

# **LNG Terminalling Programme**



Based on Article 203 of the Royal Decree of 23 December 2010 on the Code of Conduct regarding access to natural gas transmission networks

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# 1 INTRODUCTION

Fluxys LNG is the independent operator of LNG terminalling infrastructure in Belgium. The company owns and operates the Zeebrugge LNG terminal which is connected to the Belgian transmission system, owned and operated by Fluxys Belgium.

Access to LNG terminalling infrastructure in Belgium is regulated. A code of conduct (Royal decree of 23 December 2010) was published establishing the rules for access to the transmission grid, storage facilities and LNG installations.

Based on the provisions of the code of conduct, Fluxys LNG has drawn up LNG agreements (contractual terms and conditions), an LNG access code (access rules and procedures) and an LNG terminalling programme (the present document). Both the LNG agreements and the LNG access code prevail on the provisions made in this LNG terminalling programme. For convenience purposes for the clients of LNG truck loading, a distinct LNG access code for truck loading has been established.

The present LNG terminalling programme describes the LNG services Fluxys LNG offers. The purpose of this document is to outline the rules governing access to the terminal and the operating regime. In the event that changes to the LNG access code and/or the LNG agreement have an impact on the content of this LNG terminalling programme, the latter will be amended to take these changes into account.

The LNG agreements, the LNG access code, the regulated tariffs for LNG terminalling and other LNG terminalling related information are available on the website: <a href="www.fluxys.com">www.fluxys.com</a>.



#### 2 THE ZEEBRUGGE LNG TERMINAL & EXPANDED TERMINAL CAPACITY

In operation since 1987, the LNG terminal is located in the outer port of Zeebrugge on a site of ca. 30 hectares. It comprises efficient reception facilities, five state-of-the-art LNG storage tanks, vaporisation and send-out facilities for injection of regasified gas into the high-pressure gas network, and related facilities. The commissioning in 2019 of the fifth tank and its associated compressors marked the start of ship-to-ship and ship-storage-ship transshipment services. The LNG terminal can handle almost all different types of LNG carriers from 2 000 m³ LNG up to Q-max vessels with a capacity of up to 266 000 m³ LNG.

The east jetty of the Zeebrugge LNG terminal is equipped with four 16" LNG unloading arms and one vapour return arm, providing an unloading capacity of up to 14 000 m³ LNG/hour. Three of the existing storage tanks have a workable capacity of 81 500 m³ LNG each, while the fourth LNG storage tank has a workable capacity of 141 500 m³ LNG and the fifth tank a workable capacity of 180 000 m³ LNG. The firm send-out capacity of the LNG terminal amounts to 1 950 000 m³(n) per hour.

A second jetty (referred to as the west jetty) of the Zeebrugge LNG terminal enables the berthing of ships from approximately 2 000 m³ LNG up to a capacity of 217 000 m³ LNG. The west jetty gave rise to additional berthing rights offered to the market for the purpose of loading ships (i.e. LNG redelivery services).

The vaporizers installed consist of both submerged combustion vaporizers (SCV) and open rack vaporizer (ORV) – the latter in operation as from the second quarter 2013 onwards. In 2021, Fluxys LNG committed to build 3 new ORVs to reduce its greenhouse gases emissions and to increase its regasification capacity as from 2024.

The LNG terminal is located in a sheltered area so that there are no sea water currents during berthing and unloading/loading. In addition, the construction of the dockyard has reduced the height of the waves to a minimum and the port authority guarantees a depth of 13 m clearance for ships at low tide in the dock.

The LNG infrastructure in Zeebrugge currently has an annual throughput capacity of approximately 9 billion m³(n) of natural gas. Following an open season conducted in 2003 and a subscription window conducted in 2019, the entire primary capacity was allocated on a long-term ship-or-pay basis and commercialized by means of slots. Under such slots, terminal users are allowed to:

- arrive and berth their LNG vessel within a defined window,
- use a basic storage capacity of 140 000 m³ LNG, linearly decreasing over 40 tides,
- use a basic send-out capacity of 4 200 MWh/h during the abovementioned 40 tides.

Occasionally, capacity is made available for LNG services on the primary market. In addition, LNG services can be traded on the secondary market. These LNG services are available to terminal users and other parties having signed the required contractual agreements.

Additional (flexibility) storage and send-out capacities are available as well.

The LNG terminal in Zeebrugge also wants to play a leading role in the development of small scale LNG in Northwest Europe, be it as a fuel for industry or heavy-duty transport via ships and trucks. The LNG terminal therefore offers loading and unloading services for small LNG ships as well as truck loading capacity thanks to two truck loading stations.

To reinforce the role of LNG as a sustainable maritime or heavy-duty fuel, Fluxys LNG offers since 2021 the possibility to convert certificates of biomethane into certificates of bioLNG



Figure 2.1 Zeebrugge LNG Terminal

# The expanded Terminal capacity of the Zeebrugge LNG terminal

Increased stand alone send out capacity will become available at the Zeebrugge LNG terminal through a further expansion of the terminal. Following a successful open season process, this project foresees the construction of new regasification capacity to increase the stand alone send out capacity in a first step up to 8,2 GWh/h and then in a second step up to 10,5 GWh/h. The commissioning of the first step is expected early 2024 and the commissioning of the second step early 2026.

Following the fast growing interest in small scale LNG, Fluxys LNG decided in 2021 to build four new truck loading bays. These new bays should be commissioned in 2024.

#### 3 LNG TERMINALLING MODEL

The LNG terminalling model designed by Fluxys LNG provides for easy use of the LNG services. It is composed of the following elements as set out in the Figure 3.1 below:

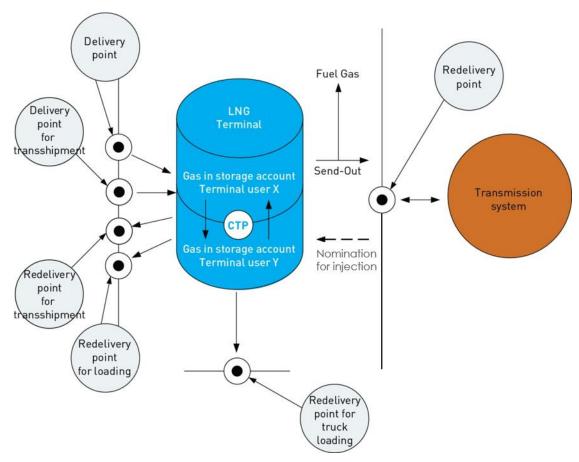


Figure 3.1 Terminalling model

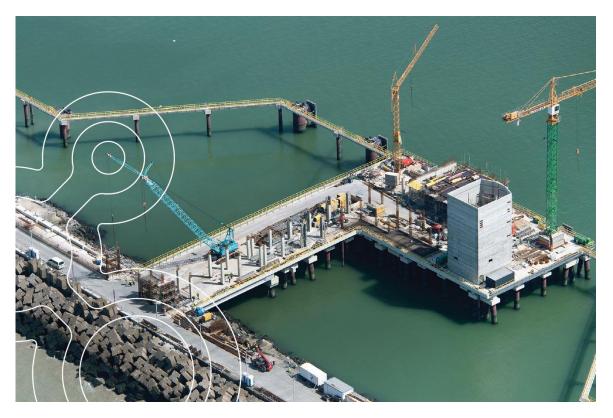
- LNG terminal: Zeebrugge LNG terminal facility operated by Fluxys LNG.
- Transmission system: transmission network operated by Fluxys Belgium and physically connected to the LNG terminal.
- Redelivery point: interface between the LNG terminal and the transmission system:
  - natural gas is sent out from the LNG terminal and injected into the transmission system;
  - natural gas from the transmission system is delivered to the LNG terminal (called nomination for injection, counter flow nomination, backhaul liquefaction or reverse nomination, subject to forward sendout flow).
- Gas in storage account of the terminal user: account of the terminal user which registers the quantity of the terminal user's gas in storage which shall include the gas in storage as from the service start date [+], the quantity of LNG (re-)delivered and/or transferred [+/-], fuel gas [+/-], and any corrections thereof [+/-].
- Commodity Transfer Point (or CTP): virtual point where the terminal user can exchange natural gas with another terminal user.
- Delivery point: the flange where an LNG ship delivers LNG to the LNG terminal.

- Delivery point for transshipment: the flange where an LNG ship delivers LNG to the LNG terminal within the framework of transshipment services.
- Redelivery point for loading: the flange where an LNG ship is loaded with LNG from the LNG terminal.
- Redelivery point for truck loading: the flange where an LNG truck is loaded with LNG from the LNG terminal.
- Redelivery point for transshipment: the flange where an LNG ship is loaded with LNG from the LNG terminal within the framework of transshipment services.
- Fuel gas: fuel gas consumed by the LNG terminal which include the actual gas consumption of the submerged combustion vaporizers (SCVs), part of the gas consumed by the combined heat & power unit (CHP)<sup>1</sup> and sundry gas consumptions (including losses).

The maximum capacity made available by Fluxys LNG to the terminal users is calculated taking into account the technical capacity of the terminalling facilities and its capacity enhancements. The maximum capacity also takes into account the need for operational flexibility, e.g. in the event of unforeseen circumstances linked to maritime transport and planning constraints.

The available amount of send-out and LNG storage capacities which are not commercialised through slots are offered to the market as additional or stand alone send-out and additional storage.

Slots, LNG redelivery services, LNG delivery services, LNG transshipment services, LNG truck loading services, flexibility services, bioLNG liquefaction services and other services are explained in detail in section 4.



<sup>&</sup>lt;sup>1</sup> As long as the CHP is in use



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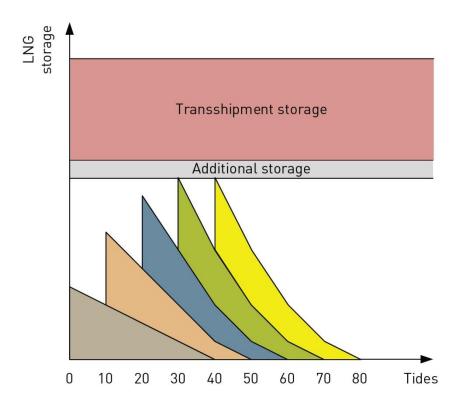


Figure 3.2 Storage capacity

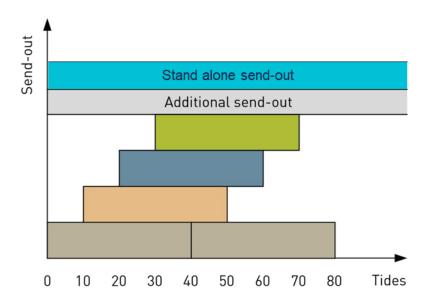


Figure 3.3 Send-Out capacity

Service	Unit	Capacity at LNG terminal	
Total number of slots	Slots per year	110	
Minimum interval between the tides indicating the start of each slot	High Tides	5	
Basic storage period	Tides	40	
Basic storage per slot	m³ (LNG)	140 000	
Basic send-out per slot	MWh/h	4 200	
Total basic storage	m³ (LNG)	350 000	
Additional storage	m³ (LNG) during one year	36 000	
Total basic send-out	MWh/h	16 800	
Additional send-out	MWh/h during one year	2 870	
Stand alone send-out	MWh/h During one year	2 870	
Total number of additional berthing rights	Additional berthing rights per year	70	
Total number of stand alone berthing rights	Stand alone berthing rights per year	70	
Residual storage	m³ (LNG) with a minimum of one month and a maximum of <u>eighteensix</u> months	Up to <u>4</u> 30 000	
Total number of LNG truck loadings	Truck loadings per year	Up to 24 000 unless otherwise specified in permits <sup>2</sup> 8 000	
Total number of transshipment berthing rights	Transshipment Berthing Rights per year (low tides)	214	
Transshipment storage	m³ (LNG) during one year	180 000	
Long term bioLNG capacity	GWh/month	21,6	

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<sup>&</sup>lt;sup>2</sup> Decision on permits expected in Q4 2022

Capacities available at Zeebrugge terminal after the stand alone send out expansion:

vice	Unit	Capacity at LNG terminal	
ber of slots	Slots per year	110	
between the tides tart of each slot	High Tides	5	
age period	Tides	40	
ige per slot	m³ (LNG)	140 000	
-out per slot	MWh/h	4 200	
ic storage	m³ (LNG)	350 000	
al storage	m³ (LNG) during one year	36 000	
c send-out	MWh/h	16 800	
al send-out	MWh/h during one year	2 870	
ne send-out	MWh/h During one year	8 200 as from early 2024 10 500 as from early 2026	
additional berthing	Additional berthing rights per year	70	
of stand alone ng rights	Stand alone berthing rights per year		
13101000	m³ (LNG) with a minimum of one month and a maximum of <u>six-eighteen</u> months	Up to 3 <u>4</u> 0 000	
NG truck loadings	Truck loadings per year	Up to 24 000 unless otherwise specified in permits <sup>3</sup> 8 000	
of transshipment ag rights	Transshipment Berthing Rights per year (low tides)	214	
ent storage	m³ (LNG) during one year	180 000	
LNG capacity	GWh/month	21,6	
of transshipment ag rights ent storage	Transshipment Berthing Rights per year (low tides) m³ (LNG) during one year	<u>C</u>	

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<sup>&</sup>lt;sup>3</sup> Decision on permits expected in Q4 2022



# 4 BASIC SERVICE OFFERING

# 4.1 Slot (for unloading LNG ships)

A slot includes the following three basic LNG services:

- 1. Berthing service
- Reception of an LNG ship subject to the maritime rules governing the port of Zeebrugge and unloading LNG from the LNG ship received at the LNG terminal.
- The berthing right of an unloading slot can also be used for the purpose of loading an LNG ship.
- The berthing service is time-sensitive: as from the high tide signalling the start of a given slot, the terminal user has to berth his ship within the window of the first ten tides.
- Only LNG ships having passed the ship approval procedure for the concerned jetty are allowed to berth and unload at the LNG terminal.
- 2. Basic storage of unloaded LNG.
- The basic storage service offers temporary storage. The basic storage period is 40 consecutive tides and the basic storage volume is 140 000 m³ of LNG (decreasing on a linear basis over time).

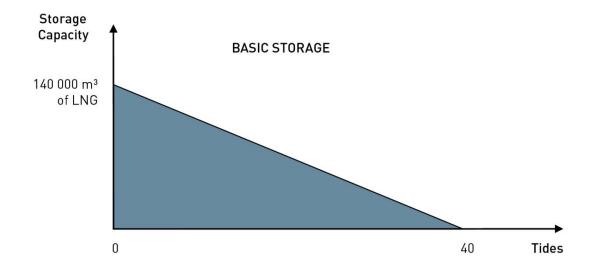
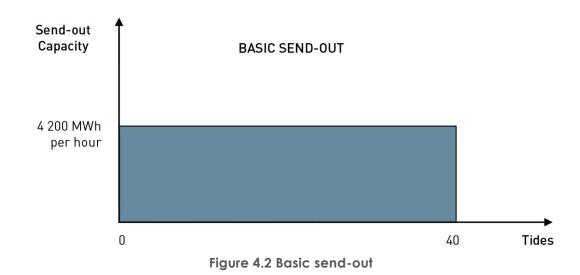


Figure 4.1 Basic storage

#### 3. Basic send-out of LNG

- Send-out consists out of regasification of the LNG and injecting this natural gas into the adjacent transmission system.
- The basic send-out period is equal to the basic storage period of the same slot. During this time window, the basic send-out capacity is equivalent to 4 200 MWh/h.



#### Allocation rule

Slots on the primary market are subscribed following either an open season or an allocation window (subscription window or auction window) depending on whether the investment decision has already been taken by the terminal operator.

Available slots are slots which were not allocated during an open season or allocation window or which have been identified as being available:

- during year n-1 (contract year prior to the contract year during which the service is supplied) when establishing the annual unloading schedule: identification of available slots between March and October;
- during year n (the contract year during which the service is supplied) and in case market demand for slots exceeds the amount of slots scheduled, Fluxys LNG, with the consent of terminal users, may decide to review the annual unloading schedule with the objective of creating additional slots;
- during year n (the contract year during which the service is supplied) when establishing
  quarterly unloading schedules: identification of unsubscribed slots or groups of
  consecutive high tides by Fluxys LNG.

These available slots are allocated according to the priorities set out below:

- to terminal users who have notified Fluxys LNG that they will either definitely or most probably be unable to use (a) subscribed slot(s) during the year n on account of maintenance;
- \_\_\_\_\_to terminal users who hold "make-up" capacity (i.e. they have not been able to use all their slots during a prior year on account of force majeure);
- <u>in case of a review of the annual unloading schedule following a high market demand,</u> terminal users having subscribed slots during a term of at least one contract year have a pre-emption right to purchase half of the slots (rounded down). The other half of the



slots and, as the case may be, non-preempted slots will be offered to any terminal user via an auction window or on a first committed/first served basis;

to all current or potential terminal users via an auction window or on a first-committed, first-served basis as soon as the available slot is scheduled into a quarterly unloading schedule.

# 4.2 LNG transshipment services

LNG transshipment services are the services of loading or unloading, gassing up and/or cooling down of an LNG ship and the storage of LNG for transshipment:

- Transshipment berthing right can be used:
  - for unloading or for loading of LNG from an LNG ship into storage or vice versa, or
  - by using 2 transshipment berthing rights, as the case may be, for direct transfers of LNG between two LNG ships.

It shall be noticed that:

- Reception of an LNG ship subject to the maritime rules governing the port of Zeebrugge
- The berthing is time-sensitive: the terminal user has to berth his LNG ship at his scheduled transshipment berthing right.
- Only LNG ships having passed the ship approval procedure are allowed to berth and load/unload at the LNG terminal.
- Gassing up: if the cargo tanks of an LNG ship using the LNG redelivery services
  are under inert atmosphere (i.e. under a CO2, NOx and/or N2 atmosphere
  with a maximum of 1 ppm H2O vapour and maximum 100 ppm O2), this inert
  gas must be replaced with LNG vapour before the start of cooling down and
  loading services.
- Cooling down: the tanks of an LNG ship are cooled to bring them to the same temperature as LNG. This is a service for terminal users using the loading service for LNG ships whose tanks are not at LNG temperature.
- Transshipment storage: entails the right to store at the LNG terminal a quantity of LNG equal to up to 180,000 cubic metres

#### Allocation rule

Transshipment services on the primary market are subscribed following either an open season or an allocation window. Available transshipment services after an open season or allocation window are allocated via an auction window or on a "first committed - first served" basis.

Transshipment storage on the primary market, available as one unit of 180 000 cubic metres, is subscribed following either an open season or an allocation window. Available transshipment storage after an open season or allocation window are allocated via an auction or on a "first committed - first served" basis.

# 4.3 Additional berthing right

Available berthing rights that are not associated with slots are offered to terminal users for the purpose of loading LNG ships. An additional berthing right consists of the right to

receive an LNG ship subject to the maritime rules governing the port of Zeebrugge and with a lower priority than the berthing rights associated with slots and transshipment berthing rights.

Only LNG ships having passed the ship approval procedure are allowed to berth at the LNG terminal.

#### Allocation rule

Additional berthing rights on the primary market are subscribed following either an open season or an allocation window. Available additional berthing rights after an open season or allocation window are allocated via an auction window on a "first committed - first served" basis.

#### 4.4 Stand alone berthing right

A stand alone berthing right consists of the right to berth a LNG ship in order for such ship to be loaded or unloaded (using a LNG redelivery service or a LNG delivery service), subject to the maritime rules governing the port of Zeebrugge and with a lower priority than the berthing rights associated with slots and transshipment berthing rights.

Only LNG ships having passed the ship approval procedure are allowed to berth at the LNG terminal.

#### Allocation rule

Stand alone berthing rights on the primary market are subscribed following either an open season or an allocation window. Available stand alone berthing rights after an open season or allocation window are allocated via an auction window or on a "first committed - first served" basis.

# 4.5 LNG redelivery services (ship loading)

LNG redelivery services are the services of loading, gassing up or cooling down an LNG ship:

- Loading services: the terminal user's LNG is pumped from the LNG terminal to the LNG ship provided shipper has an additional berthing right or stand alone berthing right (or berthing right as the case may be). The loading services are allocated in accordance with the allocation rules of the corresponding berthing rights above.
- Gassing up: if the cargo tanks of an LNG Ship using the LNG redelivery services are under inert atmosphere, this inert gas must be replaced with LNG vapour before the start of cooling down and loading services.
- Cooling down: the tanks of an LNG ship are cooled to bring them to the same temperature as LNG. This is a service for terminal users using the loading service for LNG ships whose tanks are not at LNG temperature.

#### 4.6 LNG delivery services (ship unloading)

LNG delivery services are the services of unloading LNG from an LNG ship received at the LNG terminal provided shipper has a stand alone berthing right. The unloading services are allocated in accordance with the allocation rules of the stand alone berthing rights.

For the avoidance of doubt, the LNG delivery service does not comprise any storage capacity.



#### 4.7 LNG truck loading

LNG truck loading is the service consisting of loading an LNG truck at the terminal. The LNG terminal has the capacity of loading <u>up to 24 0008 000</u> trucks per year <u>(unless otherwise specified in permits)</u> since the commissioning of the expanded terminal capacity. The clients themselves, independently from the terminal operator, have to procure LNG from a shipper having a gas in storage account at the LNG terminal.

In addition to truck loading, a truck cool down service is offered to cool the LNG tank of a truck from ambient temperature to LNG temperature.

#### Allocation rule

LNG truck loading services on the primary market are subscribed following either an open season or a subscription window. Allocation is performed pro rata the binding requests received prioritizing requests with a longer duration. LNG truck loading services available at the end of the corresponding subscription window or open season, are allocated on a "first committed - first served" basis until the organisation of the next subscription window.

# 4.8 Additional storage capacity

Additional storage capacity is the right to store quantities of LNG in the LNG terminal in addition to basic storage but excluding daily storage capacity.

#### Allocation rule

Additional storage capacity on the primary market is subscribed following either an open season or an allocation window. Available additional storage capacity after the open season or allocation window is allocated via an auction window or on a "first committed - first served" basis.

# 4.9 Additional send-out capacity

Additional send-out capacity is the right to send-out at a flow rate above basic send-out capacity but excluding daily send-out capacity.

#### Allocation rule

Additional send-out capacity on the primary market is subscribed following either an open season or an allocation window. Available additional send-out capacity after the open season or allocation window is allocated via an auction window or on a "first committed - first served" basis.

#### 4.10 Stand alone send-out capacity

Stand alone send-out capacity is the right to send-out regasified LNG that is not bundled with a slot, but excluding daily send-out capacity.

#### Allocation rule

Stand alone send-out capacity on the primary market is subscribed following either an open season or an allocation window. Available stand alone send-out capacity after the open season or allocation window is allocated via an auction window or on a "first committed - first served" basis.

#### 4.11 Daily storage capacity

Daily storage capacity is the amount of additional storage capacity that can be purchased on a daily basis. The available daily storage capacity is calculated and published for information purposes by Fluxys LNG on a daily basis for the next 30 days.

#### Allocation rule

Daily storage capacity is allocated pro rata the requests by terminal users at 11 a.m. the day before the day on which the capacity is available on a "first committed - first served" basis.

# 4.12 Daily send-out capacity

Daily send-out capacity is the amount of additional send-out capacity that can be purchased on a daily basis. The available daily send-out capacity is calculated and published for information purposes by Fluxys LNG on a daily basis for the next 30 days.

#### Allocation rule

Firm daily send-out capacity is allocated <u>on a "first committed - first served" basis.pre rata</u> the requests by terminal users at 11 a.m. the day before the day on which the capacity is available.

# 4.13 Residual Storage

Residual Storage means the right to store LNG, expressed in cubic meters, in the LNG terminal for one or several months (with a minimum of one month and a maximum of six eighteen months) made available by the terminal operator on a daily granularity.

#### Allocation rule

Residual Storage will be allocated via an auction window or on a "first committed - first served" basis following their publication on the website of terminal operator as from the start of month M minus one (M-1) until two business days prior to the start of the residual storage in month M.

#### 4.14 Non-nominated services (send-out capacity)

This service enables terminal users to nominate send-out capacity over and above their subscribed capacity to the extent that other terminal users did not nominate their entire subscribed capacity.

The availability of non-nominated send-out capacity is calculated hourly from the nominations of all terminal users made in respect of their subscribed send-out capacity.

#### Allocation rule

The available non-nominated send-out capacity is automatically allocated on an hourly basis pro rata the requested send-out capacity of each terminal user in excess of his firm send-out capacity.

# 4.15 Pooling of send-out capacity

Fluxys LNG optimises availability and use of send-out capacity by grouping all unused basic send-out capacity (known as "pooling") and by making that capacity available free of charge in the form of additional rights in respect of firm and/or interruptible basic send-out capacity to terminal users who have booked at least one slot during the next 30 days. Accordingly, these additional rights are booked without prejudice to either



subscribed basic send-out capacity or, where applicable, subscribed additional send-out capacity.

The availability of additional rights in respect of basic send-out capacity for the next 30 days together with details of the firm and interruptible proportions thereof is published daily by Fluxys LNG for information purposes.

#### Allocation rule

Additional rights in respect of basic send-out capacity are <u>allocated on a firm basis</u> if the capacity assigned for basic send-out is greater than the total basic send-out capacity of all terminal users. A terminal user may request this pooling capacity provided that his total firm send-out capacity, excluding additional send-out capacity, is no greater than one hundred and five (105) per cent of its average nominations in the month in question. Such firm rights may only be revoked by Fluxys LNG if a queue of LNG ships builds up;

Additional rights in respect of basic send-out capacity are <u>allocated on an interruptible basis</u> if the capacity assigned for basic send-out is equal to the total basic send-out capacity of all terminal users and if the total nominations for all terminal users are less than the capacity assigned for basic send-out. Such interruptible rights may be revoked at any time by Fluxys LNG.

# 4.16 Backhaul liquefaction service

Backhaul liquefaction or virtual liquefaction is a conditional service that enables terminal users to make nominations for injection at the redelivery point in order to increase the quantity of LNG available in their gas in storage account. The availability of backhaul liquefaction service is subject to total send-out nominations exceeding the minimum send-out rate defined in the LNG access code.

For the avoidance of doubt, the backhaul liquefaction service does not comprise any storage capacity and the terminal operator may reduce any nomination for injection of a terminal user that would exceed his storage capacity.

#### Allocation rule

The available backhaul liquefaction quantity<sup>4</sup> is automatically allocated on an hourly basis pro rata the requested backhaul liquefaction quantity of each terminal user (which for the avoidance of doubt could be reduced in case of storage capacity exceeding).

#### 4.17 BioLNG liquefaction service

At the LNG Terminal, (re-)liquefaction units, referred to as recondensers, are used in the process flow for regasification. In those recondensers the physical contact between LNG and natural gas enables natural gas to be cooled down and (re)liquefied.

This technical process enables Fluxys LNG to offer a service that fulfils a part of the process for the conversion of certificates of biomethane into certificates of bioLNG in compliance with the applicable certification for renewable fuels.

BioLNG liquefaction service is offered as long term capacity (yearly service) and as short term capacity (monthly service). The offered short term capacity is additional capacity on top of the long term capacity and can vary from month to month depending on the liquefied amounts of the recondensers at the LNG Terminal.

<sup>&</sup>lt;sup>4</sup> Being the difference between the total send-out nominations and the minimum send-out rate

The provision of bioLNG liquefaction services is subject to Fluxys LNG and terminal user obtaining and keeping their certification under the relevant European directives.

# Allocation rule

BioLNG liquefaction service on the primary market is subscribed following either an open season or an allocation window. Available bioLNG liquefaction services after the open season or allocation window is allocated via an auction window or on a "first committed - first served" basis.



# 5 COMPLEMENTARY SERVICE OFFERING

# 5.1 Transfer of LNG in storage

A terminal user may transfer LNG he holds in storage to another terminal user. Such a commodity transfer can be made through the Commodity Transfer Point (or CTP) at any time of the gas day. Transfers of LNG in storage will only be approved if the terminal users involved (transferor and transferee) remain within their storage rights.

# 5.2 Electronic data platform (including electronic booking system)

Fluxys LNG makes available to terminal users data such as:

- the quantity and status of their individual range of capacity rights;
- the level of LNG they hold in storage individually and the aggregated level of LNG jointly held in storage by all terminal users;
- the level of send-out they use individually and the aggregated level of send-out jointly used by all terminal users;
- the allocation of send-out from (and injection into) the LNG terminal;
- the quality and pressure parameters of the gas at the redelivery point.

The electronic data platform enables terminal users also to subscribe capacity services available on the primary and secondary market, to schedule LNG services or to exchange LNG commodity related messages with other terminal users via the 'electronic booking system'. Depending on the rights assigned to them, terminal users may:

- consult the LNG services available via the electronic booking system;
- access the data required to subscribe and reserve LNG services;
- subscribe and reserve automatically LNG services available via the electronic booking system;
- schedule their LNG services via the electronic booking system;
- exchange messages with other terminal users to facilitate LNG commodity trades.

# 5.3 Secondary market platform

To further promote capacity trading, Fluxys LNG provides an online secondary market platform for capacity trading between terminal users. Provided the market for LNG truck loading services is in development, in a first instance, the secondary market will be restricted to a bulletin board.

# 5.4 Data publication

Pursuant to European legislation (Regulation (EC) No 715/2009 of 13 July 2009) and the Belgian code of conduct (Royal decree of 23 December 2010), Fluxys LNG makes available all required information on its website. The information is accessible by everyone and can be downloaded without restriction.

# 5.5 LNG lending

Fluxys LNG may arrange for a quantity of LNG belonging to one shipper to be lent to another shipper. The LNG borrowed must be returned to the lender within a specified time period either via physical delivery of LNG, a nomination from the transmission system to the LNG terminal (nomination for injection), or by other means.

# 5.6 Quality adjustment services

Fluxys LNG offers terminal users quality adjustment services enabling them, if necessary, to change the gas composition in order to meet downstream gas quality requirements.

# 5.7 Truck approval

Truck approval entails ascertaining whether LNG trucks are compatible with the truck loading facilities at the LNG terminal.

# 5.8 Ship approval

Ship approval entails ascertaining whether LNG ships are compatible with the jetty facilities at the LNG terminal.



#### **6 SERVICE SUBSCRIPTION**

#### 6.1 How to become a terminal user

In order to be registered by Fluxys LNG as a terminal user, a Fluxys LNG's business party signs a LNG agreement. In addition to the LNG agreement, the terminal user must respect the provisions of the LNG access code.

Both documents and their attachments are available on the Fluxys website.

# 6.2 Primary market

Terminal users or potential terminal users may participate to an allocationwindow (subscription window or auction window) or an open season organized by Fluxys LNG for purposes of allocating the available capacities.

Capacities that are not allocated can, after the allocation window or open season, be subscribed by terminal users on a "first committed-first served" basis.

Other services are allocated in line with allocation rules as described for each service in section 4.

# 6.3 Secondary Market

LNG services can be acquired from another terminal user (secondary market) "over the counter" or via the secondary market platform provided by Fluxys LNG. Provided the market for LNG truck loading services is still in development, in a first instance, the secondary market will be restricted to "over the counter".

Fluxys LNG allows terminal users to trade LNG services on the secondary market with other terminal users. A traded LNG service may be traded again on the secondary market. The conditions governing trade in LNG services on the secondary market are detailed in the LNG access code.

The following conditions apply to trading of LNG services on the secondary market:

- Trading of LNG services on the secondary market entails the transfer of rights and obligations associated therewith in accordance with the corresponding LNG Agreement of the related LNG Services traded.
- The nature of LNG services traded may not alter after trading on the secondary market (e.g. a firm LNG service subscribed on the primary market must remain a firm LNG service on the secondary market).

# 7 USING THE SUBSCRIBED SERVICES

#### 7.1 Nominations

The terminal user uses his subscribed LNG services by means of electronic messages - daily nominations - for a particular gas day (a gas day begins at 6:00 and terminates at 5:59 the following day). Nomination messages provide in kWh for each hour the quantities of natural gas and/or LNG to be injected or withdrawn.

During the gas day, several nomination cycles happen. The first nomination cycle begins at 14:00 of the preceding gas day and is composed of 3 steps:

- For each hour of a given gas day, the terminal user sends his nominations to Fluxys LNG.
- Nominations are processed by Fluxys LNG (checking and matching).
- As the process of nominations is completed, Fluxys LNG sends a confirmation of the nominations.

The terminal user may revise his nominations by sending renominations leading to a new nomination cycle ((re)nominations sent by the terminal user, processing of these (re)nominations and confirmation by Fluxys LNG).

The time schedule of the nomination and renomination cycles for a given gas day is described in the access code for terminalling and is based on the EASEE-gas common business practice. Nominations are sent by the terminal user via the Edig@s protocol.

For truck loading, throughout the scheduling process, the client shall indicate their use of the subscribed LNG truck loading services. Scheduled LNG truck loading services by the client need to be confirmed by the shipper prior to the delivery of the LNG.

#### 7.2 Allocations

Fluxys LNG allocates the hourly use of LNG terminalling capacities to the terminal user. The unit used for allocation is kWh.

For send-out and nominations for injection the hourly allocation in energy is deemed equal to the confirmed nominations.

For truck loading, the allocation is the quantity confirmed after conclusion of the truck loading operation based upon the weighbridge data.

Terminal user's allocation of LNG in storage is based on the LNG in storage account, the allocations of send-out and nominations for injection, gas in kind, the possible transfer of LNG in storage, (un)loaded LNG of LNG ships, loaded LNG into LNG trucks and settlements possibly applied. The formula for the terminal user's LNG in storage and the calculation of gas in kind is detailed in the LNG access code.



#### DISCLAIMER

This document (the "LNG terminalling programme") sets forth certain information regarding the Zeebrugge LNG terminal and the related LNG services offered by Fluxys LNG at this terminal. Please note that the LNG terminalling programme can be amended from time to time pursuant to the code of conduct (Royal decree of 23 December 2010). In each case Fluxys LNG hereby disclaims any and all responsibility for any changes to the LNG services, imposed by the competent financial and regulatory Belgian and European authorities.

Additionally, the information contained in this LNG terminalling programme should not be considered to give rise to any contractual relationship between Fluxys LNG (or any of its affiliated entities) and any interested party.



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