national grid 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 shipper not being balanced and other activities that directly arise from the obligations of the shipper. 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 shipper in question being deferred, all individual requests for the transfer of programme responsibility to the shipper 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 shipper licence is withdrawn, and this withdrawal cannot be attributed to the large-scale users concerned, programme responsibility is distributed among the shippers as follows:

- a. programme responsibility for small-scale users for which the licence holder has arranged programme responsibility: to the shipper 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 shippers of small-scale users as a proportion of the number of small-scale users for which a shipper 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 shipper 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 shipper themselves: to the shipper 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 large-scale user under d has not appointed a shipper:
 - to shippers 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 network operator of the national grid may contact the shipper involved in advance, to adjust the distribution.

Shippers 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, of this allocation as soon as possible, but at the latest within three business days of the distribution, and will also inform them of 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 d as a consequence of the withdrawal of a licence from a shipper, the network operator of the national grid ensures that the allocation of programme responsibility is processed in its connection register within one business day, and asks the distribution network 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 shipper for their connection as a result of the allocation referred to in this section have the right to change shipper 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 shippers for connections allocated to them to be assigned to a different shipper if both of these shippers have submitted a joint request to this effect to the network operator of the national grid. 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 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 shipper 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 shipper and network operator involved will immediately notify the connected parties concerned of the situation that has arisen. The shipper 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 shipper.

3.3.8. Coincidence of withdrawal of licence and withdrawal of supplier

In the event that the shipper whose licence has been withdrawn also acted as the supplier, in the distribution of programme responsibility in accordance with 3.3.5.1., the shipper who is attributed programme responsibility 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 national grid.

3.4.2.

These connected parties are not entitled to make use of the services of the network operator of the national grid, 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 shipper(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 national grid, the parties connected to the upstream pipeline network have programme responsibility.

3.5.2.

Shippers are required to execute programme responsibility with regard to the connections for which they are at a particular time listed as shippers 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 shippers to have inaccurate information corrected.

4. Operational conditions

4.1. Balancing regime

4.1.0.

The shipper is responsible for monitoring the balance per portfolio.

4.1.1. Submitting programmes

4.1.1.1.

Shippers must submit an entry programme and/or exit programme for the following gas day to the network operator of the national grid by 14.00 hours each day.

4.1.1.2.

The network operator of the national grid publishes a formula on its website to clarify the relationship between entry and exit quantities per hour for exit programmes. Shippers 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 network operator of the national grid 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 network operator of the national grid will notify the shipper 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 network operator of the national grid will always reject exit programmes that do not comply with the requirements described in 4.1.1.2. If the shipper does not apply the formula referred to in 4.1.1.2 in its exit programme, the network operator of the national grid will always reject exit programmes in which the entry and exit quantities do not match in each specific hour.

The network operator of the national grid will always reject entry programmes in which the entry and exit quantities do not match on each specific hour.

The network operator of the national grid will always reject entry or exit programmes if it observes inconsistency on the VPPV with other exit or entry programmes of the same shipper and/or another shipper.

The fact that another exit or entry programme has not yet been fully approved must not lead to inconsistency in case of 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 shipper has been informed by the network operator of the national grid that its entry and/or exit programme has been rejected, the shipper submits an improved entry and/or exit programme which also requires approval by the network operator of the national grid.

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 network operator of the national grid determines this entry and/or exit programme based on the information available.

If at this time the network operator of the national grid 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 shipper, the network operator of the national grid 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 maintenance

4.1.2.1.

The network operator of the national grid publishes the hourly values of the borders of the zones for balance maintenance 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 network operator of the national grid 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 network operator of the national grid 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 shippers, and comprises:

- a. the approved entry- and/or exit programme;
- b. the hourly imbalance, i.e. the observed 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 network operator of the national grid from the shipper, or sold by the network operator of the national grid to the shipper causing the imbalance as referred to in 4.1.4.2. and 4.1.4.3. and the hour of the WDM transaction and the price;
- d. the total of all hourly imbalances, being the portfolio imbalance signal.

4.1.3.

[no longer applicable]

4.1.4. Daily balance maintenance

4.1.4.1.

In the first half of each hour, the network operator of the national grid 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 network operator of the national grid takes no action with regard to balance maintenance.

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 network operator of the national grid will issue a WDM title transaction in order to reduce the system imbalance. The quantity for which the network operator of the national grid 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 network operator of the national grid 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 network operator of the national grid will issue a WDM temporal transaction in order to reduce the system imbalance. The quantity for which the network operator of the national grid 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 network operator of the national grid anticipates that using a WDM transaction will not be sufficiently effective, the network operator of the national grid 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 maintenance in a shortage situation

The quantity of gas that the network operator of the national grid buys pursuant to 4.1.4.1 is sold by the network operator of the national grid at the hour of delivery or withdrawal at the WDM transaction price to the causer in proportion to the amount 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 maintenance in a surplus situation

The quantity of gas that the network operator of the national grid sells pursuant to 4.1.4.1, is bought by the network operator of the national grid in the hour of delivery or withdrawal at the WDM transaction price referred to in 4.1.5.1 from the causer, in proportion to the amount 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 maintenance in an emergency situation

If the network operator of the national grid has declared an emergency situation as described in 4.1.4.1 or 4.1.4.5 then the network operator of the national grid 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 national grid entry points;
- instructions at national grid exit points.

Shippers are obliged to follow the instructions given.

When the emergency situation has ended, the network operator of the national grid and the shipper concerned discuss how to resolve the situation that has arisen.

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

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

If the emergency situation announced by the network operator of the national grid has ended, the network operator of the national grid will publish this as soon as possible, stating the time when the emergency situation ended.

In the event of an emergency situation, the network operator of the national grid will not charge the shipper 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 network operator of the national grid in accordance with this article.

4.1.4.5.

If the network operator of the national grid encounters unexpected major disruptions, including a disruption in the supporting communication and control system being part of the national grid, which compromise or could compromise system integrity, the network operator of the national grid may declare an emergency situation and act in accordance with the instructions in 4.1.4.4. When resolving this type of emergency situation, any difference between the quantity of entry gas and the quantity of exit gas, after deducting the difference between entry and exit gas, will, on the basis of 4.1.1.2, be

offset against the neutral gas price referred to in 4.1.6.4. If the network operator of the national grid 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 4.1.5.3.

4.1.4.6.

If the network operator of the national grid encounters disruptions in the information supply systems regarding the balancing regime (meant to provide the shippers with information), the network operator of the national grid can decide to postpone the process which initiates the WDM transaction, as described in 4.1.4.1.

If the network operator of the national grid has postponed the process which initiates the WDM transaction, the network operator of the national grid will publish this as soon as possible, stating the time the postponement commences.

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.

If the network operator of the national grid 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 4.1.5.3.

If the information supply system is restored, the postponement ends; the network operator of the national grid 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.

The network operator of the national grid will settle the financial imbalance resulting from the imbalance settlement during the calendar year in the next calendar year.

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

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 to the off-line allocations during the fourth month following the end of the month to which the data relates is also charged against the neutral gas price referred to in 4.1.6.4.

4.1.6.4.

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:

$$\text{INDEX}_D = \frac{\sum_{i=1}^x V_i P_i}{\sum_{i=1}^x V_i}$$

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_x = Volumes of contracts for gas deliveries on balance day (D)

X = Number of contracts concluded from D-2 to D inclusive.

4.1.7. Settlement at the end of day

Pursuant to Chapter 5 of NC-BAL, the network operator of the national grid will settle the position ("daily imbalance quantity") with the shippers at the end of the day. For this purpose, the network operator of the national grid 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 network operator of the national grid 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 network operator of the national grid 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 network operator of the national grid 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 national grid.

The evaluation as referred to in this article can take place on the initiative of the network operator of the national grid 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 shippers is caused by the LFS rate.

4.2. Provision of transmission services

4.2.1. General points

4.2.1.1.

The network operator of the national grid assigns a unique identification code to every shipper for each portfolio.

4.2.1.2.

Message interchange between the shipper and the network operator of the national grid relating to the provision of transmission services will take place via a pre-coordinated and pre-tested communication protocol approved by this network operator.

4.2.2. Nomination

4.2.2.1.

Nominations from shippers specify the desired quantity of gas to be transported by the shipper at an entry point or exit point. The network operator of the national grid uses the nominations for planning gas transmission (in order to ensure that the national grid operates efficiently), for assigning interruptible entry or exit capacity, if applicable, and in the allocation process.

4.2.2.2.

Shippers submit nominations to the network operator of the national grid for each gas day for each entry point and each exit point for each portfolio. Nominations must be received by the network operator of the national grid 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 shipper is authorised to send renominations to the network operator of the national grid. Upon receipt of a renomination, the network operator of the national grid 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 network operator of the national grid 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 shipper'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 shipper's portfolio, the exit point and the party to which gas is being transferred (possibly administratively).

4.2.2.5.

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

4.2.3. Matching and confirmation

4.2.3.1.

Confirmations from the network operator of the national grid set out the quantities of gas that it will transport for the shipper. The network operator of the national grid determines the content of the confirmations based on the shipper's nominations and the results of a validation procedure.

4.2.3.2.

The validation procedure consists of one or two stages: the network operator of the national grid validates each (re)nomination made by the shipper against the conditions of the relevant agreement and – if applicable – compares these with the (re)nominations made by other shippers in the national grid or with information obtained from adjacent network operators.

4.2.3.3.

The network operator of the national grid 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 network operator of the national grid no later than 14.00 hours on that day – a confirmation to the shipper. Insofar as more entry or exit capacity than has been contracted is nominated, the network operator of the national grid will reject the shipper's (re)nomination. If there is an interruption to the supply, the shipper 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 network operator of the national grid will send a confirmation to the shipper as soon as possible, but in any event 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 shipper's responsibility to check whether a confirmation has been received and to be aware of the contents of the confirmation.

4.3. Allocation

4.3.1. General points

4.3.1.1.

The network operator of the national grid uses allocation data to ascertain how the national grid is used hour by hour by network users.

4.3.1.2.

The network operator of the national grid 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 network operator of the national grid that would in all likelihood lead to restricted services, shall only be implemented following consultation with the shipper 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 network operator of the national grid will take notice of the shipper'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 services by the network operator of the national grid. If it is necessary to restrict services, the network operator of the national grid is entitled to reduce the transmission service concerned. The rights of the shippers to use entry and exit capacity contracted by them from the network operator of the national grid will be reduced correspondingly. If the network operator of the national grid 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 shipper. The network operator of the national grid will make every effort to keep restrictions to services to an absolute minimum.

4.4.2.

Insofar as the network operator of the national grid is not, in any hour, due to a cause not attributable to the shipper, in a position to carry out the contracted transmission, or part thereof, and this leads to a noticeable restriction in the use of the service, the amount payable for entry and/or exit capacity contracted from the network operator of the national grid 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 service, taking into account the duration of the restriction (insofar as this exceeds the threshold value) and the scope of the restriction.

4.4.3.

In the event of restrictions to entry or exit capacity, the entry or exit capacity available to the shipper will be allocated by the network operator of the national grid in proportion to the entry- or exit capacity contracted by the shipper.

4.4.4.

Where interruptible entry or exit capacity is concerned, 4.4.2 does not apply in the event of a restriction to entry or exit capacity through the use of non-interruptible entry or exit capacity.

4.4.5.

The network operator of the national grid monitors the quantity of available quality conversion. The network operator of the national grid 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 network operator of the national grid does not have synthetically produced gas at its disposal. Whenever there is the danger of a shortage of quality conversion, the network operator of

the national grid will, where possible, notify shippers concerned of this, giving prior notice of at least 4 hours. The network operator of the national grid may, after this notification, get in contact with shippers concerned and request that the shippers 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 network operator of the national grid may, due to restricted availability of quality conversion, not meet (re)nominations for the use of non-interruptible transport capacity. In such cases, the network operator of the national grid is entitled to give instructions to shippers for adjusting their (re)nominations, as prescribed by the network operator of the national grid, in such a way that the system integrity of the national grid can be maintained. Shippers are obliged to follow these instructions. Where possible, the network operator of the national grid will give the instructions in proportion to the causes of the problem.

5. Agreements

5.1. Entering into agreements

5.1.1.

Without prejudice to the provisions of 2.1.2b, and 3.2.1, last paragraph, an interested party may contract a service by submitting a request to the network operator of the national grid 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 of the service in a manner specified by the network operator of the national grid on its website. The settlement period is the period of a maximum of 10 business days from the date that a request to offer or contract services, which meets all the requirements, is received by the network operator of the national grid. The settlement period begins on the day of receipt, provided the request is received before 12.00. If the request comes in after 12.00, then the settlement period will begin on the following business day. In the event of a customised service (a service that is not described in the Transmission Code gas TSO) the network operator of the national grid will inform the applicant within 10 business days that the application relates to a customised service; a reasonable settlement period will apply here, depending on the nature of the application, instead of the 10 business days mentioned above.

5.1.2.

An agreement relating to daily capacity as referred to in 5.2.1 may be concluded up to the time the service becomes effective.

5.1.3.

The network operator of the national grid designates services to interested parties on the basis of transparency, non-discrimination and efficient use of the national grid. It is specified, for each different service, how the service is awarded to interested parties by the network operator of the national grid.

5.1.4.

For each request for a service, the network operator of the national grid tests the available credit margin and the entry or exit capacity available at that moment.

5.1.5.

The network operator of the national grid responds to a request within the settlement 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 grid provides each complete request with a time stamp upon receipt. This network operator uses this time stamp for interruptible services, where appropriate, in order to determine the sequence of interruption. A complete request will state, at any event, the contract period, the service, if relevant the entry point or exit point, the interested party's identity, and, if relevant, an indication of whether this party also accepts interruptible services.

5.1.7.

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

5.2. Periods

5.2.1.

Transmission can be contracted by means of a hourly contract, daily contract for a period of one or more gas days (daily capacity) or by means of a monthly contract for one or more gas months (monthly capacity). The contracted entry or exit capacity in a daily or monthly contract must be constant over the whole contract period. An agreement relating to monthly capacity will always end on the last day of the gas month concerned.

5.2.2.

A transmission agreement with a term of one or more gas days may only be concluded within a period of three months prior to the start date, taking account of the settlement period as referred to in 5.1.1.

5.2.3.

An hourly contract has a duration of at least one hour up to a maximum of twenty-four hours, and is offered for the duration of the remainder of the gas day.

5.3. Consequences of terminating agreements

5.3.1.

On the basis of 3.3, from the moment that the network operator of the national grid withdraws a licence from shipper or terminates an agreement, this network operator is under no further obligation to provide services to this party nor has it any further obligation with regard to the terminated agreement.

6. Provision of information

6.1.

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

6.2.

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

6.3.

The network operator of the national grid 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
Non-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
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
Backhaul entry 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
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6.4.

The network operator of the national grid will update annually the tranches corresponding to backhaul and interruptible entry and exit capacity and will publish these on its website pursuant to 6.3.

6.5.

The network operator of the national grid will publish a current overview of entry points and exit points in the national grid on its website pursuant to 6.3.

7. Other provisions

7.1.

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

7.2.

The network operator of the national grid will record the quality indicators as referred to in the regulations on the Quality Aspects of Electricity and Gas Grid Management.

7.3.

[No longer applicable]

7.4.

The network operator of the national grid 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 national grid, who wishes to realise the right to choice of supplier via the electronic messaging system for one or more users or injector, connected to the closed distribution system, should contact the network operator of the national grid.

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 in which it has been published.

7.8.

This Decision is cited as Transmission Code gas TSO.

This Decision and its explanatory notes shall be published in the Dutch Government Gazette.

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 shipper or end user with exit capacity must satisfy the creditworthiness requirements arising from a credit analysis performed by the network operator of the national grid in accordance with the provisions laid down in this Annex 1, depending on the risk category to which this party is assigned on the basis of the credit analysis.

B1.2.

The network operator of the national grid 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 relating to the party, then the risk category shall be determined on the basis of the annual reports (annual report + annual accounts) of 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 for the last three years, the shipper or end user with exit capacity will be assigned to the high risk category.

Table 1: Published credit ratings and risk categories

<u>Moody's credit rating</u>	<u>Standard & Poors credit rating</u>	<u>Risk category</u>
Aaa, 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 network operator of the national grid will place the party in a higher or lower risk category.

B1.4. Financial security

A shipper or end user with exit capacity which is assigned to the high risk category by the network operator of the national grid 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 shipper or end user with exit capacity which is assigned to the medium or low risk category by the network operator of the national grid may choose to provide additional financial security in order to increase its credit limit. The amount of the credit limit must cover at least the exposure.

The network operator of the national grid 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 2 months beyond the expiry date of the contract.

B1.5. Exposure

Total exposure consists of:

1. exposure relating to the contracting of services; and
2. exposure relating to balancing.

Ad 1.

For shippers, the exposure under contracts having a term of more than 3 months is equivalent to the value of 3 times the maximum monthly invoice (excluding VAT) and, for the end user with exit capacity, is equivalent to the value of 3 times the maximum monthly invoice (excluding 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 becomes greater if there are any invoices outstanding for longer than two months.

Ad 2.

Balancing exposure is equivalent to the maximum realised balancing exposure during the previous twelve months ('general rule').

The realised 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) as a result of using the WDM transactions; and
3. outstanding amounts 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) in response to the Linepack Flexibility Service.

Those parties who submit an application to the network operator of the national grid to become shippers must declare the maximum quantity of gas that will be delivered during a period of three days and for which they will bear programme responsibility.

During the first twelve months following licensing, balancing exposure for this shipper will be equivalent to the quantity declared multiplied by the annual average gas price as described in 4.1.6.4. If, at any time during this period of twelve months, the realised exposure calculated in accordance with the general rule is higher than the exposure described in the previous manner, the general rule will apply from that time.

B1.6. Credit limit

The network operator of the national grid will, for each shipper or end user with exit capacity, set an initial credit limit based on an analysis of financial documents.

So that the financial analysis can be performed, the shipper or end user with exit capacity provides information to the network operator of the national grid concerning the structure of the group of companies to which the shipper or end user with exit capacity belongs and the ultimate parent company and the annual accounts from the last 3 years approved by an accountant (including balance sheet, income statement, cash flow statements and notes to the annual accounts).

A shipper or end user with exit capacity may conclude contracts with the network operator of the national grid until its credit limit is reached. A shipper or end user with exit capacity that is assigned to the high risk category has a credit limit equivalent to the financial security issued.

A shipper 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. A shipper 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.

Additional financial security is required for parties in any risk category if the exposure exceeds the credit limit.

If a shipper nevertheless refuses to submit additional security when being requested to do so by the network operator of the national grid within one working day of that request, the network operator of the national grid will inform all suppliers that switch messages containing this shipper will no longer be accepted and the network operator of the national grid will inform all shippers that nominations or partial nominations for sales transactions on the virtual market of this shipper will no longer be accepted.

In exceptional cases, such as extreme results for financial ratios or unusual developments within the company or sector, the network operator of the national grid may assign a higher or lower credit limit to the party.

The network operator of the national grid will, upon request, provide the shipper or end user with exit capacity with information about the current credit margin.

A higher or lower credit limit may be assigned to shippers 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 shipper or end user with exit capacity must inform the network operator of the national grid 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 shipper or end user with exit capacity must, within five business days of receipt of a request from the network operator of the national grid, 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 shipper 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 shipper 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 network operator of the national grid can make a claim on the shipper or end user with exit capacity or on

parties acting as their guarantors. For this purpose, the network operator of the national grid may require additional financial security as mentioned in B1.4.

If information becomes available to the network operator of the national grid, supplied in accordance with B1.7, indicating that a significant improvement in the creditworthiness of the shipper 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 network operator of the national grid will permit the shipper or end user with exit capacity to withdraw the security provided for that proportion of the risk.

B1.9. Licensing LB

For a shipper with a licensing LB, the network operator of the national grid will determine the monthly invoice, as referred to in B1.4, by multiplying the shipper's estimated exit capacity, based on the contracted exit capacity of the shipper for the previous year, by the average tariff at exit points linked to a distribution network. If a shipper had not contracted any exit capacity at exit points linked to a distribution network during the previous year, the network operator of the national grid will charge €50,000 to the existing credit margin; in such cases, the network operator of the national grid will adjust the shipper'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 shipper is granted licensing LB until 2 months after withdrawal of the licence.

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

B2.1.

This Annex 2 specifies how the network operator of the national grid determines the scope of the technical, non-interruptible 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. Technical capacity

The national grid is constantly being adapted to cope with changing circumstances. A one-off assessment of the technical non-interruptible entry and exit capacity is made every year in good time before the NC-CAM auction, in which a distinction is made between the first future year and the next two to fifteen years inclusive.

For the first future year, an assessment of both the non-interruptible entry and exit capacity that can be offered for the whole year is made as well as the non-interruptible entry and exit capacity that can be offered on a quarterly basis. This is achieved by carrying out the procedural steps described below. The technical non-interruptible entry and exit capacity for the month and the day correspond to the entry and exit capacity of the quarter in which the month and day concerned occur.

For the next two to fifteen future years the technical non-interruptible entry and exit capacity are determined on an annual basis for every year. This is achieved by carrying out the procedural steps described below for the next two to fifteen future years. The technical non-interruptible entry and exit capacity for the next six to fifteen future years are based on extrapolations of the technical non-interruptible entry and exit capacity calculated for the fifth year.

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 national grid or when determining expansions to the national grid. The mutual relationship between these procedural steps is as follows: shipping variants are set up on the basis of forecasts, basic principles and impact selection. A calculation is made of the extent to which the non-interruptible entry or exit capacity corresponding to each shipping variant can be transported with the existing gas transport network or with the anticipated expansions to the gas transport network. The existing gas transport network or the extensions to the existing gas transport network are assessed on the basis of these calculations.

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 national grid is designed. Therefore the reasons for adjusting the design of the national grid can usually be traced back to changes in forecasts at entry and exit

points. The network operator of the national grid 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 gas transport network or parts thereof, the physical qualities of the gas to be transported and expectations about 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 installation components. Examples of these are maximum gas pressure or gas velocity ensuing from safety requirements, working areas of installations or installation components, backup installations or installation components and agreements with customers about the conditions under which the gas is supplied.

Physical qualities of the gas relate to, inter alia, 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). The network operator of the national grid places no restrictions on the use of the entry or exit point by the shipper. This makes it important, when determining technical non-interruptible 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 network operator of the national grid publishes on its website all the basic principles that are important for the design of the national grid

B2.2.3. Impact selection

After applying the basic principles there are still a great many combinations involving the use of entry or exit capacity. The most severe transport conditions are 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 success for the design of the national grid, for example the greatest 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. Shipping variants

After applying the basic principles and worst case scenario, a limited set of scenarios remain 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 scenarios are called shipping variants. This methodology results in less than 100 shipping variants.

B2.2.5. Calculations

The network operator of the national grid calculates, for every shipping variant, whether the non-interruptible entry or exit capacity can be transported. When performing the calculations, the figures take account of the gas transport network 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 national grid, the national grid is robust enough to supply non-interruptible entry or exit capacity if the calculations, based on the set of shipping variants, show that the non-interruptible entry or exit capacity can be transported.

If the calculations, based on the set of shipping variants, show that the non-interruptible entry or exit capacity cannot be transported, measures are identified for expanding the national grid to such an extent that the non-interruptible 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 shipping variants 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 shipping variants are still just successful. In performing the recalculations, the network operator of the national grid chooses the entry and exit points where it expects to be able to sell extra non-interruptible 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 network operator of the national grid expects contractual congestion.

B2.3.1. Gas day in advance

The network operator of the national grid 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 network operator of the national grid 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. Quarter in advance

The network operator of the national grid 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 network operator of the national grid determines the oversubscription capacity for the annual 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 network operator of the national grid 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 network operator of the national grid will report these changes and the reasons for the changes within a month from the time that it changed the method .