



































## **Electronic Data Platform User Manual - Fluxys**

**All Fluxys operational data on the Belgian territory**











20/09/2023	Last updated version

# Contents

<b>1. INTRODUCTION .....</b>	<b>6</b>
1.1 GLOSSARY .....	7
1.2 AVAILABILITY AND USE OF THE EDP AND EBS.....	8
1.3 BPA.....	8
1.4 SPOCS .....	8
<b>2. ACCESS RIGHTS.....</b>	<b>9</b>
2.1 ADMINISTRATION RIGHTS.....	9
2.2 INITIAL USER SETUP.....	10
2.2.1 <i>Creating a new user</i> .....	10
2.2.2 <i>Adding user rights</i> .....	11
2.3 PASSWORD MANAGEMENT.....	11
2.3.1 <i>Unlocking a locked user</i> .....	11
2.3.2 <i>Resetting password</i> .....	12
2.4 OTHER SPOC FUNCTIONALITIES .....	12
2.4.1 <i>Changing user details</i> .....	12
2.4.2 <i>Changing the mobile phone number</i> .....	12
2.4.3 <i>Deleting user rights</i> .....	12
2.4.4 <i>Deleting a user account</i> .....	12
2.4.5 <i>Consulting user accounts</i> .....	12
<b>3. FUNCTIONALITIES FOR THE USERS (INCLUDING SPOCS) .....</b>	<b>12</b>
3.1 AUTHENTICATE .....	12
3.2 CHANGE PASSWORD .....	12
3.3 CONSULT MY INFO.....	13
3.4 SPOC TEMPLATE.....	14
<b>4. TRANSMISSION &amp; ZTP TRADING SERVICES .....</b>	<b>14</b>
4.1 CAPACITIES AND CONTRACTS .....	14
4.1.1 <i>Portfolio</i>  .....	14
4.1.2 <i>Capacities on Interconnection Points</i> .....	15
4.1.3 <i>Capacities on Domestic Exit Points</i> .....	16
4.1.4 <i>Secondary Market Report</i> .....	16
4.1.5 <i>Capacities on Quality conversion Points</i> .....	16
4.1.6 <i>Congestion Management Procedures</i> .....	16
4.1.7 <i>Allocation Agreements</i>  .....	17
4.2 MAINTENANCE .....	18
4.2.1 <i>Works and interventions impact on Interconnection Points</i> .....	18
4.2.2 <i>Works and interventions impact on Domestic Exit Points</i> .....	18
4.2.3 <i>Works and interventions impact on Quality Conversion</i> .....	18
4.2.4 <i>Verification of Measurement Equipment at Interconnection</i>  .....	19
4.3 METERING.....	19
4.3.1 <i>Daily refreshed measurements on nodes and lines</i>  .....	19
4.3.2 <i>Hourly refreshed measurements on nodes and lines</i>  .....	20
4.3.3 <i>Topology</i>  .....	24
4.3.4 <i>Further remarks about Metering and Topology</i> .....	25
4.3.5 <i>Real Time Measurement on Interconnection Points</i>  .....	25
4.3.6 <i>Wobbe Index</i>  .....	26
4.3.7 <i>Metering Index Update</i>  .....	27
4.3.8 <i>Metrological Inspection Reports</i>  .....	29
4.4 BALANCING AND ALLOCATIONS .....	29

4.4.1	Provisional Hourly Allocations 	29
4.4.2	Imbalance Smoothing Allocation 	31
4.4.3	Temperatures.....	33
4.4.4	Flow data – Allocations for previous Gas Years.....	34
4.5	FLOW DATA.....	34
4.5.1	Nominations and Flows on Interconnection Points.....	34
4.5.2	Nominations and Flows on Domestic Exit Points.....	34
4.6	INVOICING.....	34
4.6.1	Invoices 	34
4.6.2	Other invoices – Fluxys Belgium 	35
4.6.3	Preliminary Allocation Details 	35
4.6.4	Validated Allocation Details and ARS Capacity 	36
4.6.5	Monthly Interconnection point account statement 	39
4.6.6	Monthly ZTP Trading Services statement 	39
4.7	NOMINATIONS.....	39
4.7.1	Final Nominations for previous Gas Years.....	39
4.8	REGULATORY AND CONTRACTUAL DOCUMENTS.....	39
4.8.1	Standard Transmission Agreement (STA).....	39
4.8.2	Access Code for Transmission (ACT).....	39
4.8.3	Tariffs.....	40
4.8.4	Capacity calculation methodology.....	40
4.8.5	Specific requirements of Interconnector Points.....	40
4.8.6	Transmission Program (TP).....	40
4.8.7	Specifications on supply points 	40
4.8.8	Implementation information.....	40
4.9	ZTP TRADING SERVICES.....	40
4.9.1	ZTP Traded Quantities.....	40
4.9.2	ZTP Trading Services Details (before 01-10-2023) 	41
4.9.3	ZTP Trading Services Details 	42
4.10	REMIT MESSAGES.....	43
4.11	NOTIFICATIONS 	43
5.	STORAGE.....	44
5.1	CAPACITIES AND CONTRACTS.....	44
5.1.1	Capacity Rights Injection 	44
5.1.2	Capacity Rights Withdrawal 	46
5.1.3	Capacity Rights Storage 	47
5.1.4	Seasonal Program 	48
5.1.5	Congestion Indicators 	49
5.1.6	Overview remaining Storage Services.....	50
5.1.7	Secondary Market report.....	50
5.2	MAINTENANCE.....	50
5.2.1	Works and interventions impact.....	50
5.3	METERING.....	50
5.3.1	Hourly refreshed measurements on nodes and lines 	50
5.3.2	Topology 	54
5.3.3	Further remarks about Metering and Topology.....	54
5.4	STORAGE INVENTORY AND ALLOCATION.....	55
5.4.1	Provisional Hourly Allocations 	55
5.4.2	Gas In Storage 	57
5.4.3	Gas in Storage Forecast 	59
5.5	FLOW DATA.....	60
5.5.1	Inventories Storage Report.....	60
5.6	INVOICING.....	60


5.6.1	Allocation Details	60
5.6.2	Invoices	65
5.6.3	Other invoices: Fluxys Belgium	66
5.6.4	Boosters report	66
5.6.5	Gas in Storage Account for LHT Storage	66
5.6.6	Synchronization GIS-level LHT Storage	67
5.6.7	Transfers Monthly Fuelgas Balance for LHT Storage	67
5.6.8	Evolution of the Gas in Storage Account for LNG Terminal	68
5.7	REGULATORY AND CONTRACTUAL DOCUMENTS	68
5.7.1	Storage Model	68
5.7.2	Conditions and Tariffs	68
5.7.3	Contractual Documents	68
5.7.4	Subscription of capacity	68
5.8	REMIT MESSAGES	68
5.9	NOTIFICATIONS	69
<b>6.</b>	<b>LNG TERMINALLING</b>	<b>70</b>
6.1	CONTRACTING AND CAPACITIES	70
6.1.1	Available terminalling capacity	70
6.1.2	Overview of the available slots on the Primary and secondary markets	70
6.1.3	Capacity Rights - Send Out Capacity Rights	70
6.1.4	Capacity Rights - Storage Capacity Rights	71
6.1.5	Capacity Booking - Daily Send out Rights	72
6.1.6	Capacity Booking - Daily storage Rights	73
6.1.7	Capacity Booking – Stand Alone Send Out Rights	75
6.1.8	Available Virtual Liquefaction capacity	75
6.2	SCHEDULING	76
6.2.1	AMS - Available Monthly Slots	76
6.2.2	IBS - Indicative berthing Schedule	76
6.2.3	RBS - Rolling Berthing Schedule	77
6.2.4	BS - Berthing Schedule	79
6.3	SHIP APPROVAL	80
6.3.1	Request for Ship Approval	80
6.3.2	List of approved ships for the Zeebrugge LNG Terminal	80
6.3.3	Fluxys LNG ship approval procedure	80
6.4	MAINTENANCE	80
6.4.1	Work and intervention impact on LNG Terminal Zeebrugge	80
6.4.2	Planned Maintenance Events	81
6.5	METERING	82
6.5.1	Hourly refreshed measurements on nodes and lines	82
6.5.2	Topology	86
6.5.3	Further remarks about Metering and Topology	87
6.6	LNG INVENTORY & ALLOCATIONS	87
6.6.1	Inventories LNG Report	87
6.6.2	Gas In Storage	88
6.6.3	Gas in Storage Forecast	89
6.6.4	Provisional Hourly Allocations	90
6.7	INVOICING	92
6.7.1	Allocation Details	92
6.7.2	Invoices	96
6.7.3	Other invoices – Fluxys LNG	97
6.7.4	Invoices for truck companies	97
6.7.5	Gas In Storage Account for LNG Terminal	98

6.7.6	Synchronization GIS-level LNG Terminal 	99
6.7.7	Transfers Monthly Energy Balance & Monthly Fuelgas Balance for LNG Terminal 	100
6.7.8	Evolution of the Gas in Storage Account for LNG Terminal	100
6.7.9	Ship Loading & Unloading reports	101
6.1	REGULATORY AND CONTRACTUAL DOCUMENTS	101
6.1.1	Terminalling model	101
6.1.2	Terminalling services offer	101
6.1.3	Tariffs	101
6.1.4	Specific requirements at the LNG Terminal Delivery point	101
6.1.5	Specific requirement at the LNG Terminal Redelivery point	101
6.2	TRUCK PLANNING FOR SHIPPERS	101
6.2.1	LNG truck quality and quantity document 	101
6.2.2	LNG truck loadings 	101
6.2.3	Truck Manager 	101
6.3	TRUCK PLANNING FOR TRUCKING COMPANIES	101
6.3.1	Contract overview 	101
6.3.2	LNG truck quantity and quantity document 	101
6.3.3	LNG Truck loading 	102
6.3.4	Truck Manager 	102
6.4	REMIT MESSAGES	102
6.5	NOTIFICATIONS 	102
7.	<b>AUTOMATIC DOWNLOADS</b>	<b>102</b>
7.1	AUTHENTICATION PARAMETERS	102
7.1.1	Credentials in URL (default approach)	102
7.1.2	Api Gateway (new securised approach)	102

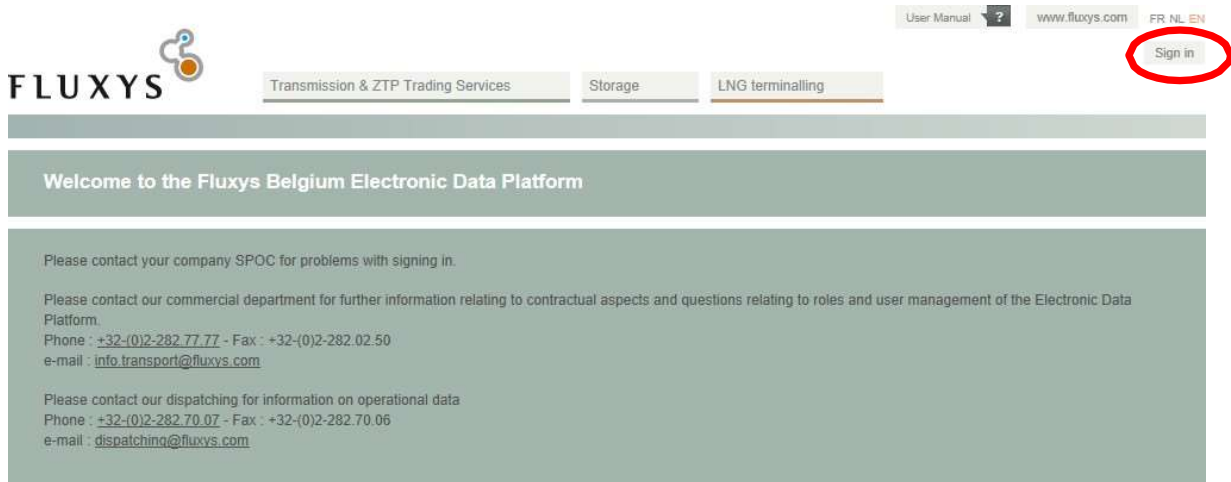
# 1. Introduction

In the framework of the execution of Transmission & ZTP Trading, Storage and LNG Terminalling Services under the Standard Transmission Agreement, the Standard Storage Agreement and/or the LNG Terminal Agreements, Fluxys offers grid user access to and use of the Electronic Data Platform with the Electronic Booking System included. Such access will be granted to grid user representatives, further referred to as users, on a non-exclusive and non-transferable basis and as from the moment those users become registered.

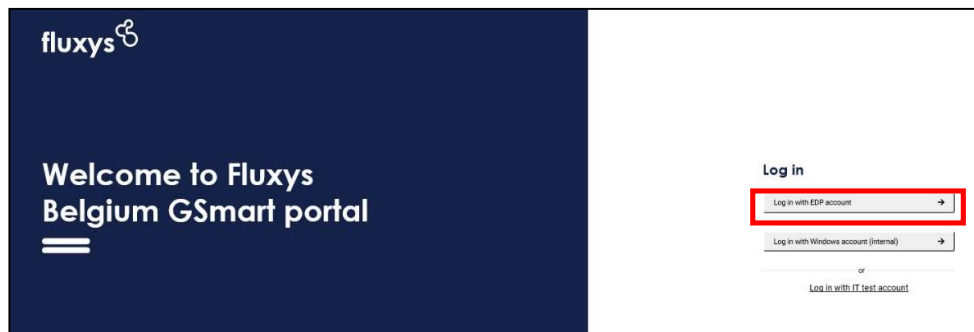
Fluxys is for commercial, operational and regulatory purposes offering different access rights to the Electronic Data Platform. The following distinction is made depending on the type of data made available:

- Public data is data made available to anyone without access restriction placed on such kind of data,
- Private data is data made available to a specific grid user, with restricted use depending on the access rights granted to the user of the Electronic Data Platform. The menu items with the symbol  are only privately accessible. Depending on his role (which was defined by the SPOC) he may or may not access all functionality shown on this screen.

In order to access the Electronic Data Platform user must log in via <https://gasdata.fluxys.com/>. For an optimal use of the data platform, we advise you to use the browser Google Chrome / Microsoft Edge.



**New 'Sign-in' page :** To prepare for the upcoming single sign-on for the Fluxys group, a new window will appear when manually signing in. If you click on 'Login with EDP account' in this new window, you will be able to login in the familiar way with the existing credentials.





The image shows a web form for signing in to the Fluxys system. At the top, the Fluxys logo is displayed. Below it is a green bar with the text "Sign In". Underneath, there is a prompt "Type your user ID and password." followed by two input fields: "User ID:" and "Password:". A "Sign In" button is located at the bottom right of the form.

## 1.1 Glossary

<b>Agreement</b>	Generic naming for STA (Standard Transmission Agreement), SSA (Standard Storage Agreement), LTA (LNG Terminalling Agreement), LTL (LNG Agreement for LNG Truck Loading), LTSA (LNG Transshipment Services Agreement), CSA (Capacity Subscription Agreement)
<b>ACT</b>	Access Code for Transmission
<b>Business Party (BP)</b>	A Business Party is a company with whom Fluxys does business (i.e. has a capacity contract). In Fluxys' ICT systems, a Business Party typically is limited to one of the possible activities (Transmission – Storage – Terminal) in which Fluxys or one of its subsidiaries is the operator. In other words, if the same company is active for all three activities (i.e. has an active STA, SSA and LTA), it will be technically registered as different business parties in the respective ICT system of the concerned activity.
<b>Business Party Association (BPA)</b>	A Business Party Association is a “federating” concept to allow users from the same company or affiliated companies to view data or perform actions for different activities (Transmission, Storage and/or Terminal) on the Fluxys Electronic Data Platform, without being registered or having to sign in several times. Even if the company has only one activity, a BPA should be created.
<b>Electronic Booking System (EBS)</b>	Part of the Electronic Data Platform provided by the TSO which allows Grid Users to subscribe transmission services.
<b>Electronic Data Platform (EDP)</b>	The internet application offered by Fluxys to the Fluxys Service User on which Fluxys and its affiliates shall give access to both public and private data and its associated Electronic Booking System through which the Grid User can subscribe transmission services.
<b>Fluxys</b>	Can either be Fluxys Belgium as Fluxys LNG.
<b>Fluxys activity</b>	Fluxys has three regulated commercial activities, being Transmission, Terminal and Storage.
<b>Fluxys Service User</b>	The Fluxys Service User is a generic naming for Transmission Service User, Storage User, Terminal User.
<b>Single Point Of Contact or SPOC</b>	<p>Fluxys Service User Representative appointed by the Fluxys Service User according to procedures set forth in the Agreements (STA, SSA, LTA) who shall be the contact person between the Fluxys Service User and Fluxys Belgium and its affiliates, and who is entitled to do the administration setup.</p> <p>A SPOC is always defined for a Business Party Association (BPA) and an activity. The SPOC can only define user rights for the BPA and the Fluxys activity that is associated to him/her.</p>
<b>Transmission Service User</b>	Generic naming used in this document only for Grid User, Gas User, TSO.

<b>User</b>	The user that is associated to a BPA. This user can sign in to the EDP and to the EBS with a user name and password.
<b>Working Hours</b>	From Monday to Friday between 9 am and 6 pm Belgian Local Time, except during bank holidays in Belgium or the TSO's general holiday schedule.

## ***1.2 Availability and use of the EDP and EBS***

The Electronic Data Platform and Electronic Booking System are intended to be accessible 24 hours per day and 7 days a week. Assistance in case of technical problems or unavailability of the EDP or EBS for whatsoever reason or the helpdesk will only be ensured by Fluxys or one of its affiliates during Working Hours.

Fluxys and any of its affiliates reserve the right to suspend or otherwise limit the availability of part or all of the EDP or EBS at any moment to make all modifications likely to improve or expand its operation or simply to ensure its maintenance. The Fluxys Service User will be notified in due time of any change in the EDP or EBS or any such unavailability. Fluxys and any of its affiliates will use its reasonable endeavours to keep such unavailability to a minimum.

The use of the EDP, and the data published on it, is at the user's own discretion and risk. Data on EDP may contain inaccuracies.

## ***1.3 BPA***

Generally speaking, the BPA concept allows federation for the access of a user to the data of his company in different contexts, for as long as the company is active in those contexts. The concept can also be used if the same user would be acting on behalf of a company or affiliated companies in other contexts. Note however that 2 affiliated companies in the same context cannot be associated to one single user.

This concept is obviously transparent for companies that are only active in one single context. In that case no association is relevant. Nonetheless, upon registration of the SPOC(s), Fluxys will setup the requested BPA for each company or group of companies.


## ***1.4 SPOCs***

Upon registration of SPOC(s), Fluxys will create a user account for the SPOC and associate this account to the relevant BPA. A SPOC is a specific type of user, who acts as a Single Point Of Contact role for one or more Fluxys contexts.

For example, a SPOC user in a Terminal context will be able to create and manage users for his BPA in the Terminal context.

The SPOC user details, such as mobile phone number and e-mail address are required. The SPOC user will receive an e-mail, stating the URL of the Electronic Data Platform and his user name. The password will be sent by SMS. This system-generated password must be changed before the SPOC user is able to log in to the system.





### Sign In

Type your user ID and password.

User ID:

New Password:

Confirm New Password:

Password rules:

- Must be between 8 and 20 characters.
- Must have at least one lower case character.
- Must have at least one upper case character.
- Must have at least one number or special character "\_%().!@#"
- Your UserId cannot be part of your password

## 2. Access rights

For the avoidance of doubt, Fluxys grants user that has been registered either as SPOC either by the SPOC, a temporary, personal, non-transferable and non-exclusive right to use the Electronic Data Platform for the consultation of data based on specific access rights, in the framework of the Standard Transmission Agreement, the Standard Storage Agreement and/or the LNG Terminal Agreements.

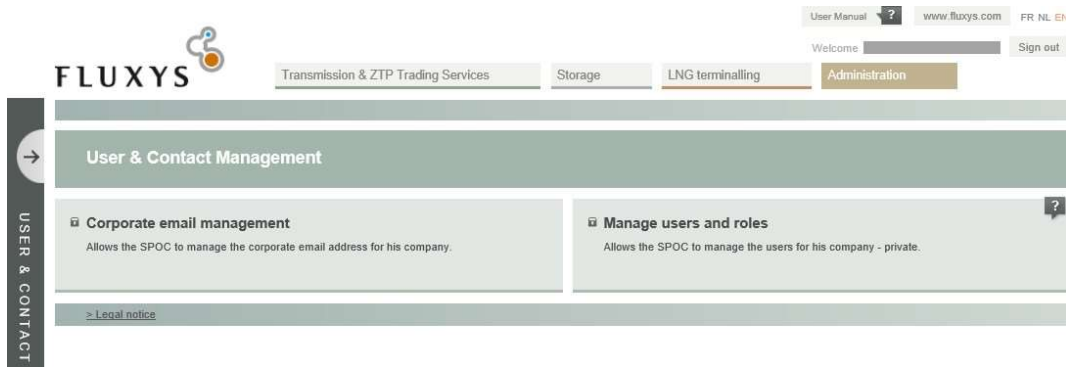
### 2.1 Administration rights

Grid user shall appoint one or more SPOCs, who shall become users granted with administration rights in the Electronic Data Platform. For the registration of a SPOC for a specific grid user, Fluxys requires at least the name, e-mail address and mobile phone number of such person as described in section 3.4.2.

Once the SPOC is registered, Fluxys shall send the SPOC the URL of the Electronic Data Platform and his/her username by e-mail and his/her password by SMS<sup>1</sup>. As from this moment the SPOC is entitled to use the Electronic Data Platform administration tool via <https://gasdata.fluxys.com/administration> and execute the administration setup of all users relating to such grid user, by:

- Registering users and their information;
- Managing user's password, including creation, reset or unlock operations;
- Modifying or deleting the information relating to users;
- Granting or modify granted access rights to users.

<sup>1</sup> The password is generated by the system and must be changed at first login attempt



In order to register a new user, the SPOC of the grid user shall register at least his/her name, e-mail address and mobile phone number in the administration tool. Once the user is registered, Fluxys shall send the user the URL of the Electronic Data Platform and his/her username by e-mail and his/her password by SMS. As from this moment the user is entitled to use the Electronic Data Platform and consult private data relating to the grid user, according to the access rights granted to him/her at that time by the SPOC.

## 2.2 Initial user setup

### 2.2.1 Creating a new user

Before creating a user account, the SPOC should check if the user already exists. If this is the case, user details do not need to be filled in. The SPOC can proceed immediately to assigning rights to the already existing user (See 0).

If the user is new, the user details have to be filled in:

- First and last name (\*)
- Mobile phone number (\*) (\*\*)
- E-mail address (\*) (\*\*)
- Regular phone number

(\*) fields are mandatory

(\*\*) fields have to be entered twice to ensure that the value entered is correct

The user ID is generated by the system, and consists of the 7 first letters<sup>2</sup> of the surname and the first letter of the first name. The user ID is a mere suggestion by the system. If the SPOC prefers another user ID, he can enter another one. The system will check the uniqueness of the user ID before saving the user.

After pressing the Save button, the SPOC receives a validation code by SMS, which has to be entered in the provided field. This code must be validated successfully by the system before the newly created user account is actually saved in the system.

Once the account is saved, the specified user receives an e-mail with a link to the Fluxys Electronic Data Platform. To gain access to this platform, the user must enter the initial user password generated by the system. This password is not shown to the SPOC but sent to the user by SMS. Before being able to sign in, the user should reset this system-generated password to a personal password. For clarity's sake, next symbols do not appear in the password:

- l: lower case L
- I: upper case i
- o: lower case o
- O: upper case o

The 1 and 0 do sometimes appear in the system-generated password.

The user should reset the system-generated password before logging in. The password should contain minimum 8 characters and maximum 20 characters. It should consist of at least 1 upper case letter, 1 lower case letter and 1 digit or special character (except the special characters ' " \ &). The password cannot contain the username.

Should the e-mail address or mobile phone number be entered incorrectly by the SPOC, it is up to the user to notice that no message was received within reasonable term. The user should therefore contact the SPOC to verify what went wrong.

## 2.2.2 Adding user rights

Once a user account has been selected, the SPOC can assign user rights.

- If a user is entitled **Reader** rights, access is granted to consult public data and private data relating to the grid user only.
- If a user is entitled **Composer** rights, access is granted to consult and register transaction information through the Electronic Booking System relating to requests of transmission services for the account of a Grid User.
- If a user is entitled **Validator** rights, access is granted to consult and validate binding transactions through the Electronic Booking System for the account of a Grid User. Such validation of binding transmission service requests is done by entering a confirmation code sent by SMS by the TSO.
- An **AA Validator** is a user profile especially to approve the allocation agreements (see section 4.1.8).
- An **Automatic Download Agent** is a user profile especially for automatic downloads, usually executed by an external system that requires private data relating to the grid user.
- A **Metering Index Encoder** is a user profile to encode metering index (see section 4.3.9).

Because of security reasons, if the user already has a role Reader, Composer or Validator, then the role Automatic Download Agent cannot be assigned. If the user already has the role Automatic Download Agent, then the role Reader, Composer or Validator cannot be assigned.

## 2.3 Password management

### 2.3.1 Unlocking a locked user

If a user subsequently enters an incorrect password 5 times in a row, then the system locks the specified user account, if it even exists. The account can only be unlocked by the SPOC.

---

<sup>2</sup> If the last name does not consist of 7 letters, the last name as a whole is concatenated with the first letter of the first name.

Consequently, a SPOC can also unlock a fellow SPOC. Once an account has been unlocked, an e-mail is sent to the user to inform him/her about the unlocking of the account.

### **2.3.2 Resetting password**

The SPOC can reset the password of a user or a fellow SPOC if asked to do so. The user under consideration should just be selected before pushing the reset button.

When resetting, the system first checks whether or not the selected user is locked and unlocks the user if necessary.

The system generates a new password and sends it to the user by SMS. The user should change the password before being able to log in to the Fluxys Electronic Data Platform.

## **2.4 Other SPOC functionalities**

### **2.4.1 Changing user details**

The details of the user can be changed

- First and last name
- Regular phone number
- E-mail address

The e-mail address has to be entered twice in order to make sure the correct value is entered.

### **2.4.2 Changing the mobile phone number**

The mobile phone number of the user can also be changed. The new value for the mobile phone number has to be entered twice (the copy paste functionality is disabled).

To confirm the change, the SPOC has to enter the validation code he has received by SMS.

### **2.4.3 Deleting user rights**

The SPOC can select a user account and delete his/her rights.

### **2.4.4 Deleting a user account**

A user account can only be deleted if it has no rights whatsoever. As long as the account still has rights, the delete button will be disabled. If the SPOC has strong reasons for deleting the user anyway, he should first delete the user rights.

### **2.4.5 Consulting user accounts**

The SPOC can consult all the users for his BP. For each user there is an indication of the applied user rights (SPOC rights and/or other rights).

## **3. Functionalities for the users (including SPOCs)**

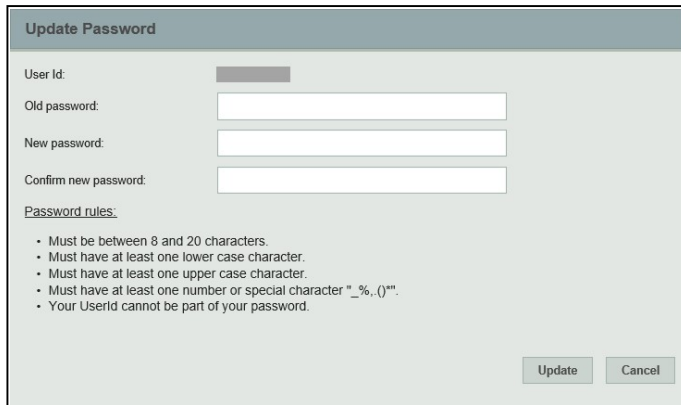
### **3.1 Authenticate**

The user is authenticated with User ID and password. If the password is entered incorrectly 5 subsequent times in a row, the system locks the user.

### **3.2 Change password**

The user can change his password by typing in the old password and then typing the new password twice, in order to ensure that the entered value is the correct one.

The password should contain minimum 8 characters and maximum 20 characters. It should consist of at least 1 upper case letter, 1 lower case letter and 1 digit or special character (except the special characters ' " \ &). The password cannot contain the username.



**Update Password**

User Id:

Old password:

New password:

Confirm new password:

Password rules:

- Must be between 8 and 20 characters.
- Must have at least one lower case character.
- Must have at least one upper case character.
- Must have at least one number or special character "\_%,()".
- Your UserId cannot be part of your password.

### Log in



FR NL EN User Manual ? www.fluxys.com

Click the “sign in” button in the right upper corner of the screen. The user is asked to fill in his/her user account (mentioned in the e-mail received) and his password (mentioned in the SMS when this is the first time, or reset by the user himself when this is not the first time).



FR NL EN User Manual ? www.fluxys.com

Welcome Lisa Simpson (Demo BPA)

The user name followed by the BPA name between brackets shows when the user has signed in.

## 3.3 Consult my info

Click on the user name. The following screen appears



**My Details**

**USER INFORMATION**

User Id:	SimpsonL	E-mail:	albert2demo@fluxys.com
First name:	Lisa	Mobile phone:	0644930000000
Last name:	Simpson	Telephone:	12345

Storage SPOC: \_\_\_\_\_ Terminal SPOC: \_\_\_\_\_ Transmission SPOC: \_\_\_\_\_

Name: Albert2 Demo  
Email: albert2demo@fluxys.com  
Mobile phone: 0644930000000

Name: Albert2 Demo  
Email: albert2demo@fluxys.com  
Mobile phone: 0644930000000

The external user can consult his user information, being:

- First name
- Last name
- User ID
- Telephone number
- Mobile phone number

- E-mail address

The user can also consult the information for the SPOCs of his BPA

- Name
- Mobile phone number
- E-mail address

### 3.4 SPOC Template

The following fields have to be provided to Fluxys for each SPOC. Note that phone number is the only field which is not mandatory.

#### Electronic Data Platform Form

Please complete this template and send it back to FLUXYS ( <a href="mailto:info.transport@fluxys.com">info.transport@fluxys.com</a> or <a href="mailto:info.lng@fluxys.com">info.lng@fluxys.com</a> ) <b>as soon as possible</b> in order to enable FLUXYS to create the SPOC(s) for your company once the concerned STA, Storage, and/or Terminal Agreements enter into force.							
COMPANY NAME							
SPOC: This person will be responsible for the management of the users and their access rights for the Electronic Data Platform within your company					Activity		
First Name	Last Name	Mobile Phone*	Email Address	Phone Number	Transmission <sup>1</sup>	Storage	Terminal
					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

\* Mobile Phone Number shall be used in order to send a SMS including the password to the SPOC.

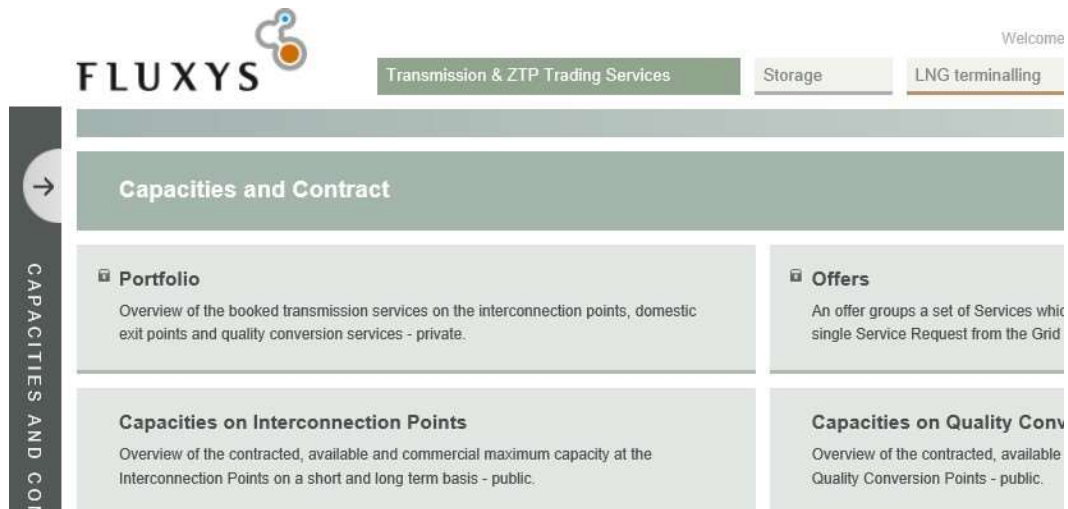
The template will be provided via [info.transport@fluxys.com](mailto:info.transport@fluxys.com) when the company becomes a Business Party (BP) by signing the Standard Transmission Agreement, the Standard Storage Agreement and/or the LNG Terminal Agreements.

## 4. Transmission & ZTP Trading Services

### 4.1 Capacities and Contracts

#### 4.1.1 Portfolio

Via the Electronic Data Platform it is possible for the grid user to download his portfolio of contracted services.



Navigate towards “Capacities and Contracts” in the “Transmission & ZTP Trading Services” section on the Electronic Data Platform and select the “Portfolio” tab in order to consult the portfolio.

In the Portfolio screen the grid user can select to export his portfolio to a XML file or a CSV file. This export can be generated as of a specific date for an unlimited period or for a specific period.

Note that this is private data which is made available to a specific grid user only, with restricted use depending on the access rights granted to the user of the Electronic Data Platform, as detailed in Attachment G of the Access Code for Transmission.

#### 4.1.2 Capacities on Interconnection Points

Fluxys publishes the contracted, available and commercial maximum capacities at every interconnection point on its network for the next 15 years.

- Firm Capacity: capacity that is guaranteed under all normal circumstances.
- Backhaul Capacity: offered at unidirectional interconnection points, in the opposite direction of the physical gas flow direction and is usable as long as the resulting physical flow remains in the physical direction of the interconnection point
- Interruptible Capacity: capacity with an interruption probability of 5% based on historical flows.

The following table explains the column names

CCF	Contracted Capacity Firm
ACF	Available Capacity Firm
CMCF	Commercial Maximum Capacity Firm
CCB	Contracted Capacity Backhaul
ACB	Available Capacity Backhaul

CMCB	Commercial Maximum Capacity Backhaul
CCI	Contracted Capacity Interruptible
ACI	Available Capacity Interruptible
CMCI	Commercial Maximum Capacity Interruptible

The set of interconnection points that can be chosen as parameter contains both the interconnection points valid in the former transmission model, and in the new entry-exit transmission model. By default all the interconnection points are checked.

The report shows for each day in the requested period only data for the interconnection points that are valid on that day. Attention, the download can only be done for blocks of 2 years.

### 4.1.3 Capacities on Domestic Exit Points

Fluxys publishes the contracted, available and technical capacities at each Zone, H and L, of its network with the aggregated set of data for the supply points connected to this Zone.

The following table explains the column names

CCF	Contracted Capacity Firm
ACF	Available Capacity Firm
TC	Technical Capacity

### 4.1.4 Secondary Market Report

Capacities booked on the secondary market are reported in aggregated form, per interconnection point, direction and type of capacity. The types of capacities are firm, Backhaul and interruptible.

### 4.1.5 Capacities on Quality conversion Points

Fluxys publishes the contracted, available and commercial maximum capacities at every conversion point on its network.

The following table explains the column names

CCF	Contracted Capacity Firm
ACF	Available Capacity Firm
CMCF	Commercial Maximum Capacity Firm
CCI	Contracted Capacity Interruptible
ACI	Available Capacity Interruptible
CMCI	Commercial Maximum Capacity Interruptible
DF	Demand Factor
SF	Seasonal Factor
MF	Maintenance Factor
IF	Interruption Factor

### 4.1.6 Congestion Management Procedures

Congestion occurs when a Service Request for Firm Transmission Services at an Interconnection Point or an End User Domestic Exit Point cannot be confirmed due to lack of available Firm Transmission Services and if none of proactive congestion management measures or any other alternatives envisaged between TSO and Grid User have provided for an acceptable solution.



#### 4.1.6.1 Unsuccessful requests for firm capacity

Occurrence of unsuccessful, legally valid requests for firm capacity products with a duration of one month or longer including the number and volume of the unsuccessful requests.

#### 4.1.6.2 Auctions cleared at prices higher than the reserve price

In the case of auctions, where and when firm capacity products with a duration of one month or longer have cleared at prices higher than the reserve price.

#### 4.1.6.3 No firm capacity offer

Where and when no firm capacity product with a duration of one month or longer has been offered in the regular allocation process.

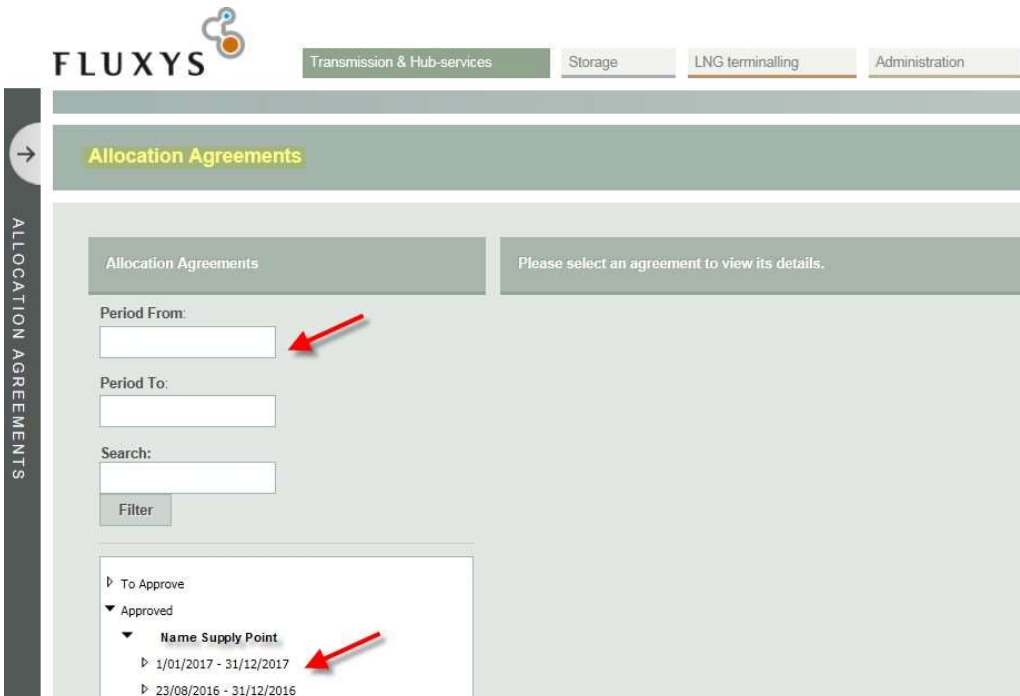
#### 4.1.6.4 Capacity made available through congestion management procedures

Total capacity made available through the application of the congestion-management procedures.

### 4.1.7 Allocation Agreements

In this section, Allocation Agreements are listed, available for consultation and approval. In the folder tree a distinction is made between:

- To Approve : List of the AA to be approved
- Approved :
  - Allocation Agreements which have been signed by all involved parties are listed and available for consultation in this section.
  - The filter panel gives the possibility to select Allocation Agreements which are relevant for a specific period.
  - If the user wants to display the Allocation Agreement for a specific period, he should first select the correct period in the tree under the name of the Domestic Exit Point.



The screenshot displays the FLUXYS web application interface for Allocation Agreements. At the top, there are navigation tabs: 'Transmission & Hub-services', 'Storage', 'LNG terminalling', and 'Administration'. The 'Allocation Agreements' section is highlighted in the sidebar. The main content area includes a filter panel with fields for 'Period From', 'Period To', and 'Search', along with a 'Filter' button. Below the filter panel is a tree view showing a hierarchy of 'To Approve' and 'Approved' agreements. A red arrow points to the 'Period From' input field, and another red arrow points to the '1/01/2017 - 31/12/2017' period in the tree view.

The following information is then available:

- **Agreement details :**

**Validity Period:** the period for which the Allocation Agreement is concluded by all involved parties

**Approval deadline:** the deadline to meet for the approval of the Allocation Agreement (only relevant if not already approved by all involved parties)

Station Schema: a schema of the receiving station of the Domestic Exit Point (by clicking on the image, the window enlarges)

*Allocation rule description:* the description of the rule which will be applied to calculate the allocation to the Grid User(s) of the Quantities of Natural Gas offtaken at the Domestic Exit Point.

- **Agreement Approval:**

*The involved parties:* Grid User and Final Costumer

*The status of the approval:* Approved (to be approved and refused are status which are available)

## 4.2 Maintenance

### 4.2.1 Works and interventions impact on Interconnection Points

Fluxys publishes the works and interventions impact on interconnection points, describing the following information:

IP	Interconnection Point
Sub Grid	Subgrid to which the interconnection point belongs
Direction	Direction of gas flow
Gas day	Gas day
Gas Hour	Gas hour
CCFB	Contracted Capacity Firm & Backhaul
PIFB	Planned Interruption Firm & Backhaul
UIFB	Unplanned Interruption Firm & Backhaul
RCFB	Remaining Capacity Firm & Backhaul
RCFB %	Remaining Capacity Firm & Backhaul %
CCI	Contracted Capacity Interruptible
PII	Planned Interruption Interruptible
AI	Actual Interruption Interruptible
RCI	Remaining Capacity Interruptible
RCI %	Remaining Capacity Interruptible %
Nature	Nature of Work Maintenance

### 4.2.2 Works and interventions impact on Domestic Exit Points

Overview of the contracted, available and commercial maximum capacity at the Interconnection Points on long term basis

TSO and Grid User agree to cooperate in the planning and scheduling of any installations, connections, disconnections and removals of relevant facilities so as to facilitate necessary maintenance, repair and replacement works, to reduce necessary interruption periods and to minimize interruptions.

Maintenance, repair or replacement works affecting the MTSRf and/or MTSRb shall be limited in duration and instances insofar as reasonably possible.

### 4.2.3 Works and interventions impact on Quality Conversion

Overview of works and interventions planned for the current year on the Fluxys Grid that could affect the execution of your transmission contracts on the Quality Conversion Services.

The TSO shall, in accordance with the Standard Transmission Agreement, notify the Grid User on maintenance and its influence on the Real Quality Conversion Capacity of the different Quality Conversion Services.

## 4.2.4 Verification of Measurement Equipment at Interconnection

Planned Verification of Measurements Equipment at Interconnection Points (in accordance with the Access Code for Transmission, Attachment D: Metering Procedures, section 7.1).

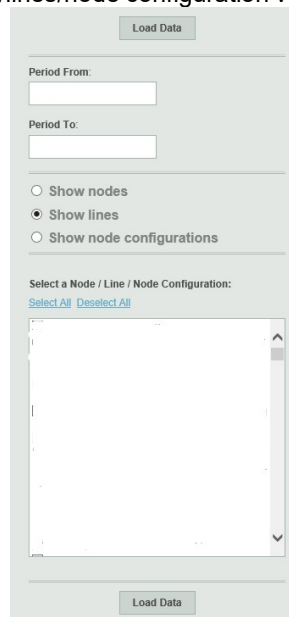
## 4.3 Metering

### 4.3.1 Daily refreshed measurements on nodes and lines

The Measurements in this section are refreshed on a daily basis. The user can consult daily measurements on nodes or lines for a selected period (Short or long period (More than 1 month)). The nodes and lines for which the user has or had view rights are available in the treeview. The system will only return results for the selected lines/nodes if the user has view rights for the selected period.

In this case, precise selections are necessary via filters:

- Period: From ... to ....
- Show node level or by lines
- Select one or several nodes/lines/node configuration via the selection list



The screenshot shows a 'Load Data' dialog box with the following elements:

- A 'Load Data' button at the top.
- Input fields for 'Period From:' and 'Period To:'.
- Radio buttons for selection: 'Show nodes', 'Show lines' (which is selected), and 'Show node configurations'.
- A section titled 'Select a Node / Line / Node Configuration:' containing links for 'Select All' and 'Deselect All'.
- A large empty list box for selecting specific nodes or lines.
- A 'Load Data' button at the bottom.

For each node or metering line for each day on the selected period, a line is displayed with the following measurements:

- The **Flow Measurements**: Volume, Energy, GCV, Pressure (absolute pressure – expressed in Bara), Temperature, Gross Volume and Conv. Volume.
- The **Gas Composition** tab displays the measurements of the composition of the gas.
- The **Gas Characteristics** tab displays the measurements retrieved by the gas analysis: Density, Wobbe, NCV, Kref, CO2 EF, GCV and a validation status.
- The status field shows the validation status of the measurements:
  - **No Data**
  - **Raw data** are measurements that are not at all verified or validated
  - **Verified data** means that a preliminary verification check has been done
  - **Validated data** means that extra checks have been executed and that the measurement is considered as accountable

Please note that the all measurements are flow weighted averages (Except Volume and Energy).

The user can also export the measurement information for the selected period in different file formats:

- XML
- CSV (Comma delimited or semicolon delimited)
- Excel

### 4.3.2 Hourly refreshed measurements on nodes and lines

The data is based on the new codification which makes it possible to visualize information on line-level for every type of metering configuration (e.g. 2 meters in series in one metering line).

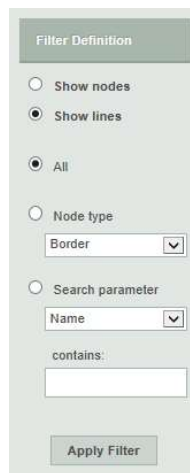
When opening this section, the Hourly View with flow measurements for the last available hour is displayed for all the nodes.

Some filters are available:

- Date: At the top (just below the hourly, daily and monthly tabs) the date selector is located. The date shown is the gasday of the measurements displayed in the measurement grid. The last available report button will automatically select the current day and hour.



- Show nodes: the measurements on node level
- Show lines: the measurements by lines
- All: No filter is applied.
- Node Type: Filter by border or by supply
- Search parameter:
  - Choice between "Name" or "Codification number"
  - Complete the box "Contains" with the exact "Codification number" or the exact name
  - Apply Filter



On the left hand side a bar with all the available hours in the selected gasday is presented. Clicking on a specific hour will select this hour and display the measurements of this hour in the measurements grid. When changing the gasday the first gashour of that day is selected.

Local Hours
<a href="#">06:00 - 07:00</a>
<a href="#">07:00 - 08:00</a>
<a href="#">08:00 - 09:00</a>
<a href="#">09:00 - 10:00</a>
<a href="#">10:00 - 11:00</a>
<a href="#">11:00 - 12:00</a>
<a href="#">12:00 - 13:00</a>
<b>13:00 - 14:00</b>
<a href="#">14:00 - 15:00</a>
<a href="#">15:00 - 16:00</a>
<a href="#">16:00 - 17:00</a>
<a href="#">17:00 - 18:00</a>
<a href="#">18:00 - 19:00</a>

The center of the screen shows all the flow measurements on the selected gasday and gashour. For each node or metering line, a line is displayed with the following measurements:

- The amount of **Volume** that flowed through the node or metering line (Converted to normal conditions (0°C and 1 atm))
- The amount of **Energy** that flowed through the node or metering line during this hour
- The **GCV** calculated from the gas flow. This value is calculated as the fraction of Energy/Volume.
- The **Pressure** of the gas (absolute pressure – expressed in Bara)
- The **Temperature** of the gas
- The **Gross Volume** is the physical volume of the gas at measured conditions.
- The **VnConv** is the normalized Volume that is measured by the volume converter.
- For a metering line, the value **Weight/In Maintenance** indicates the weight of the line (-1 / 0 / 0,5 / 1). Some examples :
  - If a metering line is in maintenance or subcounting, the weight of the metering line will be '0'.
  - If two meters are installed in the same meteringline, the weight will be '0.5'

This makes that the metering results on node level are the summation of the consumptions (in Volume or Energy) of the different depending metering lines multiplied by their weight.

- The **Status** field shows the validation status of the measurements:
  - **No Data**
  - **Raw** data are measurements that are not at all verified or validated
  - **Verified data** means that a preliminary verification check has been done
  - **Validated data** means that extra checks have been executed and that the measurement is considered as accountable

Hourly refreshed measurements on nodes and lines

Display Download

Previous Day 12/09/2022 Next Day Last Available Report

Filter Definition	Local Hours	Node/Line	Delivery Point
<input type="radio"/> Show nodes	06:00 - 07:00		
<input checked="" type="radio"/> Show lines	07:00 - 08:00		
<input checked="" type="radio"/> All	08:00 - 09:00		
<input type="radio"/> Node type	09:00 - 10:00		
Border	10:00 - 11:00		
<input type="radio"/> Search parameter	11:00 - 12:00		
Name	12:00 - 13:00		
contains:	13:00 - 14:00		
	14:00 - 15:00		
	15:00 - 16:00		
	16:00 - 17:00		
	17:00 - 18:00		
	18:00 - 19:00		
	19:00 - 20:00		

Apply Filter

#### 4.3.2.1 Download

There are essentially two main options to download measurement information from the application:

- The user can download the information manually by using the Graphical User Interface.
- It is also possible to address the download feature directly by using the Download URL.

##### 4.3.2.1.1 Manual download by the user

The user can download the required information manually by navigating to the Download section for a certain gasday period on the filtered nodes and metering lines:

- Hourly Flow Measurements on Node
- Hourly Flow Measurements on Metering Line
- Corrected Hourly Flow Measurements on Node
- Corrected Hourly Flow Measurements on Metering Line
- Hourly Gas Analysis on Node
- Daily Gas Analysis on Node

It is possible to choose between two different file formats:

- CSV
- XML

##### 4.3.2.1.2 Selection in manual download

In general:

If you do not filter on a node or metering line (in the cell 'containing'), the selected period must not exceed 1 month. The downloaded file will contain all the data of the nodes/metering lines for which you have view rights.

Containing  in Internal Codification Number or Internal Business Identifier

If you filter on a part of a node or metering line (some characters in the cell 'containing'), the selected period must not exceed 1 month. The downloaded file will contain all the data of the nodes/metering lines which contain the characters you put in the filter and for which you have view rights.

Some particularities:

If you select 'Hourly Flow Measurements on Node' or 'Hourly Gas Analysis on Node', and you filter on the exact codification of a node (in cell 'containing'). The selected period can be up to 1 year.

Attention: The codification must be absolutely accurate (You can find the codification for nodes and lines in the display section or in topology section).

The codification (for node) must consist of 5 digits + N + 2 digits: **12345-N12**

The screenshot shows the 'Download' tab of a web interface. Under 'Data Publication Type', the first option 'Hourly Flow Measurement on Node' is selected with a radio button. Below this, there is a 'Containing' field with the value '22222-N01' and a label 'in Node or Metering Line Codification Number'. A date and time range is specified: 'From' 21/12/2017 at 1 hour to 21/12/2017 at 24 hours. Under 'Format Type', 'CSV' is selected. A 'Download' button is located at the bottom left of the form.

If you select 'Hourly Flow Measurements on Metering Line', and you filter on the exact codification of a line (in cell 'containing'). The selected period can be up to 1 year.

The codification must be absolutely accurate (You can find the codification for nodes and lines in the display section or in topology section).

The codification (for line) must consist of 5 digits + N + 2 digits + / + 1 letter + / + the number of the line: **12345-N12/A/1**

The screenshot shows a web interface for data publication. At the top, there are 'Display' and 'Download' tabs, with 'Download' being the active one. Below the tabs is a section titled 'Data Publication Type' containing several radio button options. The option 'Hourly Flow Measurement on Metering Line' is selected and highlighted with a red box. Below this section is a text input field containing '22222-N01/A/1', preceded by the word 'Containing' and followed by the text 'in Node or Metering Line Codification Number'. Below the text field is a date and time range selector. It shows 'From' as '21/12/2017' and 'to' as '21/12/2017', with a time range from '1' hour to '24' hour. This entire range selector is also highlighted with a red box. Below the date range is a 'Format Type' section with two radio button options: 'CSV' (selected) and 'XML'. At the bottom of the form is a 'Download' button.

The function "Corrected Hourly Flow Measurements" returns all measurement corrections that have been made during the selected period (Ex: If Fluxys makes corrections on the Measurements of 28/01/2015 on respectively 09.02.2015 and 03.03.2015, these changes will be visible by selecting respectively the period from 01.02.2015 to 28.02.2015 and 01.03.2015 to 31.03.2015).

#### 4.3.2.1.3 Automatic download by an application

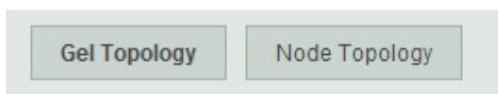
See chapter 7.

6 new downloads based on new codification are available.

### 4.3.3 Topology

This section provides information about the metering topology elements on which the user has the right to view data. The view rights are derived from the contracts which are based on Gas Exchange Locations. These gas exchange locations can be subdivided in a set of Nodes.

#### 4.3.3.1 Content



A Gas Exchange Location (GEL) consists of node memberships. A node can be a member of a GEL during a given time period. The membership has a weight with which the measurements of the respective node are aggregated in the result for the associated GEL. All this information can be found per GEL under the button **GEL Topology** (This option is accessible to limited users (It depends of their contractual link with Fluxys)).

Under the **Node Topology** button a drop-down box can be found with all the nodes on which the user has the right to view data.

The whole history of the node and the underlying metering lines are shown after selecting a node. The node history consists of the name changes and the EAN number.



The metering line history consists of the measured before status, operational status and the EAN number.

The data is based on the old and the new codification which makes it possible to visualize information on line-level for every type of metering configuration (e.g. 2 meters in series in one metering line).

#### **4.3.3.2 Download**

There are essentially two main options to download topology information from the application:

- The user can download the information manually by using the Graphical User Interface.
- It is also possible to address the download feature directly by using the Download URL.

##### **4.3.3.2.1 Manual download by the user**

The user can download the required information manually by navigating to the Download section. This section provides selections to download the whole history of either:

- Gas Exchange Location Topology: for all GELs on which the user has the right to view data
- Node Topology: for all GELs on which the user has the right to view data

It is possible to choose between two different file formats:

- CSV
- XML

##### **4.3.3.2.2 Automatic download by an application**

See chapter 7.

### **4.3.4 Further remarks about Metering and Topology**

#### **4.3.4.1 Aggregation of measurements**

Since a Gas Exchange Location (GEL) consists of a set of nodes and a node consists of a set of metering lines, the measurements for a complete GEL should be aggregated.

We advise to start the aggregation for a complete GEL from the set of nodes and not from the set of metering lines! A metering line can go 'In Maintenance' or the measurements can already be accounted in the measurements of another metering line, i.e. 'Measured Before'.

The measurements on the node level take these two parameters into account and can therefore readily be used for the aggregations.

Example

What is the total energy on gas exchange location A at gas day X, hour Y?

The topology of gas exchange location A at gas day X and hour Y is:

- Membership 1: Node n1, weight w1 = -1
- Membership 2: Node n2, weight w2 = -1
- Membership 3: Node n3, weight w3 = 1

The measurements of nodes n1, n2 and n3 at gas day X and hour Y are:

- Node n1: e1 = 100 kWh
- Node n2: e2 = 200 kWh
- Node n3: e3 = 500 kWh

Calculation

Total energy (e) =  $e1 * w1 + e2 * w2 + e3 * w3$   
=  $100 * -1 + 200 * -1 + 500 * 1$   
= 200 kWh

### **4.3.5 Real Time Measurement on Interconnection Points**

The Real-time Data screen offers an overview of the last available real-time metering data on GELs for which the current user has a valid real-time metering contract. The user can select to narrow

down the shown data to a single GEL. Once the screen is opened the available data can be updated by clicking on the Refresh button.

#### 4.3.5.1 GEL selection

All GELs available to the user are listed in a drop-down menu. By selecting a single GEL from the list the shown data will be narrowed down to all data belonging to the selected GEL. To return to the general overview the user can select the “All GELs” option from the drop-down menu.

#### 4.3.5.2 Requesting an update

The real-time data shown on the screen is not updated automatically after opening the screen. However, in the database the available data will be refreshed with the latest available data every six minutes.

By clicking the Refresh button the user can ask for an update. If the available data has been updated, the most recent version of the metering data will be displayed. The application does not keep track of the real-time value history, so previously shown data is lost after updating the screen.

#### 4.3.5.3 Download web service

See chapter 7.

### 4.3.6 Wobbe Index

This report enables Grid Users to monitor the gas quality of the gas they import into the Belgian network. The gas quality of this imported gas should be in balance with the gas quality of the gas that is exported to the UK.

Values for gashours larger than the current gashour are not available, meaning that future gashours and gasdays will be suppressed.

The value for the Wobbe at a certain point and certain gashour can change over time. At anytime the best available value is published.

All Wobbe values are defined on Interconnection Points with underlying nodes, except for 2 values on the H-zone and on the L-zone which are defined as the weighted average of the Wobbe values for all Interconnection Points of such Zones.

Grid Users receive the Wobbe Index in a data format and also downloads are made available. The values contain 2 decimal digits.

Data format

**FLUXYS**

Transmission & Hub-services | Storage | **LNG terminalling** | Administration

**Wobbe Index**

Display | Download

Previous Day 31/05/2017 | Next Day | Last Available Report 31/05/2017 13:39

Wobbe Index (kWh/m³)	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14
BHZONE	14.59	14.59	14.59	14.59	14.59	14.59	14.58	14.58
BLZONE	12.81	12.80	12.80	12.81	12.81	12.81	12.81	12.81
Alveringem	14.67	14.67	14.67	14.67	14.67	14.67	14.67	14.67
Blaregnies L	12.86	12.87	12.87	12.88	12.88	12.87	12.87	12.87
Blaregnies Segeo	14.63	14.64	14.64	14.65	14.64	14.64	14.64	14.64
Blaregnies Troll	14.60	14.60	14.60	14.60	14.60	14.60	14.60	14.60

Downloads:

Using the download functionality the Grid User can download, either the latest available report, or he can make a selection of a date range which include the latest available report. Downloads are made available in CSV and XML formats.

**4.3.7 Metering Index Update**

The End-user will have the possibility on one hand to encode the index readings of the counter and the convertor, and on the other hand to visualize the index readings made by the Fluxys agent.

**Metering Index Update**

Select a Line: 21197/3 ZANDVLIET POWER ANTWERPEN (ZANDVLIET) - 21197-N01UA/3

**New Index**

Counter: Date: [ ] Time: 06:00 Index: [ ] m³(b) Delta: m³(b)

Converter: Date: [ ] Time: 06:00 Index: [ ] m³(b) Delta: m³(b)

Save

Last Indices counter				Last Indices Converter			
Time Stamp	Index (m³(b))	Delta (m³(b))	Name Encoder	Time Stamp	Index (m³(b))	Delta (m³(b))	Name Encoder
25/05/2016 03:00	47000	-76456	Damien André	25/05/2016 03:00	7561600	6907279	Damien André
24/05/2016 01:00	123456	76887	Test WCF	24/05/2016 03:24	654321	-6907033	Test WCF
27/04/2015 03:52	46569	0	Fluxys Agent	27/04/2015 03:52	7561354	0	Fluxys Agent
29/10/2014 11:04	46569	0	Fluxys Agent	29/10/2014 11:04	7561354	1	Fluxys Agent
12/06/2014 12:05	46569	210	Fluxys Agent	12/06/2014 12:06	7561353	12539	Fluxys Agent
12/06/2014 09:24	46359	0	Fluxys Agent	12/06/2014 09:24	7548814	19	Fluxys Agent
08/05/2014 03:08	46359	0	Fluxys Agent	08/05/2014 03:09	7548795	0	Fluxys Agent
11/04/2014 02:10	46359	1	Fluxys Agent	11/04/2014 02:11	7548795	114	Fluxys Agent
25/07/2013 01:50	46358	0	Fluxys Agent	25/07/2013 01:50	7548681	0	Fluxys Agent

If you only want to enter a counter index, the date for convertor should be 'unchecked'. If not, an alarm will appear indicating that a mandatory field was not filled.

**New Index**

Counter: Date: 06/10/2016 Time: 06:00 Index: 123457 m<sup>3</sup>(b)

Converter: Date: 05/10/2016 Time: 06:00 Index: m<sup>3</sup>(n)

Oct 2016

Do not forget to update your rights (new created role: 'Metering index encoder') to have access to encode the metering index.

**Update Rights**

User Id: DAN\_BASF  
First Name: Damien  
Last Name: André

Transmission Roles: ☒ Reader ☐ Composer ☐ Validator ☐ AA Validator ☒ Metering Index Encoder ☐ Automated Download Agent

Storage Roles: ☐ Reader ☐ Composer ☐ Validator ☐ Automated Download Agent

LNG Terminalling Roles: ☐ Reader ☐ Composer ☐ Validator ☐ Automated Download Agent

Update Cancel

If the encoding window below does not appear, it means that the selected line is no longer active in our systems (You can check the status of your station / line – In Operation or not - in the Topology section of our platform).

**Metering Index Update**

Select a Line: 21197/3 ZANDVLIET POWER ANTWERPEN (ZANDVLIET) - 21197-ND1/A3

**New Index**

Counter: Date: Time: 06:00 Index: m<sup>3</sup>(b) Delta: m<sup>3</sup>(b)

Converter: Date: Time: 06:00 Index: m<sup>3</sup>(b) Delta: m<sup>3</sup>(b)

Save

Last Indices counter				Last Indices Converter			
Time Stamp	Index (m <sup>3</sup> (b))	Delta (m <sup>3</sup> (b))	Name Encoder	Time Stamp	Index (m <sup>3</sup> (b))	Delta (m <sup>3</sup> (b))	Name Encoder
25/05/2016 03:00	47000	-76456	Damien André	25/05/2016 03:00	7561800	6907279	Damien André
24/05/2016 01:00	123456	-76887	Test WCF	24/05/2016 03:24	654321	-6907033	Test WCF
27/04/2015 03:52	46569	0	Fluxys Agent	27/04/2015 03:52	7561354	0	Fluxys Agent
29/10/2014 11:04	46569	0	Fluxys Agent	29/10/2014 11:04	7561354	1	Fluxys Agent
12/06/2014 12:05	46569	210	Fluxys Agent	12/06/2014 12:06	7561353	12539	Fluxys Agent
12/06/2014 09:24	46359	0	Fluxys Agent	12/06/2014 09:24	7548914	19	Fluxys Agent
08/05/2014 03:08	46359	0	Fluxys Agent	08/05/2014 03:09	7548795	0	Fluxys Agent
11/04/2014 02:10	46359	1	Fluxys Agent	11/04/2014 02:11	7548795	114	Fluxys Agent
25/07/2013 01:50	46358	0	Fluxys Agent	25/07/2013 01:50	7548681	0	Fluxys Agent

You can download the Metering Index Update - User manual by clicking on 

### Remarks :

- We recommend a monthly encoding of your indexes (in the first 5 days of the month) for the optimization of our data verification flow (cfr. Operational Procedures (annex to connection agreement § 5.1.7) [https://www.fluxys.com/en/products-services/empowering-you/terms-conditions/tandc\\_fluxys-belgium-connection-end-user](https://www.fluxys.com/en/products-services/empowering-you/terms-conditions/tandc_fluxys-belgium-connection-end-user))
- When your index is encoded, you can see the delta between the 2 last indexations. If the delta is 'NA' (negative delta), please check that your encoding is correct. If yes, please contact [contract.accounting@fluxys.com](mailto:contract.accounting@fluxys.com)

- You can find in the summary table a column 'Rejected'. If this one is checked, this means that the index is not been taken into account. In this case, the delta is between the 2 last indexations 'not rejected'.

Last Indices counter					Last Indices Converter				
Time Stamp	Index (m³/bt)	Delta (m³/bt)	Rejected	Name Encoder	Time Stamp	Index (m³/t)	Delta (m³/t)	Rejected	Name Encoder
02/01/2019 09:44	1304665	1261090			02/01/2019 09:50	355447940	53747940		
04/12/2018 09:38	1204665	1181090			04/12/2018 09:44	35544795	N/A		
02/03/2018 10:03	43575	41720		Fluxys Agent	02/03/2018 10:02	301700000	1633854		Fluxys Agent

### 4.3.8 Metrological Inspection Reports

Fluxys provides its customers the Metrological Inspection Reports via this tab.

## 4.4 Balancing and Allocations

### 4.4.1 Provisional Hourly Allocations

For a complete description of the Provisional Hourly Allocations data publication, please refer to the annex C1 of the [ACT](#):

#### 4.4.1.1 Purpose

The 'Provisional Hourly Allocation Report' screen gives the ability to navigate through all of the user's Provisional Hourly Allocation reports of the past 3 years. The allocations are categorized by their respective gashour.

#### 4.4.1.2 Published data

For each gashour a list of all provisional allocations is given. Every allocation detail concludes the gashour and gasday, the shipper account, the EDIGAS-code of the location and the allocation value (expressed in kWh).

#### 4.4.1.3 Access to publications

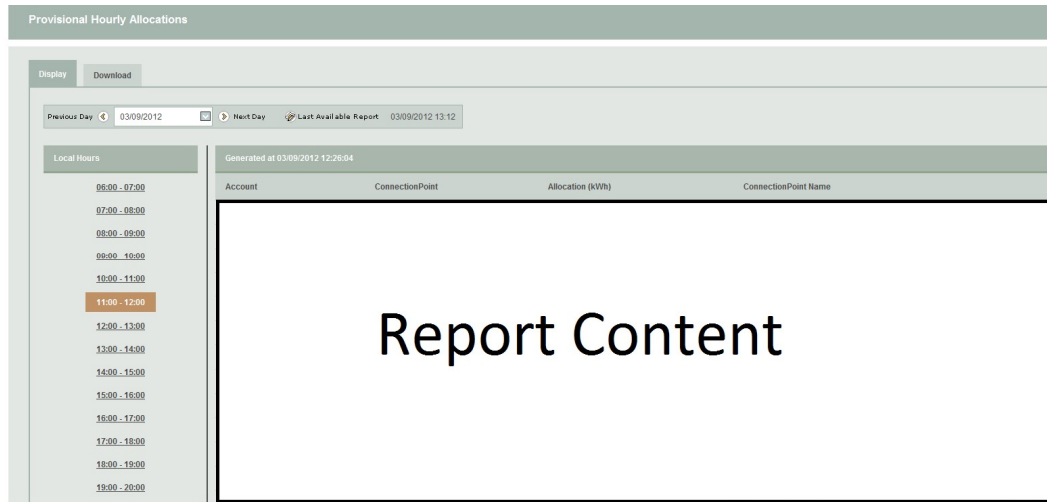
The provisional hourly allocations can be accessed in three different ways: via the display section, the download section and via a download URL.

The display section allows the grid user to view and consult the provisional hourly allocations online and the download section and download URL give the grid user the ability to download the available allocations in different file formats for further usage.

##### 4.4.1.3.1 Display section

The last available Provisional Hourly Allocation Report will be displayed by default.

If the user wants to display the allocations for a different gashour, then he should first select the correct gasday with the calendar tool at the top left corner of the screen. By default the Allocations first gashour of the day is displayed. Then the correct gashour can be chosen from the bar on the left side of the screen.



Additionally to the allocation data, the generation date and time of the report is displayed on top of the screen.

#### 4.4.1.3.2 Download section

To manually download provisional hourly allocations, the user should select the download tab. The download screen gives two options to download the provisional hourly allocations. The gasday or range of gasdays and the output file format can be chosen by the user.

##### Date range selection:

- Last available report  
This option returns the provisional hourly allocations for the last gasday.
- Date range:  
Select all the gasdays starting at gasday 'From' until gasday 'To'. The FROM date may not be later in time than the TO date and the maximum date range is limited to one week. The screen automatically changes the FROM or TO date if the maximum date range of one week is exceeded.

##### Output File Type Selection:

Three file types are available for manual download:

- CSV
- XML

**Provisional Hourly Allocations**

Display Download

**Date Range Selection**

☐ The last available Report

☒ Select from a date range:

From 03/09/2012 To 03/09/2012

**Output File Type Selection**

☒ CSV Format

☐ XML Format

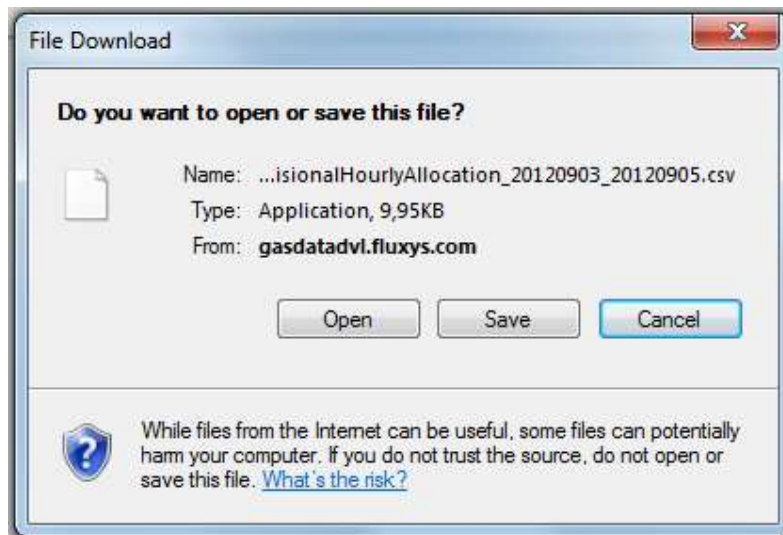
September, 2012

Mo	Tu	We	Th	Fr	Sa	Su
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
1	2	3	4	5	6	7

Today: September 3, 2012

Saturday, September 15, 2012

After the user has set the right parameters to download the desired Provisional Hourly Allocations and clicked the Download button, the File Download screen pops up, giving him/her the choice to directly open the file, or to save it.



#### 4.4.1.3.3 Automatic download URL

See chapter 7.

### 4.4.2 Imbalance Smoothing Allocation

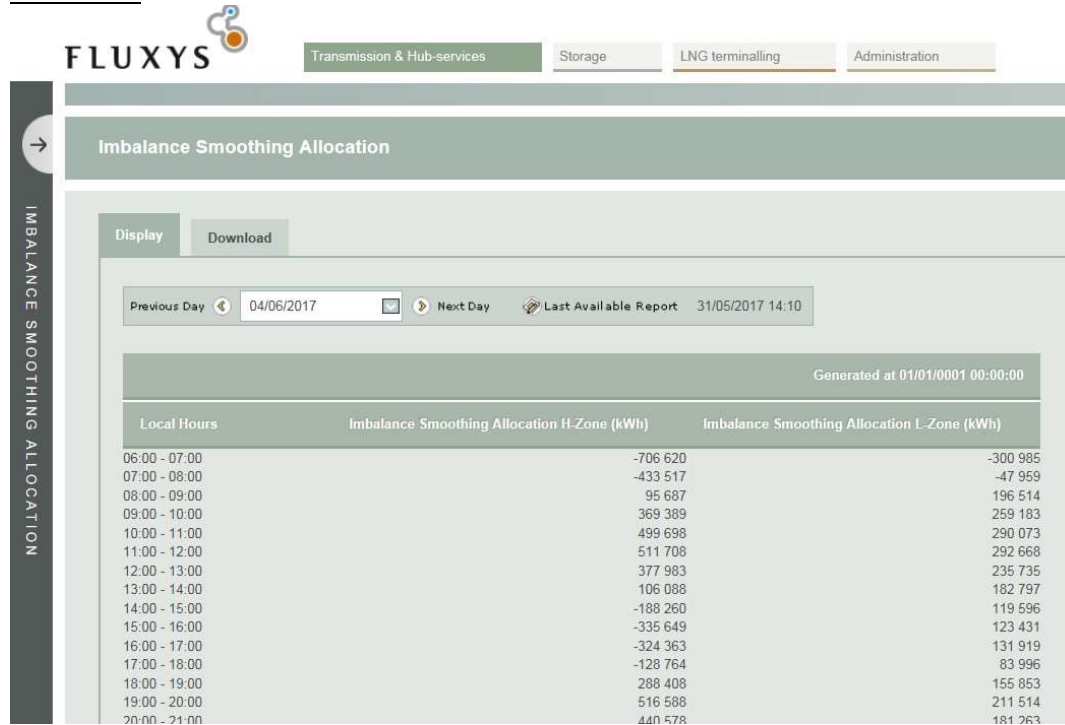
The Imbalance Smoothing Allocation publication holds hourly Imbalance Smoothing Allocations for a specific gasday.

Grid Users receive the Imbalance Smoothing Allocations for the H-zone and/or the L-zone depending on their activities in a data format and also downloads are made available.

This publication is published every day around 11h30 CET with the latest values for the upcoming 4 gasdays.

All values are rounded to 1kWh.

#### Data format



Local Hours	Imbalance Smoothing Allocation H-Zone (kWh)	Imbalance Smoothing Allocation L-Zone (kWh)
06:00 - 07:00	-706 620	-300 985
07:00 - 08:00	-433 517	-47 959
08:00 - 09:00	95 687	196 514
09:00 - 10:00	369 389	259 183
10:00 - 11:00	499 698	290 073
11:00 - 12:00	511 708	292 668
12:00 - 13:00	377 983	235 735
13:00 - 14:00	106 088	182 797
14:00 - 15:00	-188 260	119 596
15:00 - 16:00	-335 649	123 431
16:00 - 17:00	-324 363	131 919
17:00 - 18:00	-128 764	83 996
18:00 - 19:00	288 408	155 853
19:00 - 20:00	516 588	211 514
20:00 - 21:00	440 578	181 263

#### Downloads:

Using the download functionality the Grid User can download, either the latest available report, or he can make a selection of a date range which include the latest available report.

Downloads are made available in CSV and XML formats.



The screenshot shows the FLUXYS web application interface. At the top, there is a navigation bar with the FLUXYS logo and several menu items: 'Transmission & Hub-services', 'Storage', 'LNG terminalling', and 'Administration'. Below this, a sidebar on the left contains a vertical menu with 'IMBALANCE SMOOTHING ALLOCATION'. The main content area has a header 'Imbalance Smoothing Allocation' and two tabs: 'Display' and 'Download'. The 'Download' tab is selected, showing a form with two sections: 'Date Range Selection' and 'Output File Type Selection'. In the 'Date Range Selection' section, the first option 'The last available Report' is selected with a radio button. Below it, there is an option 'Select from a date range:' with two date pickers set to '15/06/2017'. In the 'Output File Type Selection' section, the 'CSV Format' option is selected with a radio button, and the 'XML Format' option is unselected. A 'Download' button is located at the bottom right of the form.

### 4.4.3 Temperatures

#### Daily Equivalent Temperature

Both forecasted and realized values are made available for system users to calculate their tolerances in the balancing system of Fluxys.

The Daily Equivalent Temperature is the sum of 60% of the temperature of Day D, 30% of D-1 and 10% of D-2. The forecasted daily equivalent temperature is based on the latest available realized temperatures and the forecasted daily temperatures.

#### Degree-day Temperature

The Degree-day Temperature is a measurement reflecting the demand for energy needed to heat buildings.

Degree-day Temperatures are defined relative to the base temperature of 16.5°C: the outside temperature above which a building needs no heating. If the average daily temperature is lower than the base temperature, the degree day temperature is the difference between both:

Example 1: average daily temperature = - 5°C □ Degree-day temperature = 21.5

Example 2: average daily temperature = 5°C □ Degree-day temperature = 11.5

If the average daily temperature is equal to or higher than the base temperature, the degree day temperature is zero:

Example 3: average daily temperature = 20°C □ Degree-day temperature = 0

FDET (°C)	Forecasted Daily Equivalent Temperature
RDET (°C)	Realized Daily Equivalent Temperature
DD (°C)	Degree Days
CDD (°C)	Cumulated Degree Days (start= 1st of October)

#### 4.4.4 Flow data – Allocations for previous Gas Years

The history of daily allocations for interconnection point in entry and exit-mode for period 2005-2011.

### 4.5 Flow Data

#### 4.5.1 Nominations and Flows on Interconnection Points

Day-Ahead nominations	DAN	The aggregated quantities of gas nominated by all system users for the following gas day at the first nomination window closure at 14.00h
Final Nominations	FN	The aggregated quantities of gas ultimately nominated by all system users for the gas hour/day. These nominations have not yet been confirmed, so they do not take into account any possible restrictions (e.g. constraints, exceeding capacity,...)
Interruptions	INT	The aggregated quantities of interrupted gas
Allocations	Alloc	Per gas day and per interconnection point the aggregated quantities of gas allocated to all system users having nominated gas quantities. Allocations at the interconnection points are provided separately for entry and exit.
Physical Flow	PF	The metered flow at the interconnection point. The data of the Physical Flow is reported on the entry-direction of every Interconnection Point. The sign indicates the direction of the flow, a positive value for incoming borders into the Fluxys-grid and a negative value for outgoing flows.
Gross Calorific Value	GCV	The conversion factor between m <sup>3</sup> (n) and kWh expressed in kWh/m <sup>3</sup> (n)

#### 4.5.2 Nominations and Flows on Domestic Exit Points

Nature	Nature	Consumption (negative figure) : quantity consumed by an end-user Production (positive figure) : quantity produced by an end-user/production unit <i>This are allocations. These quantities do not necessarily enter physically in the FLX' GRID</i>
Day-Ahead nominations	DAN	The aggregated quantities of gas nominated by all system users for the following gas day at the first nomination window closure at 14.00h
Final Nominations	FN	The aggregated quantities of gas ultimately nominated by all system users for the gas hour/day. These nominations have not yet been confirmed, so they do not take into account any possible restrictions (e.g. constraints, exceeding capacity,...)
Interruptions	INT	The aggregated quantities of interrupted gas
Allocations	Alloc	The aggregated quantities of gas allocated to all system users having nominated gas quantities at the exit-points in Belgium, grouped by Client Type
Physical Flow	PF	The aggregated metered flow at the group of Client Type per Balancing Zone
Gross Calorific Value	GCV	The conversion factor between m <sup>3</sup> (n) and kWh expressed in kWh/m <sup>3</sup> (n)

### 4.6 Invoicing

#### 4.6.1 Invoices

When the Invoices menu-item is clicked, the Invoices section will open.

Invoice Selection	Reference for Summary Payment	Description	Document			
▼ Entry/Exit Transmission Model	6164/31254/110319	11/03/2019 - Summary				
▼ 2019						
▼ March						
▼ 11/03/2019 Overview						
▶ [redacted] Bill						
▶ [redacted] Self-Bill						
▼ February						
▼ 11/02/2019 Overview						
▶ [redacted] Bill						
▶ [redacted] Self-Bill						
▼ January						

Document nr	Description	Invoice	Invoice XML	Invoice Detail XML	Invoice Appendix
0201900473	11/03/2019 - Bill				
0201990144	11/03/2019 - Self-Bill				

In this section all the available invoices are listed in the folders in the left menu.

In the folder tree a distinction is made between

- Entry/Exit Transmission model (for invoices about months as from 10/2015)
- Transport & Transit Model (for invoices about months before 1/10/2012)
- Federal contribution (as from 1/04/2014)

The folders are sorted by the available invoicing dates. By opening a folder the invoices for this invoicing date will be displayed in the middle of the screen.

Note that if you click on the folder, the application will automatically display the first invoice underneath it.

#### 4.6.2 Other invoices – Fluxys Belgium


This section of EDP gives access to private data concerning invoices and appendixes for non-regulated activities.

#### 4.6.3 Preliminary Allocation Details

Besides the fully validated allocation details (see 4.6.4), Fluxys also provides a preliminary version of the allocation details. A preliminary version contains the best information at the moment of publication but the data have not yet been fully validated.

##### 4.6.3.1 General Overview

In a drop-down menu near the top of the Consult Preliminary screen the user can select a month for which he wants to see the preliminary allocation details. The drop-down menu will list all months that have preliminary allocation details available. By default the most recent month is selected.

Activity Month:  

Once the month is selected, the preliminary allocation details for that month are shown. They can be downloaded separately, or with the button “download preliminary allocation details” one can download a zip file containing all the preliminary allocation details.

##### 4.6.3.2 Download

The user can choose between downloading a single allocation detail and downloading all allocation details for the selected month.

###### 4.6.3.2.1 Single file download

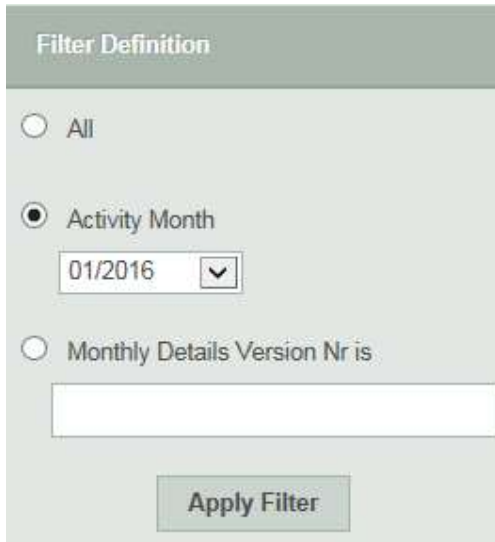
When the user selects the file he wants to download he can choose between immediately opening the file and saving the file to disk. The allocation detail is offered as a CSV file that can be viewed using Excel or notepad.

#### 4.6.3.2.2 Complete download

Again the user will get the choice between viewing and saving the file. When downloading a complete set of allocation details files, the user receives a .zip archive containing all CSV allocation details files for the selected month.

#### 4.6.4 Validated Allocation Details and ARS Capacity


As the filter option "All" is selected on the panel by default, the navigation panel shows all available invoicing months and allocation details versions. The user can use the Navigation Tree to select an allocation detail and view or download the document.



**Filter Definition**

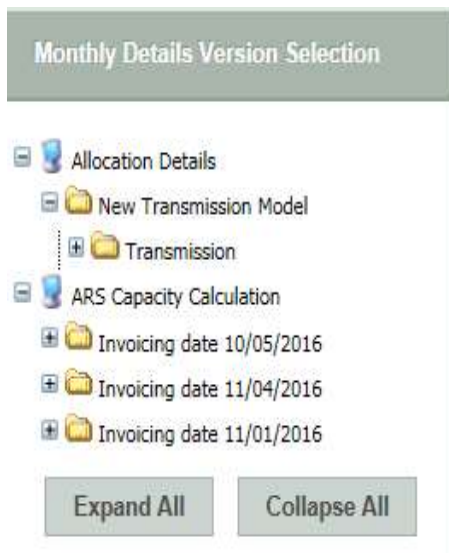
☐ All

☒ Activity Month












01/2016 

☐ Monthly Details Version Nr is

**Apply Filter**



**Monthly Details Version Selection**

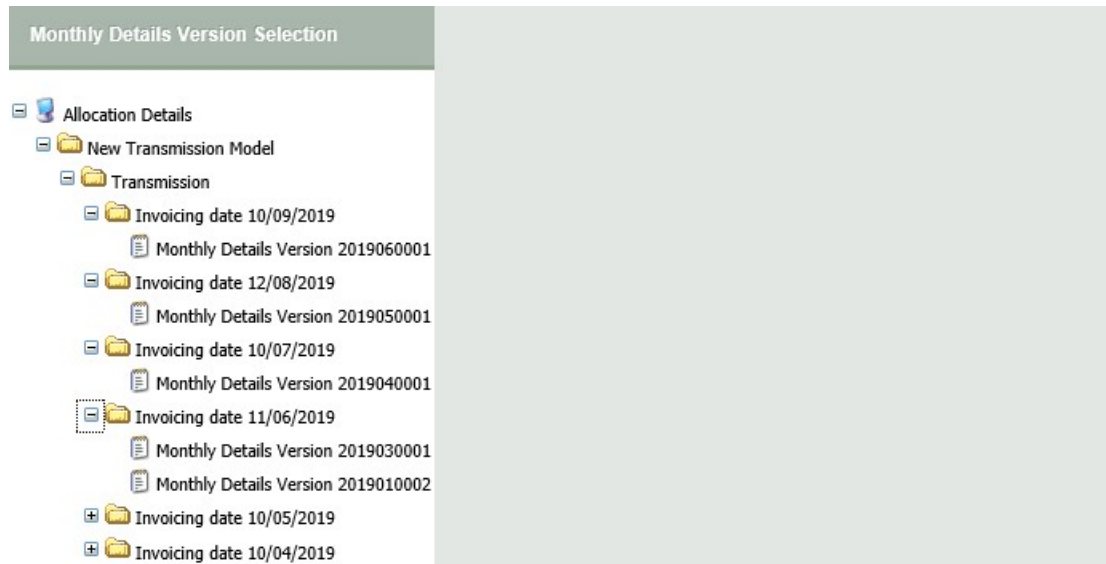
-  Allocation Details
  -  New Transmission Model
    -   Transmission
-  ARS Capacity Calculation
  -   Invoicing date 10/05/2016
  -   Invoicing date 11/04/2016
  -   Invoicing date 11/01/2016

**Expand All** **Collapse All**

The user can modify the filter applied on the collection of available allocation details organized in the navigation tree. The allocation details are grouped per monthly details version number.

The Navigation Tree, the Filter Panel and the different downloading options will be discussed in the following sections.

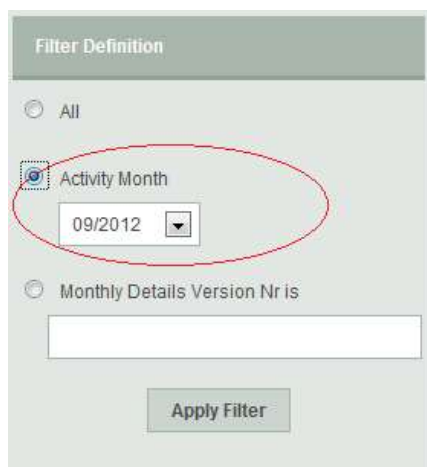
#### 4.6.4.1 Navigation Tree



The navigation provides a tree structure of all invoicing dates (i.e. document date of the allocation details) of the last 3 years and the associated bundled/linked Monthly Details Version Numbers:

- Label 'Allocation Details'.  
This navigation tree is built for the quick navigation through the archived collection of allocation details of the last 3 years. The filter above provides additional browsing facilities and is applicable on the tree content.
- Invoicing Dates (invoicing data available for the past 3 years).  
This level of the navigation tree contains the invoicing dates or document dates of the last 36 invoicing months.
- Monthly Details Version Number  
The user can find all the Monthly Details Version Numbers that are attached/bundled/linked to a particular invoicing date or document date. If a Monthly Details Version Number has been selected in the navigation tree, the user will have the possibility to download all the allocation details associated with that particular Monthly Details Version Number, and related to the invoicing date of the previous level. All the related allocation details for a particular Monthly Details Version Number and Invoicing Month/Document date will be shown in the Allocation Details Download Panel to the right of the Navigation Tree. These particular allocation details can be downloaded separately or all together in a zip file.

#### 4.6.4.2 Filter Panel



=> Only the Monthly Details Versions of Activity Month September 2012 are shown in the navigation tree, even though the invoicing dates contain other Monthly Details Versions

The Filter Panel gives the user the possibility to filter/limit the available Monthly Details Version Numbers in the navigation tree for easy and quick navigation. After applying a desired filter-option by selecting the preferred filter option and clicking the “Apply Filter” button, this option is highlighted. The filter panel consists of the following criteria/options.

- All  
If this option is chosen, no filter is applied. The option “All” gives all the available Monthly Details Version Numbers grouped by the Invoicing Date (=document date) to which they are linked/bundled.
- Activity Month  
This filter criterion gives the user the option to restrict the available Monthly Details Version Numbers shown in the navigation tree to a pre-defined Activity Month in the combo-box.
- Monthly Details Version Number  
This option offers the possibility to search and request a specific Monthly Details Version Number that fully matches the expression entered in the corresponding edit-box. As so, the user can limit the Monthly Details Version Numbers shown in the navigation tree to one particular version.

#### 4.6.4.3 Download

Essentially, there are two different ways in which the download features of the application can be used:

- Download the desired information through the Graphical User Interface.
- Address the download feature directly by using the Download URL.

##### 4.6.4.3.1 Manual download by the user

The user can download the allocation details of a selected invoicing date or linked to the selected Monthly Details Version Number by navigating to the desired invoicing month and Monthly Details Version Number.

If a Monthly Details Version Number has been selected in the navigation tree, all the related allocation details for a particular Monthly Details Version Number and Invoicing Date/Document Date are shown in the Allocation Details Download Panel to the right of the Navigation Tree.



The user has the possibility to choose the granularity of the group of allocation details to download:

- A particular single allocation detail can be downloaded by clicking the download button in front of the associated allocation detail line. Subsequently, this allocation detail file is downloaded as a CSV file which can be opened with either Notepad or Excel, and/or can also be saved to a local drive.
- All the allocation details related to a particular Monthly Details Version Number can be downloaded by selecting the option “Download this Monthly Details Version” and clicking the “Start Download” button. This bundle of allocation details is downloaded as a ZIP file containing all the allocation details in CSV file format.
- The download of all the allocation details of all the allocation details versions related to the selected invoicing date of the previous level is executed by selecting the option “Download entire Invoicing Date”, and clicking the “Start Download Button”. This group of allocation details is downloaded as a ZIP file containing all the allocation details in CSV file format.

After the user has initiated a download, the File Download screen pops up giving him/her the choice to either directly open the file or save it.

#### **4.6.4.3.2 Automatic download by an application**

See chapter 7.

### **4.6.5 Monthly Interconnection point account statement**

Monthly interconnection point account statement for customers of Fluxys and published every month on Electronic Data Platform.

This report contains the monthly detail of Grid User activities on the BeLux Model.

### **4.6.6 Monthly ZTP Trading Services statement**

Monthly allocation form (based on daily figures) which specify for each individual customer the specific ZTP Trading Services.

For every Month in the Year, a table will be produced for each Counterparty of the Customer containing daily delivery/redelivery information.

#### **Important notice:**

Please note that as from 01/10/2017 these reports will no longer exist. The history will remain available.

## **4.7 Nominations**

### **4.7.1 Final Nominations for previous Gas Years**

The history of final daily Shipper Nominations for interconnection point in entry and exit-mode for period 2005-2011.

## **4.8 Regulatory and contractual documents**

### **4.8.1 Standard Transmission Agreement ([STA](#))**

The object of this Agreement is to lay down the terms and conditions upon which the Grid User will be able, on and from the Start Date, to subscribe to Services offered by the TSO and upon which the TSO shall perform such Services.

Subject to the terms and conditions of this Standard Transmission Agreement and the attachment C 1 of the Access Code for Transmission, TSO shall operate and maintain the Transmission Grid in accordance with the applicable regulation.

Subject to the terms and conditions of this Standard Transmission Agreement and the attachment A of the Access Code for Transmission, during the Contract Period, TSO shall provide Grid User with, and Grid User shall pay for, the Transmission Services as Grid User may have subscribed pursuant to any Services Confirmation and/or has been allocated, for the relevant Service Period and in accordance with any terms and conditions set out in the relevant Services Confirmation.

### **4.8.2 Access Code for Transmission ([ACT](#))**

The Access Code for Transmission consists of a standard set of terms and conditions governing regulated access to the Transmission Services offered by the Transmission System Operator to any Grid User on the Transmission Grid operated by Transmission System Operator in accordance with the code of conduct regarding access to the natural gas transmission network, storage facility for natural gas and LNG facility as approved by royal Decree of 23 December 2010 (the Code of Conduct).

The purpose of the Access Code for Transmission is to define the set of rules and procedures governing the Transmission Services offered by Transmission System Operator to Grid Users on the Transmission Grid. In addition to being governed by the Access Code for Transmission, the Transmission Services offered by Transmission System Operator to any Grid User on the



Transmission Grid shall be subject to the terms and conditions set out in the Standard Transmission Agreement entered into between Transmission System Operator and any such Grid User.

### **4.8.3 Tariffs**

Overview [tariffs](#), tariff methodology and tariff calculator.

### **4.8.4 Capacity calculation methodology**

Fluxys updates annually its ten-year indicative investment program. These actualizations take into account the evolution of the needs for supply of natural gas, requests for new connections and the new needs of the grid users as a result of market consultations.

In order to actualize the investment program, Fluxys performs simulations on the existing configuration of its grid, based on the data for the expected development as a result of the request for transmission capacity and the estimated evolution of capacities. Different scenarios are investigated taking into account different possible configuration of gas flow, peak consumption and the maximum grid imbalance.

These grid simulations on a largely bi-directional and highly interconnected grid remain a continuous and complex exercise. Based on these transmission grid simulations, the firmness of the capacity of the grid users and end-users can be guaranteed.

### **4.8.5 Specific requirements of Interconnector Points**

Operating conditions and quality requirements at Interconnection Points.

### **4.8.6 Transmission Program (TP)**

The transmission program describes certain information regarding the transmission model and the related services offered by Fluxys for the period running from the start of the Entry/Exit model until 2015 and gives an overview of the services offered by Fluxys Belgium.

This transmission program is intended for information purposes and includes information that is set out in detail in the access code for transmission.

### **4.8.7 Specifications on supply points**

The general specifications on the supply points describing the characteristics that the supplied natural gas must meet.

### **4.8.8 Implementation information**

Find here all [operational information](#) relating to the implementation of the entry/exit model (templates, data formats,...)

## **4.9 ZTP Trading Services**

For a complete description of the [ZTP Trading Services](#), please refer to our Fluxys website.

### **4.9.1 ZTP Traded Quantities**

Overview of the ZTP trading volumes.



ZTP Traded Quantities

Load Data

---

from (incl.):

01/09/2017

to (incl.):

04/09/2017

---

Load Data

For a selected period, you can find the following data (by day) for trading points:

- The Traded quantity (kWh)
- The Physical Throughput (kWh)
- The Churn factor

(For the explanation of the abbreviations, please refer to the User Manual)												
Gasday	ZTPH			ZTP Physical Trading Service			ZTP Notional Trading Service			ZTPL		
(in kWh)	Traded Quantity (in kWh)	Physical Throughput (in kWh)	Churn	Traded Quantity (in kWh)	Physical Throughput (in kWh)	Churn	Traded Quantity (in kWh)	Physical Throughput (in kWh)	Churn	Traded Quantity (in kWh)	Physical Throughput (in kWh)	Churn
01/03/2019	3.257.943.578	927.472.009	2,51	1.926.771.832	594.430.649	2,24	1.331.171.746	333.041.360	3,00	106.390.295	34.136.368	
02/03/2019	3.147.877.943	944.513.185	2,33	1.879.784.294	610.626.425	2,08	1.268.093.649	333.886.760	2,80	99.438.892	31.846.368	
03/03/2019	3.056.069.590	864.830.026	2,53	1.840.424.103	545.480.466	2,37	1.215.645.487	319.349.560	2,81	100.618.561	31.779.368	
04/03/2019	2.765.203.478	780.672.497	2,54	1.631.724.545	465.426.713	2,51	1.133.478.933	315.245.784	2,60	111.379.130	35.641.368	
05/03/2019	3.273.288.601	1.024.836.325	2,19	1.798.688.143	615.229.536	1,92	1.474.600.458	409.606.789	2,60	115.672.997	36.496.368	
06/03/2019	3.469.902.468	1.068.705.106	2,25	1.955.993.280	663.935.364	1,95	1.513.909.188	404.769.742	2,74	100.632.708	30.961.056	
07/03/2019	3.407.384.089	1.020.805.583	2,34	2.075.615.084	650.760.119	2,19	1.331.769.005	370.045.464	2,60	111.755.715	35.393.368	
08/03/2019	3.174.562.756	980.608.630	2,24	1.877.855.506	616.977.839	2,04	1.296.707.250	363.630.791	2,57	109.377.133	34.361.368	
09/03/2019	2.871.384.411	825.253.166	2,48	1.728.612.928	513.506.102	2,37	1.142.771.483	311.747.064	2,67	100.299.024	31.429.368	
10/03/2019	2.855.991.420	818.593.366	2,49	1.727.148.128	512.043.702	2,37	1.128.843.292	306.549.664	2,68	110.131.244	35.207.368	

#### 4.9.2 ZTP Trading Services Details (before 01-10-2023)

Overview of the ZTP Trading Services for customers of Fluxys Belgium (Imbalance Pooling Services, Imbalance Transfer Services, Implicit Allocation of Capacity, trade details).

ZTP Trading Services Details

Load Data

---

Period From:

01/09/2017

Period To:

05/09/2017

For a selected period, you can find the following data (by hour) for trading points:

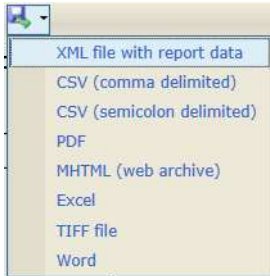
- The Imbalance Pooling Services quantity (kWh)
- The Implicit Allocations of Capacity quantity (kWh)
- The status (Forecasted and Provisional)
- The Trading details (kWh)

Imbalance Pooling and Implicit Allocation of Capacity										
Gas Day	Gas Hour	Status	Imbalance Pooling Service			Implicit Allocation of Capacity (Unbalanced Regime)				
			Imbalance Pooling of the Net Confirmed Title Transfer for the ZTP Physical Trading Service (kWh)	Imbalance Pooling of the Hourly Imbalance of the H Balancing Zone (kWh)	Imbalance Pooling of the Hourly Imbalance of the L Balancing Zone (kWh)	Net off Entry & Exit confirmations IZT, ZPT, LNG, Zeebrugge (kWh)	Sum Entry capacity IZT, ZPT, LNG, Zeebrugge (kWh)	Sum Exit capacity IZT, ZPT, LNG, Zeebrugge (kWh)	Cumulated implicitly allocated Entry Transmission Services for Zeebrugge (kWh)	Cumulated implicitly allocated Exit Transmission Services for Zeebrugge (kWh)

Trading Details						
Gas Day	Gas Hour	Trading Service	From	To	Nominated Quantity (kWh)	Confirmed Quantity (kWh)

These data are updated every hour.

The user can download the information manually.



### 4.9.3 ZTP Trading Services Details

As from October 1st, 2023, the existing ZTP Physical and ZTP Notional Trading Services will be merged into a single ZTP Trading Service. By merging the ZTP Physical and the ZTP Notional Trading Services into the ZTP Trading Services, the Imbalance Transfer Service and the Imbalance Pooling Service, offered by Fluxys Belgium, will become obsolete and will no longer exist. For the avoidance of doubt, Implicit allocation of Entry and Exit Services on Zeebrugge IP will continue to be provided but will no longer be done under the Imbalance Transfer Service.

Overview of the ZTP Trading Services for customers of Fluxys Belgium.

ZTP Trading Services Details

Load Data

Period From:

01/09/2017

Period To:

05/09/2017

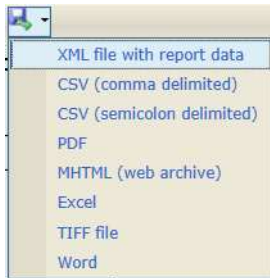
For a selected period, you can find the following data (by hour) for trading points:

- The Imbalance Pooling Services quantity (kWh)
- The status (Forecasted and Provisional)
- The Trading details (kWh)

Trading Details						
Gas Day	Gas Hour	Trading Service	From	To	Nominated Quantity (kWh)	Confirmed Quantity (kWh)

These data are updated every hour.

The user can download the information manually.



## 4.10 REMIT messages

**Regulation on Energy Market Integrity and Transparency**

**Purpose** : Publishing information to foster open and fair competition through reporting that may impact price and applies to market participants (including TSO's or Grid-Users who enters into transactions in wholesale energy markets).

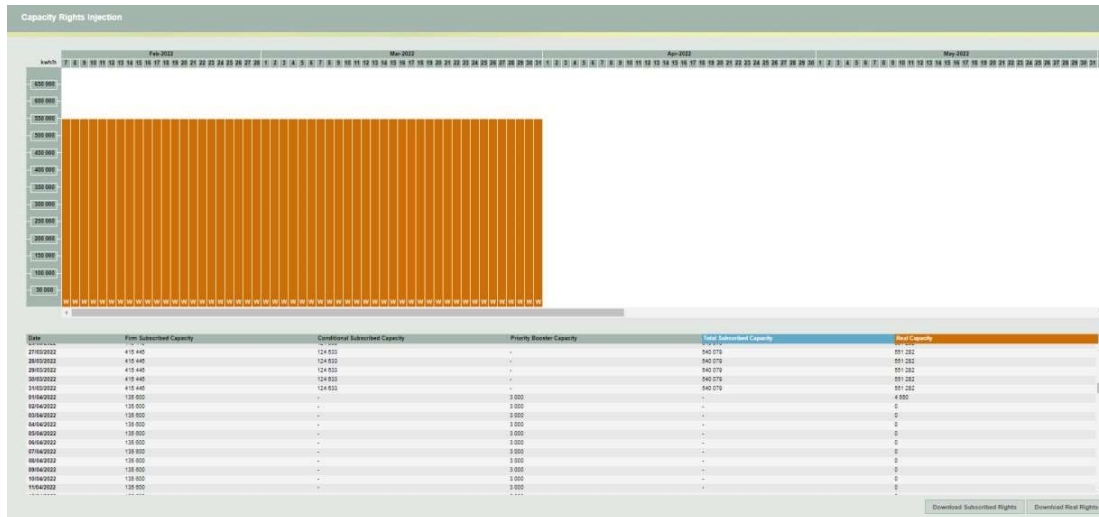
## 4.11 Notifications

General commercial informations.

## 5. Storage

### 5.1 Capacities and Contracts

#### 5.1.1 Capacity Rights Injection



Injection Capacity Consult Screen

#### Monthly view :

Information about injection capacities is retrieved for a period of 7 months: one month in the past and six months in the future.

The upper section presents a graph with the daily total subscribed and total real injection capacities for the selected plant over the time line (horizontal axis), which has a daily basis (GasDays). The view displays 60 days and is scrollable. The default view when opening contains 3 days history and 56 days in the future.

The installation mode is displayed at the bottom of the bar chart. (I = Injection, S = Stop and W = Withdrawal)

The lower section shows the same information in a table, but with two extra columns: the firm subscribed and conditional subscribed injection capacities. A new column "Priority Booster Capacity" is added.

For dates starting from 01/04/22 there is no more data published for the columns "Conditional Subscribed Capacity" and "Subscribed Total Capacity".

All capacities are now reported in the unit kWh/h instead of the unit m³/h.

For dates before 01/04/22 a conversion from the unit m³/h to the unit kWh/h is done:

- A fixed GCV of 11,3 kWh/m³ is used for subscribed capacities.
- The measured GCV is used for real capacities.

The real injection capacities in withdrawal and stop mode are set to sum of all withdrawal rights. The possible reverse nomination that will be confirmed depends on the actual forward flow.

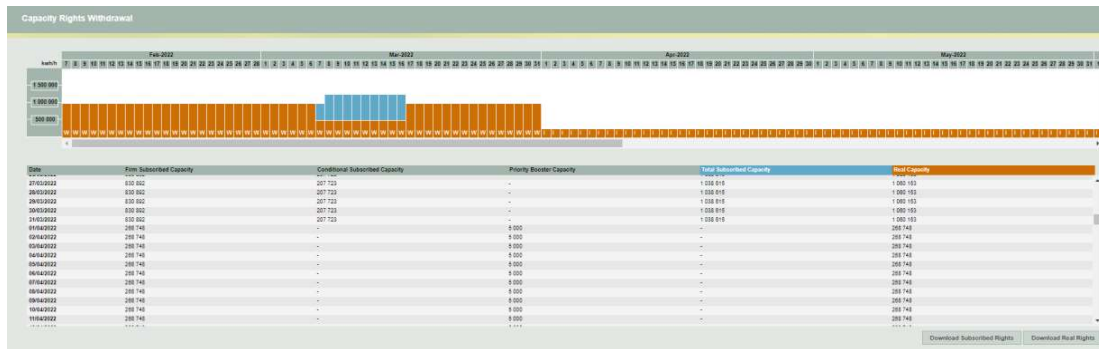
The subscribed and real injection rights can be downloaded to an .xml file by pressing resp. the 'Download Subscribed Rights' button and the 'Download Real Rights' button. This allows you to save the .xml files on one of your drives.

In following link you can find an impression of how the XML looks like:

<https://www.fluxys.com/en/products-services/empowering-you/operational-information/operational-information-storage-belgium>



## 5.1.2 Capacity Rights Withdrawal



Withdrawal Capacity Consult Screen

### Monthly view :

Information about withdrawal capacities is retrieved for a period of 7 months: one month in the past and six months in the future.

The upper section presents a graph with the daily total subscribed and total real withdrawal capacities for the selected plant over the time line (horizontal axis), which has a daily basis (GasDays). The view displays 60 days and is scrollable. The default view when opening contains 3 days history and 56 days in the future.

The installation mode is displayed at the bottom of the bar chart. (I = Injection, S = Stop and W = Withdrawal)

The lower section shows the same information in a table, but with two extra columns: the firm subscribed and conditional subscribed withdrawal capacities. A new column "Priority Booster Capacity" is added.

For dates starting from 01/04/22 there is no more data published for the columns "Conditional Subscribed Capacity" and "Subscribed Total Capacity".

All capacities are reported in the unit kWh instead of the unit m<sup>3</sup>.

For dates before 01/04/22 a conversion from the unit m<sup>3</sup>/h to the unit kWh/h is done:

- A fixed GCV of 11,3 kWh/m<sup>3</sup> is used for subscribed capacities.
- The measured GCV is used for real capacities.

The real withdrawal capacities in injection and stop mode are set to sum of all injection rights. The possible reverse nomination that will be confirmed depends on the actual forward flow.

The subscribed and real withdrawal rights can be downloaded to an .xml file by pressing resp. the 'Download Subscribed Rights' button and the 'Download Real Rights' button. This allows you to save the .xml files on one of your drives.

In following link you can find an impression of how the XML looks like:

<https://www.fluxys.com/en/products-services/empowering-you/operational-information/operational-information-storage-belgium>

Section: Electronic Data Platform -> Downloads (Update xx/xx/xxxx) -> EDP - Description of Storage section.pdf

### Daily view :

When clicking on a vertical bar representing one GasDay the bottom half of the display changes to a detailed hourly view.

Several extra columns are also visible showing the correction factor: the maintenance, conditional, volume and account factors, the Day Ahead Market and the installation mode. Please note that the Day Ahead Market capacity is on Plant level not on storage user level.

For dates starting from 01/04/22 the column “Conditional Factor (%)” is removed and replaced by the column “Claimed Factor (%)”. For dates before 01/04/22, the Conditional Factor is still published.

The column “Account Factor (%)” is renamed to “Gis Exceeding Factor (%)”.

The column “DAM/NNS [m³/h]” is renamed to “Booster capacity [kWh/h]”.

All capacities are reported in the unit kWh/h instead of the unit m³/h.

For dates before 01/04/22 a conversion from the unit m³/h to the unit kWh/h is done:

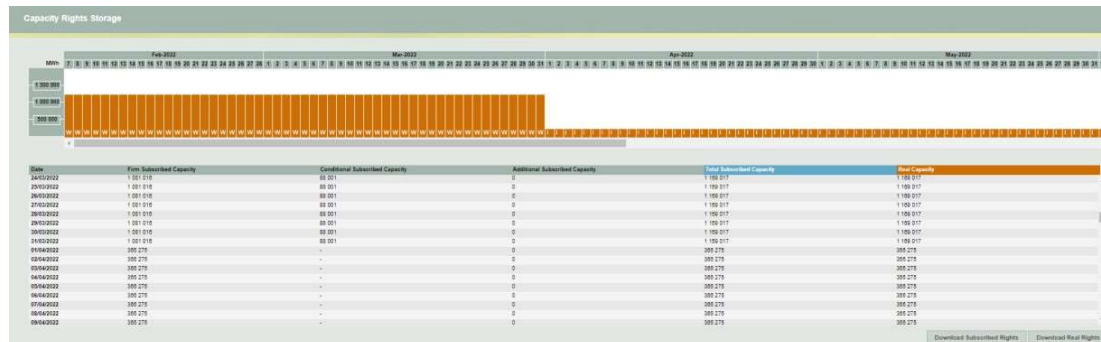
- A fixed GCV of 11,3 kWh/m³ is used for subscribed capacities.
- The measured GCV is used for real capacities.

DAM/NNS represents the maximum daily extra capacity that can be allocated on top of the rights of a SSU. The eventual assigned allocation will depend on the nominations of other SSUs.



Withdrawal Capacity Consult Screen with Details (vertical bar clicked)

### 5.1.3 Capacity Rights Storage



Storage Capacity Consult Screen

Information about storage capacities is retrieved for a period of 7 months: one month in the past and six months in the future.

The upper section presents a graph with the daily total subscribed and total real storage capacities for the selected plant over the time line (horizontal axis), which has a daily basis (GasDays). The view displays 60 days and is scrollable. The default view when opening contains 3 days history and 56 days in the future.

The installation mode is displayed at the bottom of the bar chart. (I = Injection, S = Stop and W = Withdrawal)

The lower section shows the same information in a table, but with three extra columns: the firm subscribed, the conditional subscribed and the additional subscribed storage capacities. Note that values are given in MWh and are rounded.

Starting from 01/04/22 there is no data published for the column “Conditional Subscribed Capacity”.



The subscribed and real storage rights can be downloaded to an .xml file by pressing resp. the 'Download Subscribed' button and the 'Download Real Rights' button. This allows you to save the .xml files on one of your drives.

In following link you can find an impression of how the XML looks like:

<https://www.fluxys.com/en/products-services/empowering-you/operational-information/operational-information-storage-belgium>

Section: Electronic Data Platform -> Downloads (Update xx/xx/xxxx) -> EDP - Description of Storage section.pdf

### 5.1.4 Seasonal Program

**Seasonal Program**

Period for seasonal program:

Please note that your seasonal program will be capped to your subscribed rights (red font) and that your updated seasonal program will be taken into account with the next calculation cycle at full hour + 20 minutes.

Monthly Values		Mar 2015		Apr 2015		May 2015		Jun 2015		Jul 2015		Aug 2015	
		Set		Set		Set		Set		Set		Set	
Daily Values	1	Injection	Withdrawal	Injection	Withdrawal	Injection	Withdrawal	Injection	Withdrawal	Injection	Withdrawal	Injection	Withdrawal
	2												
	3												
	4												
	5												
	6												
	7												
	8												
	9												
	10												
	11												
	12												
	13												
	14												
	15												
	16												
	17												
	18												
	19												
	20												
	21												
	22												
	23												
	24												
	25												
	26												
	27												
	28												
	29												
	30												
	31												
Monthly Totals		0	0	0	0	0	0	0	0	0	0	0	0
Notified Of		0	0	0	0	0	0	0	0	0	0	0	0

#### Seasonal Program Screen

The information on the seasonal program can be retrieved for 4 periods of 6 months each. The default period is the current month till 5 months in the future. The other periods are the past 6 month period and 2 future periods of 6 months each. The list box provides the possibility to select the period of choice.

The seasonal program in the past as well as full day + 1 cannot be edited anymore.

To define the seasonal program, just enter the amount in the Month Values field of the appropriate month and click the Set button underneath. This will cause the amount to be evenly distributed over the days of the month. It is also possible to enter daily amounts after which 'Recalculate Monthly Totals' has to be clicked to update the monthly total.

When the program has been entered or changed, the 'Submit Seasonal Program' button has to be clicked to save the amounts. While submitting the amounts, the amounts will be restricted to the



subscribed rights. In case the original amounts are capped by this action, the definitive amounts are published in red font.

At the bottom of the columns, the Monthly Totals and the Netted Of values are displayed. The Netted Of value is calculated by subtracting the total withdrawal amount of the month from the total injection amount of that month.

The seasonal program can be downloaded to an .xml file by pressing the 'Download Documents' button. This allows you to save the .xml file on one of your drives.

In following link you can find an impression of how the XML looks like:

<https://www.fluxys.com/en/products-services/empowering-you/operational-information/operational-information-storage-belgium>

Section: Electronic Data Platform -> Downloads (Update xx/xx/xxxx) -> EDP - Description of Storage section.pdf

### 5.1.5 Congestion Indicators

	Injection			Withdrawal			Storage		
	Daily Maximum %	Daily Average %	Plant Daily Average %	Daily Maximum %	Daily Average %	Plant Daily Average %	GIS unused % forecast	GIS unused capacity (MWh)	Plant GIS % forecast
01/08/2012	0.00	0.00	0.00	0.00	0.00	0.00	27.20	0.00	27.20
02/08/2012	0.00	0.00	0.00	0.00	0.00	0.00	26.71	0.00	26.71
03/08/2012	0.00	0.00	0.00	0.00	0.00	0.00	26.22	0.00	26.22
04/08/2012	0.00	0.00	0.00	0.00	0.00	0.00	25.73	0.00	25.73
05/08/2012	0.00	0.00	0.00	0.00	0.00	0.00	--	--	--
06/08/2012	0.00	0.00	0.00	0.00	0.00	0.00	--	--	--
07/08/2012	0.00	0.00	0.00	0.00	0.00	0.00	--	--	--
08/08/2012	0.00	0.00	0.00	0.00	0.00	0.00	24.20	0.00	24.20
09/08/2012	0.00	0.00	0.00	0.00	0.00	0.00	90.00	0.00	92.63
10/08/2012	0.00	0.00	0.00	0.00	0.00	0.00	90.00	0.00	92.34
11/08/2012	0.00	0.00	0.00	0.00	0.00	0.00	90.00	0.00	92.06
12/08/2012	0.00	0.00	0.00	0.00	0.00	0.00	90.00	0.00	91.78
13/08/2012	0.00	0.00	0.00	0.00	0.00	0.00	90.00	0.00	91.50
14/08/2012	0.00	0.00	0.00	0.00	0.00	0.00	90.00	0.00	91.21
15/08/2012	0.00	0.00	0.00	0.00	0.00	0.00	90.00	0.00	90.93
16/08/2012	0.00	0.00	0.00	0.00	0.00	0.00	90.00	0.00	90.65
17/08/2012	0.00	0.00	0.00	0.00	0.00	0.00	90.00	0.00	90.37
18/08/2012	0.00	0.00	6.48	0.00	0.00	0.00	90.00	0.00	94.77
19/08/2012	0.00	0.00	0.00	0.00	0.00	0.00	90.00	0.00	94.62
20/08/2012	0.00	0.00	0.11	0.00	0.00	0.00	90.00	0.00	93.37
21/08/2012	0.00	0.00	42.24	0.00	0.00	0.00	90.00	0.00	92.77
22/08/2012	0.00	0.00	0.00	0.00	0.00	0.00	90.00	0.00	92.42
23/08/2012	0.00	0.00	0.05	0.00	0.00	0.00	90.00	0.00	91.82
24/08/2012	0.00	0.00	0.00	0.00	0.00	0.00	90.00	0.00	91.22
25/08/2012	0.00	0.00	0.00	0.00	0.00	0.00	90.00	0.00	90.62
26/08/2012	0.00	0.00	0.00	0.00	0.00	0.00	90.00	0.00	90.02
27/08/2012	0.00	0.00	0.00	0.00	0.00	0.00	89.42	0.00	89.42
28/08/2012	0.00	0.00	0.00	0.00	0.00	0.00	88.82	0.00	88.82
29/08/2012	0.00	0.00	0.00	0.00	0.00	0.00	88.22	0.00	88.22
30/08/2012	0.00	0.00	0.00	0.00	0.00	0.00	87.61	0.00	87.61
31/08/2012	0.00	0.00	0.00	0.00	0.00	0.00	87.01	0.00	87.01

Indicators screen

This section represents a table with the congestion indicators for Injection, Withdrawal & Storage for each day of the current month.

It is possible to retrieve the congestion indicators for another month by using the previous month or next month buttons. A rolling window of 13 months will be provided; this means that only historic data till 13 months in the past can be consulted.

The data will be displayed as percentages, being a value between 0 and 100. Two significant decimal numbers will be shown.

If no data is available for a number of possible causes (f.e. before 15/4/2012, dates in the future), “-” is displayed.

The indicators for Injection are: Daily Maximum %, Daily Average % and Plant Daily Average %.  
The indicators for Withdrawal are: Daily Maximum %, Daily Average % and Plant Daily Average %.  
The indicators for Storage are: GIS Unused % Forecast, GIS Unused Capacity (MWh) and and Plant GIS % Forecast.

The indicators can be downloaded to an .xml file by pressing the 'Download Documents' button. This allows you to save the .xml file on one of your drives.

In following link you can find an impression of how the XML looks like:

<https://www.fluxys.com/en/products-services/empowering-you/operational-information/operational-information-storage-belgium>

Section: Electronic Data Platform -> Downloads (Update xx/xx/xxxx) -> EDP - Description of Storage section.pdf

**Notes:**

1. Additional storage capacity is not taken into account for the indicators (GIS utilization rates)
2. The storage indicators for the current day will be available from 16h15
3. The injection and withdrawal indicators for the previous day will be available from 8h30AM

### 5.1.6 Overview remaining Storage Services

The remaining Storage Services (Injection / Withdrawal / Volume) for the primary market are displayed in the corresponding table view and are updated on a regular basis (and depending on the allocation calendar).

The Storage Services offered on the secondary market are displayed in the corresponding table view and are posted on request of the selling Storage User.

For more detailed information on the available Storage Services, Storage User can contact the storage operator on [info.storage@fluxys.com](mailto:info.storage@fluxys.com).

### 5.1.7 Secondary Market report

Under this tab Storage users are redirected to the [Emix platform](#). Emix is an advertising page with requests and offers for the secondary market of all Storage products. Via this tool Storage Users can interact easily with each other to purchase and/or sell Storage products.

## 5.2 Maintenance

### 5.2.1 Works and interventions impact

Works and interventions (i.e. planned maintenance) impacting the Installation Point are published for the following calendar year as from the 1<sup>st</sup> October preceding the calendar year. The information is updated every month. Detailed information on short term changes impacting the service rights (Injection / Withdrawal) are published by the maintenance factors as described in 4.1.

## 5.3 Metering

### 5.3.1 Hourly refreshed measurements on nodes and lines

The data is based on the codification which makes it possible to visualize information on line- level for every type of metering configuration (e.g. 2 meters in series in one metering line).

When opening this section, the Hourly View with flow measurements for the last available hour is displayed for all the nodes.

On the left hand side a bar with all the available hours in the selected gasday is presented. Clicking on a specific hour will select this hour and display the measurements of this hour in the measurements grid. When changing the gasday the first gashour of that day is selected.

Local Hours
<a href="#">06:00 - 07:00</a>
<a href="#">07:00 - 08:00</a>
<a href="#">08:00 - 09:00</a>
<a href="#">09:00 - 10:00</a>
<a href="#">10:00 - 11:00</a>
<a href="#">11:00 - 12:00</a>
<a href="#">12:00 - 13:00</a>
<b>13:00 - 14:00</b>
<a href="#">14:00 - 15:00</a>
<a href="#">15:00 - 16:00</a>
<a href="#">16:00 - 17:00</a>
<a href="#">17:00 - 18:00</a>
<a href="#">18:00 - 19:00</a>

The center of the screen shows all the flow measurements on the selected gasday and gashour. For each node or metering line, a line is displayed with the following measurements:

- The amount of **Volume** that flowed through the node or metering line (Converted to normal conditions (0°C and 1 atm))
- The amount of **Energy** that flowed through the node or metering line during this hour
- The **GCV** calculated from the gas flow. This value is calculated as the fraction of Energy/Volume.
- The **Pressure** of the gas (absolute pressure – expressed in Bara)
- The **Temperature** of the gas
- The **Gross Volume** is the physical volume of the gas at measured conditions.
- The **VnConv** is the normalized Volume that is measured by the volume converter.
- For a metering line, the value **Weight/In Maintenance** indicates the weight of the line (-1 / 0 / 0,5 / 1). Some examples :
  - If a metering line is in maintenance or subcounting, the weight of the metering line will be '0'.
  - If two meters are installed in the same meteringline, the weight will be '0.5'

This makes that the metering results on node level are the summation of the consumptions (in Volume or Energy) of the different depending metering lines multiplied by their weight.

- The **Status** field shows the validation status of the measurements:
  - **No Data**
  - **Raw** data are measurements that are not at all verified or validated
  - **Verified data** means that a preliminary verification check has been done
  - **Validated data** means that extra checks have been executed and that the measurement is considered as accountable

Hourly refreshed measurements on nodes and lines – New Codification

Display

Download

Previous Day

05/09/2017

Next Day

Last Available Report

Local Hours	Node/Line	Delivery Point	Node Name	Volume [m³ (n)]
06:00 - 07:00	20210-N01/A/1	20210	FLUXYS LOENHOUT STORAGE	79 720
07:00 - 08:00	20210-N01/A/2	20210	FLUXYS LOENHOUT STORAGE	0
08:00 - 09:00	20210-N01/A/3	20210	FLUXYS LOENHOUT STORAGE	0
09:00 - 10:00	20210-N01/A/4	20210	FLUXYS LOENHOUT STORAGE	0
10:00 - 11:00				
11:00 - 12:00				
12:00 - 13:00				
13:00 - 14:00				

### 5.3.1.1 Download

There are essentially two main options to download measurement information from the application:

- The user can download the information manually by using the Graphical User Interface.
- It is also possible to address the download feature directly by using the Download URL.

#### 5.3.1.1.1 Manual download by the user

The user can download the required information manually by navigating to the Download section for a certain gasday period on the filtered nodes and metering lines:

- Hourly Flow Measurements on Node
- Hourly Flow Measurements on Metering Line
- Hourly Gas Analysis on Node
- Daily Gas Analysis on Node

It is possible to choose between two different file formats:

- CSV
- XML

#### 5.3.1.1.2 Selection in manual download

In general:

If you do not filter on a node or metering line (in the cell 'containing'), the selected period must not exceed 1 month. The downloaded file will contain all the data of the nodes/metering lines for which you have view rights.

Containing	<input type="text"/>	in Internal Codification Number or Internal Business Identifier
------------	----------------------	-----------------------------------------------------------------

If you filter on a part of a node or metering line (some characters in the cell 'containing'), the selected period must not exceed 1 month. The downloaded file will contain all the data of the nodes/metering lines which contain the characters you put in the filter and for which you have view rights.

Some particularities:

If you select 'Hourly Flow Measurements on Node' or 'Hourly Gas Analysis on Node', and you filter on the exact codification of a node (in cell 'containing'). The selected period can be up to 1 year.

Attention: The codification must be absolutely accurate (You can find the codification for nodes and lines in the display section or in topology section).

The codification (for node) must consist of 5 digits + N + 2 digits: 12345-N12

The screenshot shows the 'Download' tab of a web application. Under 'Data Publication Type', the radio button for 'Hourly Flow Measurement on Node' is selected and highlighted with a red box. Below this, the 'Containing' field is set to '22222-N01' and is also highlighted with a red box. The 'From' date is '01/09/2016' and the 'to' date is '08/12/2016', both highlighted with a red box. The 'Format Type' section shows 'CSV' selected. A 'Download' button is at the bottom.

If you select 'Hourly Flow Measurements on Metering Line', and you filter on the exact codification of a line (in cell 'containing'). The selected period can be up to 1 year.

The codification must be absolutely accurate (You can find the codification for nodes and lines in the display section or in topology section).

The codification (for line) must consist of 5 digits + N + 2 digits + / + 1 letter + / + the number of the line: 12345-N12/A/1

The screenshot shows the 'Download' tab of a web application. Under 'Data Publication Type', the radio button for 'Hourly Flow Measurement on Metering Line' is selected and highlighted with a red box. Below this, the 'Containing' field is set to '22222-N01/A/1' and is also highlighted with a red box. The 'From' date is '01/09/2016' and the 'to' date is '08/12/2016', both highlighted with a red box. The 'Format Type' section shows 'CSV' selected. A 'Download' button is at the bottom.

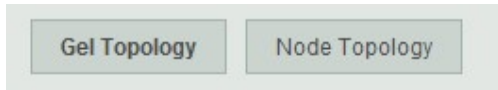
#### 5.3.1.1.3 Automatic download by an application

See chapter 7.

### 5.3.2 Topology

This section provides information about the metering topology elements on which the user has the right to view data. The view rights are derived from the contracts which are based on Gas Exchange Locations. These gas exchange locations can be subdivided in a set of Nodes.

#### 5.3.2.1 Content



A Gas Exchange Location (GEL) consists of node memberships. A node can be a member of a GEL during a given time period. The membership has a weight with which the measurements of the respective node are aggregated in the result for the associated GEL. All this information can be found per GEL under the button **GEL Topology** (This option is accessible to limited users it depends of their contractual link with Fluxys - not applicable for Storage).

Under the **Node Topology** button a drop-down box can be found with all the nodes on which the user has the right to view data.

The whole history of the node is shown after selecting a node. The node history consists of the name changes and the EAN number.

The metering line history consists of the measured before status, operational status and the EAN number.

#### 5.3.2.2 Download

There are essentially two main options to download topology information from the application:

- The user can download the information manually by using the Graphical User Interface.
- It is also possible to address the download feature directly by using the Download URL.

##### 5.3.2.2.1 Manual download by the user

The user can download the required information manually by navigating to the Download section.

This section provides selections to download the whole history of either:

- Gas Exchange Location Topology: for all GELs on which the user has the right to view data
- Node Topology: for all GELs on which the user has the right to view data

It is possible to choose between two different file formats:

- CSV
- XML

##### 5.3.2.2.2 Automatic download by an application

See chapter 7.

### 5.3.3 Further remarks about Metering and Topology

#### 5.3.3.1 Aggregation of measurements

Since a Gas Exchange Location (GEL) consists of a set of nodes and a node consists of a set of metering lines, the measurements for a complete GEL should be aggregated.

We advise to start the aggregation for a complete GEL from the set of nodes and not from the set of metering lines. A metering line can go 'In Maintenance' or the measurements can already be accounted in the measurements of another metering line, i.e. 'Measured Before'.

The measurements on the node level take these two parameters into account and can therefore readily be used for the aggregations.

**Example**

What is the total energy on gas exchange location A at gas day X, hour Y?

The topology of gas exchange location A at gas day X and hour Y is:

- Membership 1: Node n1, weight w1 = -1
- Membership 2: Node n2, weight w2 = -1
- Membership 3: Node n3, weight w3 = 1

The measurements of nodes n1, n2 and n3 at gas day X and hour Y are:

- Node n1: e1 = 100 kWh
- Node n2: e2 = 200 kWh
- Node n3: e3 = 500 kWh

Calculation

Total energy (e) =  $e1 * w1 + e2 * w2 + e3 * w3$   
=  $100 * -1 + 200 * -1 + 500 * 1$   
= 200 kWh

## **5.4 Storage Inventory and Allocation**

### **5.4.1 Provisional Hourly Allocations**

For a complete description of the Provisional Hourly Allocations data publication, please refer to the annex D1 of the Access Code for Storage.

#### **5.4.1.1 Purpose**

The 'Provisional Hourly Allocation Report' screen gives the ability to navigate through all of the user's Provisional Hourly Allocation reports of the past 3 years. The allocations are categorized by their respective gashour.

#### **5.4.1.2 Published data**

For each gashour a list of all provisional allocations is given. Every allocation detail concludes the gashour and gasday, the shipper account, the EDIGAS-code of the location and the allocation value (expressed in kWh).

#### **5.4.1.3 Access to publications**

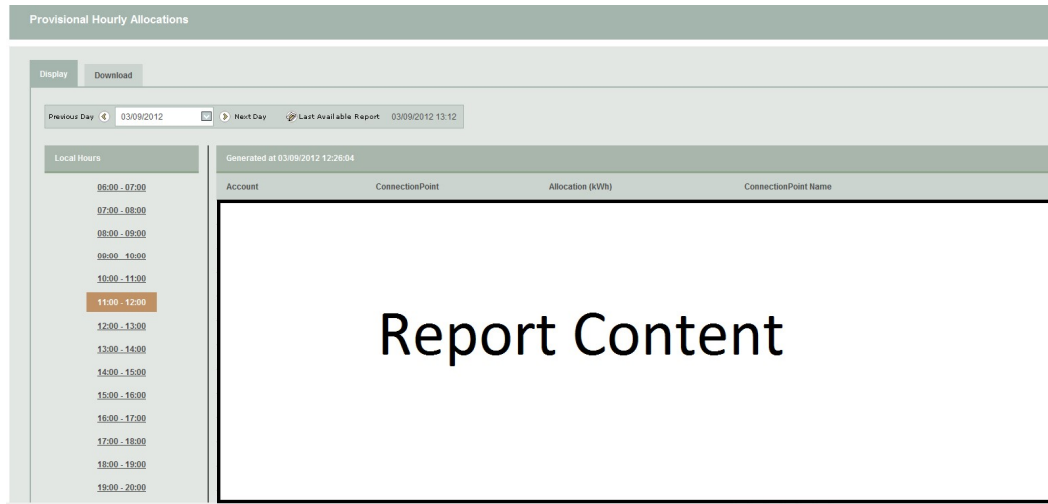
The provisional hourly allocations can be accessed in three different ways: via the display section, the download section and via a download URL.

The display section allows the grid user to view and consult the provisional hourly allocations online and the download section and download URL give the grid user the ability to download the available allocations in different file formats for further usage.

##### **5.4.1.3.1 Display section**

The last available Provisional Hourly Allocation Report will be displayed by default.

If the user wants to display the allocations for a different gashour, then he should first select the correct gasday with the calendar tool at the top left corner of the screen. By default the Allocations first gashour of the day is displayed. Then the correct gashour can be chosen from the bar on the left side of the screen.



Additionally to the allocation data, the generation date and time of the report is displayed on top of the screen.

#### 5.4.1.3.2 Download section

To manually download provisional hourly allocations, the user should select the download tab.

The download screen gives two options to download the provisional hourly allocations. The gasday or range of gasdays and the output file format can be chosen by the user.

##### Date range selection:

- Last available report  
This option returns the provisional hourly allocations for the last gasday.
- Date range:  
Select all the gasdays starting at gasday 'From' until gasday 'To'. The FROM date may not be later in time than the TO date and the maximum date range is limited to one week. The screen automatically changes the FROM or TO date if the maximum date range of one week is exceeded.

##### Output File Type Selection:

Three file types are available for manual download:

- CSV
- XML



**Provisional Hourly Allocations**

Display Download

**Date Range Selection**

☐ The last available Report

☒ Select from a date range:

From  To

**Output File Type Selection**

☒ CSV Format

☐ XML Format

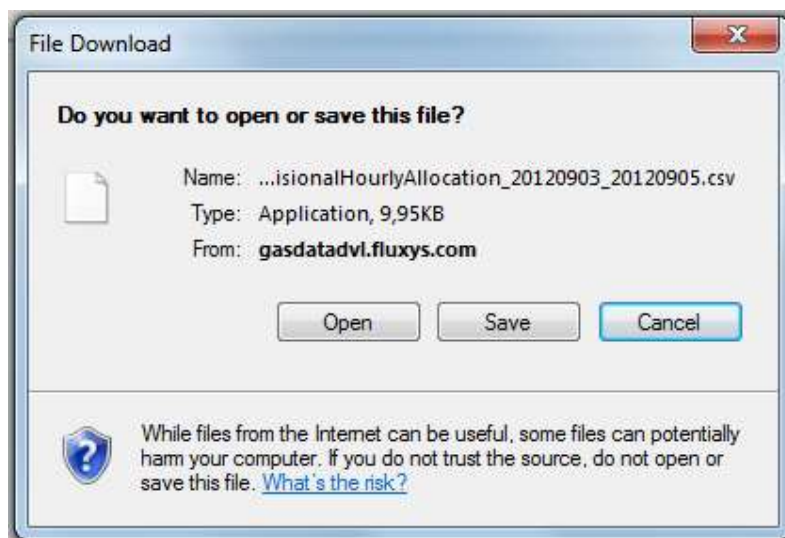
September, 2012

Mo	Tu	We	Th	Fr	Sa	Su
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
1	2	3	4	5	6	7

Today: September 3, 2012

Saturday, September 15, 2012

After the user has set the right parameters to download the desired Provisional Hourly Allocations and clicked the Download button, the File Download screen pops up, giving him/her the choice to directly open the file, or to save it.



#### 5.4.1.3.3 Automatic download URL

See chapter 7.

### 5.4.2 Gas In Storage

GIS data allows grid users to keep track of the amount of energy they have in storage in the Fluxys storage installations.

#### 5.4.2.1 Display

The Gas In Storage screen opens by default the last available GIS Report.

The GIS Report screen gives the ability to navigate through the user's GIS Reports of the last past 3 years. Therefore, the user will find a calendar menu item where he can select the appropriate day for which he wants to consult the GIS Report. So, by changing the date, the user can navigate through all his available Reported Daily Imbalance Reports.

The title of each GIS Report consists of the gasday for which the report applies. The GIS data is delivered on a per hour basis. For every hour (expressed in local time) following elements are displayed:

- Begin and end time of the hour
- For each plant at which a grid user is active
  - Amount of GIS position of the user (kWh)
  - Total amount of GIS (kWh)
  - Generation time of the GIS message

The report is built up as the gasday progresses with a new line being added every hour.

Gas in Storage			
<div>Display Download</div> <div>           Previous Day ◀ 05/09/2012 ▶ Next Day ⚙ Last Available Report         </div>			
05/09/2012 Loenhout			
Local Hours	GIS Position	Total GIS	Generated At
06:00 - 07:00			
07:00 - 08:00			
08:00 - 09:00			
09:00 - 10:00			
10:00 - 11:00			
11:00 - 12:00			
12:00 - 13:00			
13:00 - 14:00			
14:00 - 15:00			

## Report Content

### 5.4.2.2 Download

There are two different ways in which the download features of the application can be used. These different options are intended for different sorts of use. On one hand, the user can download the desired information by using the Graphical User Interface. On the other hand, it is also possible to address the download feature directly by using the Download URL.REPORT

#### 5.4.2.2.1 Manual download by the user

On one hand, the user can download the last available report or a range of reports using the Graphical User Interface by navigating to the download section of the application.

In the Gas In Storage screen, the user can specify all the parameters of the desired download.

The download procedure for the GIS Reports follows the same rules and principles as the download procedure of the Provisional Hourly Allocations. Therefore, we refer to paragraph 7. Automatic downloads for more information on downloading report information.

Display

Download

Date Range Selection

☒ The last available Report

☐ Select from a date range:

From 05/09/2012
To 05/09/2012

Output File Type Selection

☒ CSV Format

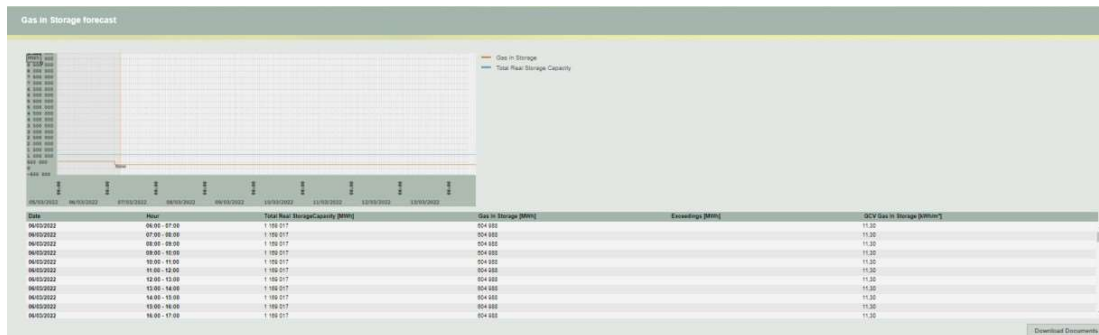
☐ XML Format

Download

#### 5.4.2.2.2 Automatic download by an application

See chapter 7.

### 5.4.3 Gas in Storage Forecast



GIS / Storage Right screen

The upper section represents a graph with two curves: the GIS level in red and the total real storage rights in blue. The picture displays an hourly detail for a period of 9 gasdays (yesterday, today and next week). The vertical axis shows the amount in MWh. The current hour is represented by a vertical line. The first gashour of a day is also highlighted.

The lower section shows the same information in a table, but with one extra column: the GCV Gas In Storage.

When the Gas In Storage is negative or, at any given hour, greater than the cumulated storage rights of the plant, this is regarded as an exceeding. The exceeding amount is shown in both the graph and the table.

The gas in storage can be downloaded to an .xml file by pressing the 'Download Documents' button. This allows you to save the .xml file on one of your drives.

The .xml file will provide, for the period (*tags \Period\Start, \Period\End*) for which gas in storage is available on the screen, the gas in storage in kWh and m3

(tag *\DailyBalances\DailyBalance\HourlyBalances\HourlyBalance\ EnergySteeringAccount (kWh)or*  
*\ VolumeSteeringAccount (in m3)*)

and the total gas in storage in the well

(tag *\DailyBalances\DailyBalance\HourlyBalances\HourlyBalance\ EnergyTotalGis (kWh)*)

per gasday

(tag *\DailyBalances\DailyBalance\Gasday*)

and per gashour

(tag `\DailyBalances\DailyBalance\ HourlyBalances\HourlyBalance\GasHour`).

## 5.5 Flow Data

### 5.5.1 Inventories Storage Report

Specific factors for storage users to calculate their real injection and withdrawal rights

UFI	Underground Factor for Injection
TSOFI	TSO Claim Factor injectie (New)
MFI	Maintenance Factor for Injection
UFW	Underground Factor for Withdrawal
TSOFW	TSO Claim Factor withdrawl (New)
MFW	Maintenance Factor for Withdrawal
GIS	Gas In Storage
ASC	Available Storage Capacity (= USC – CSCF – CSCC)
CSCF	Contracted Storage Capacity Firm
USC	Usable Storage Capacity (=max(Total SBU's;(CSCF+CSCC)) (Maximum that can be stored in current operational conditions)
WV	Working Volume (or Useful Volume as described in Access Code - Glossary) (Maximum that can be stored in optimal conditions)
MIC	Total available Injection capacity
MWC	Total available Withdrawal capacity
DANIN	Day-Ahead Nomination Injection
DANWD	Day-Ahead Nomination Withdrawal
FNIN	Final Nomination Injection
FNWD	Final Nomination Withdrawal
AllocIN	Allocation Injection
AllocWD	Allocation Withdrawal
PF	Physical Flow
GCV	Gross Calorific Value in kWh/m <sup>3</sup> (n) – a fixed GCV of 11,3 kWh/m <sup>3</sup> is used

## 5.6 Invoicing

### 5.6.1 Allocation Details

As the filter option “All” is selected on the panel by default, the navigation panel shows all available invoicing months and allocation details versions. The user can use the Navigation Tree to select an allocation detail and view or download the document.

The image shows two panels from a software interface. The top panel, titled 'Filter Definition', has a light green header and contains three radio button options: 'All' (selected), 'Activity Month', and 'Monthly Details Version Nr is'. The 'Activity Month' option has a dropdown menu showing '09/2012'. The 'Monthly Details Version Nr is' option has an empty text input field. Below these options is a grey 'Apply Filter' button. The bottom panel, titled 'Monthly Details Version Selection', has a light green header and shows a tree view under 'Allocation Details'. It lists 15 items, each with a folder icon and a date: 'Invoicing date 19/06/2012' through 'Invoicing date 02/09/2011'. Each item has a plus icon to its left.

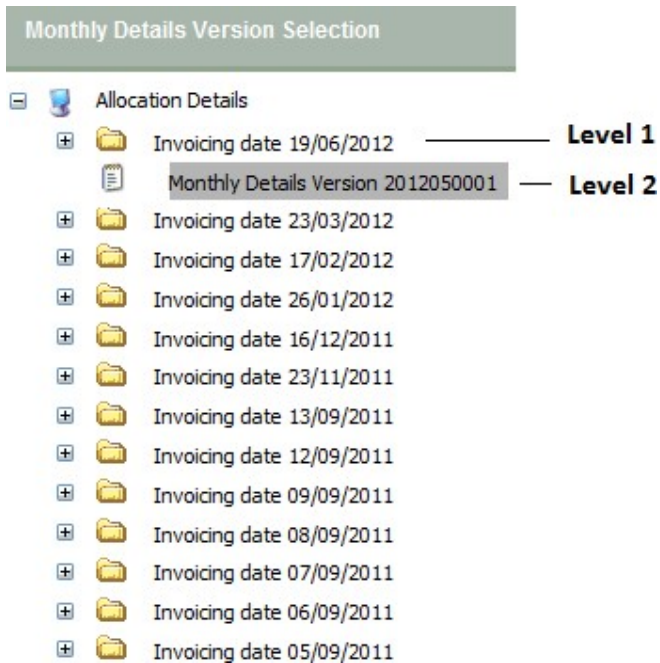
Filter

Navigation Tree

The user can modify the filter applied on the collection of available allocation details organized in the navigation tree. The allocation details are grouped per invoicing month and per monthly details version number.

The Navigation Tree, the Filter Panel and the different downloading options will be discussed in the following sections.

### 5.6.1.1 Navigation Tree



The navigation provides a tree structure of all invoicing dates (i.e. document date of the allocation details) of the last 3 years and the associated bundled/linked Monthly Details Version Numbers:

- **Level 0: label 'Allocation Details'.**  
This navigation tree is built for the quick navigation through the archived collection of allocation details of the last 3 years. The filter above provides additional browsing facilities and is applicable on the tree content.
- **Level 1: Invoicing Dates (invoicing data available for the past 3 years).**  
This level of the navigation tree contains the invoicing dates or document dates of the last 36 invoicing months.
- **Level 2: Monthly Details Version Number**  
In the second level, the user can find all the Monthly Details Version Numbers that are attached/bundled/linked to a particular invoicing date or document date. If a Monthly Details Version Number has been selected in the navigation tree, the user will have the possibility to download all the allocation details associated with that particular Monthly Details Version Number, and related to the invoicing date of the previous level. All the related allocation details for a particular Monthly Details Version Number and Invoicing Month/Document date will be shown in the Allocation Details Download Panel to the right of the Navigation Tree. These particular allocation details can be downloaded separately or all together in a zip file.

### 5.6.1.2 Filter Panel

=> Only the Monthly Details Versions of Activity Month September 2012 are shown in the navigation tree, even though the invoicing dates contain other Monthly Details Versions

The Filter Panel gives the user the possibility to filter/limit the available Monthly Details Version Numbers in the navigation tree for easy and quick navigation. After applying a desired filter-option by selecting the preferred filter option and clicking the “Apply Filter” button, this option is highlighted. The filter panel consists of the following criteria/options.

- All  
If this option is chosen, no filter is applied. The option “All” gives all the available Monthly Details Version Numbers grouped by the Invoicing Date (=document date) to which they are linked/bundled.
- Activity Month  
This filter criterion gives the user the option to restrict the available Monthly Details Version Numbers shown in the navigation tree to a pre-defined Activity Month in the combo-box.
- Monthly Details Version Number  
This option offers the possibility to search and request a specific Monthly Details Version Number that fully matches the expression entered in the corresponding edit-box. As so, the user can limit the Monthly Details Version Numbers shown in the navigation tree to one particular version.

### 5.6.1.3 Download

Essentially, there are two different ways in which the download features of the application can be used:

- Download the desired information through the Graphical User Interface.
- Address the download feature directly by using the Download URL.

#### 5.6.1.3.1 Manual download by the user

The user can download the allocation details of a selected invoicing date or linked to the selected Monthly Details Version Number by navigating to the desired invoicing month (level 1) and Monthly Details Version Number (level 2).

If a Monthly Details Version Number has been selected in the fourth level of the navigation tree, all the related allocation details for a particular Monthly Details Version Number and Invoicing Date/Document Date are shown in the Allocation Details Download Panel to the right of the Navigation Tree.

Invoicing date 30/06/2010	Download	Grid User's Definitive Hourly Allocation Form	Download a single allocation detail	12/02/2012
Invoicing date 31/05/2010	Download	Grid User's Definitive Hourly Allocation Form	Grid User's Definitive Hourly Allocation Form of	13/02/2012
Invoicing date 28/06/2012	Download	Grid User's Definitive Hourly Allocation Form	GasDay 13/02/2012, with Monthly Details Version	14/02/2012
Invoicing date 27/04/2012	Download	Grid User's Definitive Hourly Allocation Form	Number 2012020001 and linked to the invoicing	15/02/2012
Invoicing date 31/03/2012	Download	Grid User's Definitive Hourly Allocation Form	date 31/03/2012	16/02/2012
Monthly Details Version 2012020001	Download	Grid User's Definitive Hourly Allocation Form	Download all allocation details related to a	17/02/2012
Monthly Details Version 2012010002	Download	Grid User's Definitive Hourly Allocation Form	particular Monthly Details Version	
Monthly Details Version 2011120003	Download	Grid User's Definitive Hourly Allocation Form	All the allocation details with Monthly Details	
invoicing date 29/09/2010	Download	Grid User's Definitive Monthly Allocation Form	Version Number 2012020001 and linked to the	01/02/2012
Invoicing date 27/08/2010	Download	Grid User's Definitive BAP Hourly Allocation Form	invoicing date 31/03/2012	01/02/2012
Invoicing date 29/07/2010	Download	Grid User's Definitive BAP Daily Allocation Form	Download all allocation details related to the	01/02/2012
Invoicing date 30/06/2010	Download	Grid User's Definitive BAP Daily Allocation Form	selected invoicing date	
Invoicing date 31/05/2010	Download	Grid User's Definitive BAP Daily Allocation Form	All the allocation details linked to the invoicing	
Invoicing date 30/04/2010	Download	Grid User's Definitive BAP Daily Allocation Form	date 31/03/2012 (versions 2012020001,	
Invoicing date 30/03/2010	Download	Grid User's Definitive BAP Daily Allocation Form	2012010002 and 2011120003)	
Invoicing date 28/02/2010	Download	Grid User's Definitive BAP Daily Allocation Form		
Invoicing date 28/01/2010	Download	Grid User's Definitive BAP Daily Allocation Form		
Invoicing date 29/12/2009	Download	Grid User's Definitive BAP Daily Allocation Form		
	Download this Monthly Details Version	Download entire Invoicing Date		

The user has the possibility to choose the granularity of the group of allocation details to download:

- A particular single allocation detail can be downloaded by clicking the download button in front of the associated allocation detail line. Subsequently, this allocation detail file is downloaded as a CSV file which can be opened with either Notepad or Excel, and/or can also be saved to a local drive.
- All the allocation details related to a particular Monthly Details Version Number can be downloaded by selecting the option "Download this Monthly Details Version" and clicking the "Start Download" button. This bundle of allocation details is downloaded as a ZIP file containing all the allocation details in CSV file format.
- The download of all the allocation details of all the allocation details versions related to the selected invoicing date of the previous level is executed by selecting the option "Download entire Invoicing Date", and clicking the "Start Download Button". This group of allocation details is downloaded as a ZIP file containing all the allocation details in CSV file format.

After the user has initiated a download, the File Download screen pops up giving him/her the choice to either directly open the file or save it.

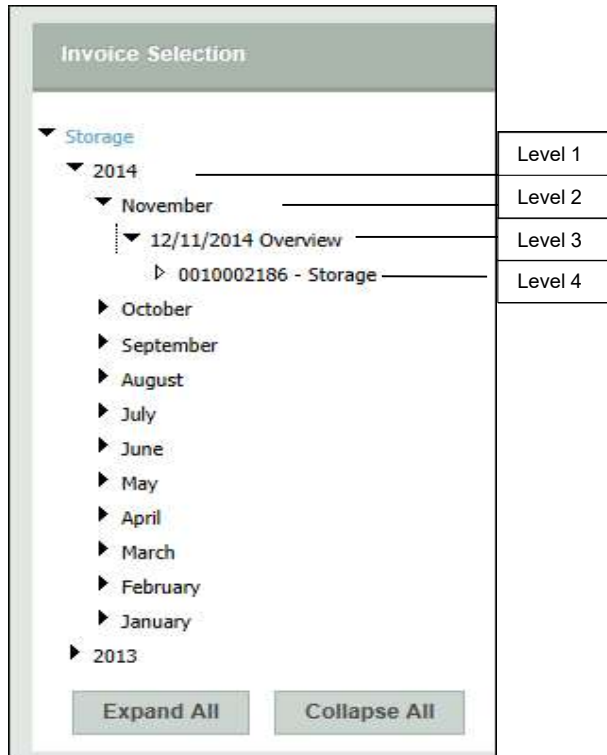
#### 5.6.1.3.2 Automatic download by an application

See chapter 7.



## 5.6.2 Invoices

### 5.6.2.1 Navigation Tree



The navigation provides a tree structure of all invoicing dates from April 2013 and the associated bundled/linked Invoice Numbers:

- **Level 0:** label 'Storage'.  
This navigation tree is built for the quick navigation through the archived collection of invoices from April 2013.
- **Level 1:** Invoicing year  
This level of the navigation tree contains the invoicing year.
- **Level 2:** Invoicing month  
This level of the navigation tree contains the invoicing month.
- **Level 3:** Invoicing Dates (invoicing data available from April 2013).  
This level of the navigation tree contains the invoicing dates. If a invoicing version number has been selected in the navigation tree, the user will have the possibility to download all the invoices associated
- **Level 4:** Invoicing Number  
In this level, the user can find all the invoicing version numbers that are attached/bundled/linked to a particular invoicing date.

#### 5.6.2.2 Download

A manual download for the desired information through the Graphical User Interface can be done.

##### 5.6.2.2.1 Manual download by the user

The user can download the document of a selected invoicing date or linked to the selected invoice number by navigating to the desired invoicing month (level 2).

Document nr	Description	Invoice	Invoice Appendix
0010000857	12/05/2014 - Storage		

Starting from 01/04/2022, PDF invoices and appendixes will be abandoned and replaced by Invoice XML and Invoice Detail XML files.

The product codes can be found under [Operational Information](#) on our website Fluxys.com.

### 5.6.3 Other invoices: Fluxys Belgium

This section of EDP gives access to private data concerning invoices and appendixes for non-regulated activities.

### 5.6.4 Boosters report

Invoicing details for the calculation of the variable part of the Service Fee for the DAM/NNS Service, the part of the confirmed (last) Nominations above the applicable Real Withdrawal Capacity or Real Injection Capacity is allocated to the DAM/NNS.

Filename YYYYMM contains invoicing details of invoice YYYYMM+1

DAM - NNS reports	
File Name	Date
201410v01 - Allocated Non Nominated Services - GDF Suez.xlsx	07/11/2014 10:25:07
201409v01 - Allocated Non Nominated Services - GDF Suez.xlsx	08/10/2014 14:11:26
201408v01 - Allocated Non Nominated Services - GDF Suez.xlsx	04/09/2014 09:58:33
201407v01 - Allocated Non Nominated Services - GDF Suez.xlsx	21/08/2014 08:52:54
Showing 1 to 4 of 4 entries	

### 5.6.5 Gas in Storage Account for LHT Storage

This report contains the monthly detail of the individual total inventory position (GIS account level) at the Loenhout storage installation plant during the month.

The Gas In Storage account is published every month on Electronic Data Platform.


## LOENHOUT STORAGE PLANT



GIS Account for	xxxxxxx	
Month	October 2020	kWh
<b>1. Quantities IN</b>		
Allocated Quantities IN		2 118 000
<b>Total Quantities IN</b>		<b>2 118 000</b>
<b>2. Quantities OUT</b>		
Allocated Quantities OUT		21 522 000
Allocated Gas in Kind		108 030
<b>Total Quantities OUT</b>		<b>21 630 030</b>
<b>3. Balance</b>		
<b>GIS at 01/10/2020 06:00</b>		<b>2 822 507 809</b>
+ Quantities IN		2 118 000
- Quantities OUT		- 21 630 030
<b>GIS at 01/11/2020 06:00</b>		<b>2 802 995 779</b>
<i>Change in GIS</i>		<i>- 19 512 030</i>

### 5.6.6 Synchronization GIS-level LHT Storage

The synchronization between the steering and validation level of the Gas In Storage account at the Loenhout storage Installation point. The scheduling date for this synchronization is communicated by Fluxys Belgium NV with the publication on Electronic Data Platform.

Synchronisation Steering level at Loenhout Storage - xxxxxxxx					
These figures are based on the levels at 01/11/2020 06:00 (Steering level is the level based on provisional figures - this is the level as it is forwarded each hour by Fluxys by use of an electronic message)					
Your steering GIS account	1.159.767.094	kWh			
Your validated GIS account	1.159.767.094	kWh			
Delta	0	kWh			
This quantity will be synchronized on		xx/xx/2020	at gashour	06:00-07:00	

### 5.6.7 Transfers Monthly Fuelgas Balance for LHT Storage

Distribution of the Monthly Fuelgas Balance at the Loenhout Installation plant.  
This operation is done the following month. The scheduling date for this transfer is communicated by Fluxys with the publication on Electronic Data Platform.

**Monthly Fuelgas Balance transfers at Loenhout Storage - XXXXXX**

The following quantities will be transferred to your Gas in Storage account :

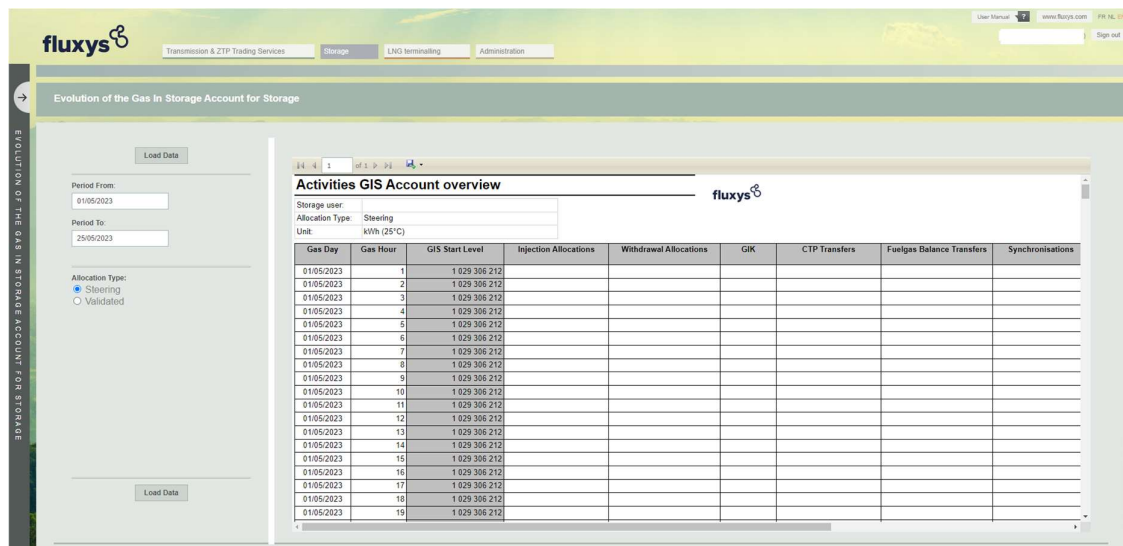
Monthly Fuelgas Balance - Oktober 2020 52.576 kWh

This quantity will be transferred on xx/xx/2020 at gashour 06:00-07:00

Please contact us, if the proposed date and time are not convenient for you.

### 5.6.8 Evolution of the Gas in Storage Account for LNG Terminal

Evolution of your GIS account in energy with hourly granularity, contains data from the past and already known data for the future.



**Activities GIS Account overview**

Storage user:

Allocation Type: ☒ Steering ☐ Validated

Unit: kWh (25°C)

Gas Day	Gas Hour	GIS Start Level	Injection Allocations	Withdrawal Allocations	GIK	CTP Transfers	Fuelgas Balance Transfers	Synchronisations
01/05/2023	1	1 029 306 212						
01/05/2023	2	1 029 306 212						
01/05/2023	3	1 029 306 212						
01/05/2023	4	1 029 306 212						
01/05/2023	5	1 029 306 212						
01/05/2023	6	1 029 306 212						
01/05/2023	7	1 029 306 212						
01/05/2023	8	1 029 306 212						
01/05/2023	9	1 029 306 212						
01/05/2023	10	1 029 306 212						
01/05/2023	11	1 029 306 212						
01/05/2023	12	1 029 306 212						
01/05/2023	13	1 029 306 212						
01/05/2023	14	1 029 306 212						
01/05/2023	15	1 029 306 212						
01/05/2023	16	1 029 306 212						
01/05/2023	17	1 029 306 212						
01/05/2023	18	1 029 306 212						
01/05/2023	19	1 029 306 212						

#### 5.6.8.1 Download

A manual download for the desired information can be done only in .xls format via export drop down menu.

## 5.7 Regulatory and contractual documents

### 5.7.1 Storage Model

[Link](#) to Program for storage – description of services.

### 5.7.2 Conditions and Tariffs

[Link](#) to Tariffs for storage services.

### 5.7.3 Contractual Documents

[Link](#) to Storage agreements and access code.

### 5.7.4 Subscription of capacity

[Link](#) to Subscription and allocation on the [primary market](#).

## 5.8 REMIT messages

Purpose : Publishing information to foster open and fair competition through reporting that may impact price and applies to market participants (including TSO's or Grid-Users who enters into transactions in wholesale energy markets).

## **5.9 Notifications**

General commercial informations

## 6. LNG Terminalling

### 6.1 Contracting and Capacities

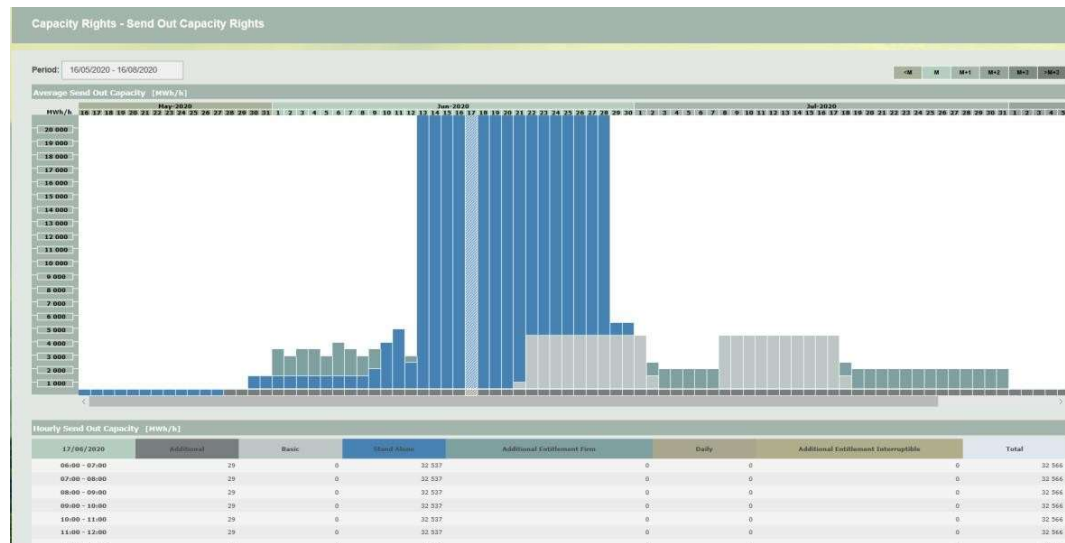
#### 6.1.1 Available terminalling capacity

Information on total capacity for the Zeebrugge LNG Terminal facility.

#### 6.1.2 Overview of the available slots on the Primary and secondary markets

Bulletin board for available slots and Terminalling services, with associated reservation form.

#### 6.1.3 Capacity Rights - Send Out Capacity Rights



S-O Capacity Consult Screen

Information about Send Out capacities is retrieved for a period of 3 months: one month in the past and two months in the future.

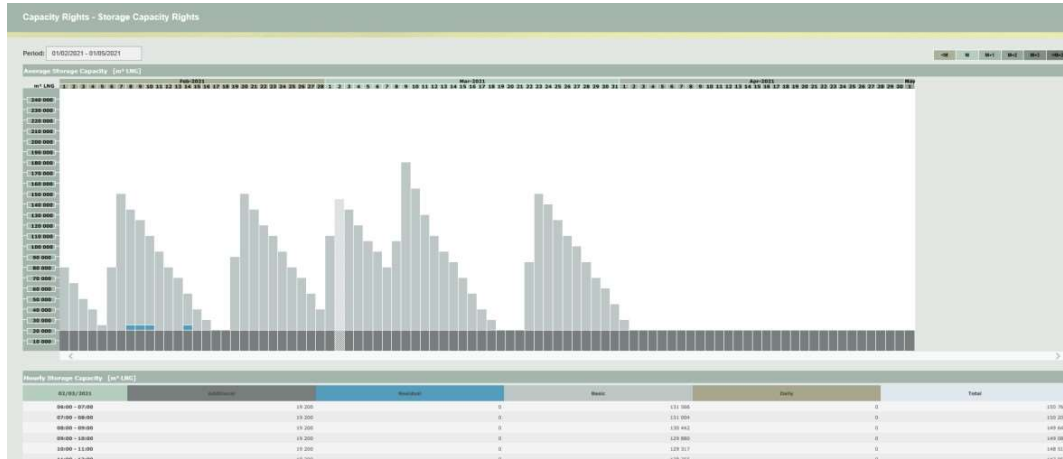
The upper section presents a daily average of the S-O capacities over the time line (horizontal axis); the major time steps are month and the minor ones are days (GasDays). Given the hourly resolution nature of the capacities, the daily average is only informational. Clicking on a given day in the upper section will load the hourly details for that day. By default, "tomorrow" is loaded. Note that values are given in MWh/h and are rounded.

Hourly Send Out Capacity [MWh/h]							
17/06/2020	Additional	Basic	Send Out	Additional Entitlement Firm	Daily	Additional Entitlement Interruptible	Total
00:00 - 01:00	29	0	32 537	0	0	0	32 564
01:00 - 02:00	29	0	32 537	0	0	0	32 564
02:00 - 03:00	29	0	32 537	0	0	0	32 564
03:00 - 04:00	29	0	32 537	0	0	0	32 564
04:00 - 05:00	29	0	32 537	0	0	0	32 564
05:00 - 06:00	29	0	32 537	0	0	0	32 564
06:00 - 07:00	29	0	32 537	0	0	0	32 564
07:00 - 08:00	29	0	32 537	0	0	0	32 564
08:00 - 09:00	29	0	32 537	0	0	0	32 564
09:00 - 10:00	29	0	32 537	0	0	0	32 564
10:00 - 11:00	29	0	32 537	0	0	0	32 564
11:00 - 12:00	29	0	32 537	0	0	0	32 564
12:00 - 13:00	29	0	32 537	0	0	0	32 564
13:00 - 14:00	29	0	32 537	0	0	0	32 564
14:00 - 15:00	29	0	32 537	0	0	0	32 564
15:00 - 16:00	29	0	32 537	0	0	0	32 564
16:00 - 17:00	29	0	32 537	0	0	0	32 564
17:00 - 18:00	29	0	32 537	0	0	0	32 564
18:00 - 19:00	29	0	32 537	0	0	0	32 564
19:00 - 20:00	29	0	32 537	0	0	0	32 564
20:00 - 21:00	29	0	32 537	0	0	0	32 564
21:00 - 22:00	29	0	32 537	0	0	0	32 564
22:00 - 23:00	29	0	32 537	0	0	0	32 564
23:00 - 00:00	29	0	32 537	0	0	0	32 564
00:00 - 01:00	29	0	32 537	1 915	0	0	34 481
01:00 - 02:00	29	0	32 537	1 915	0	0	34 481
02:00 - 03:00	29	0	32 537	1 915	0	0	34 481
03:00 - 04:00	29	0	32 537	1 915	0	0	34 481
04:00 - 05:00	29	0	32 537	1 915	0	0	34 481
05:00 - 06:00	29	0	32 537	1 915	0	0	34 481

Send Out capacities hourly details for one given day.

The “Download Documents” button will allow the download of this information in XML format.

## 6.1.4 Capacity Rights - Storage Capacity Rights



Storage Capacity Consult Screen

Information about Storage capacities is retrieved for a period of 3 months: one month in the past and two months in the future. The color code will help to identify the current month.

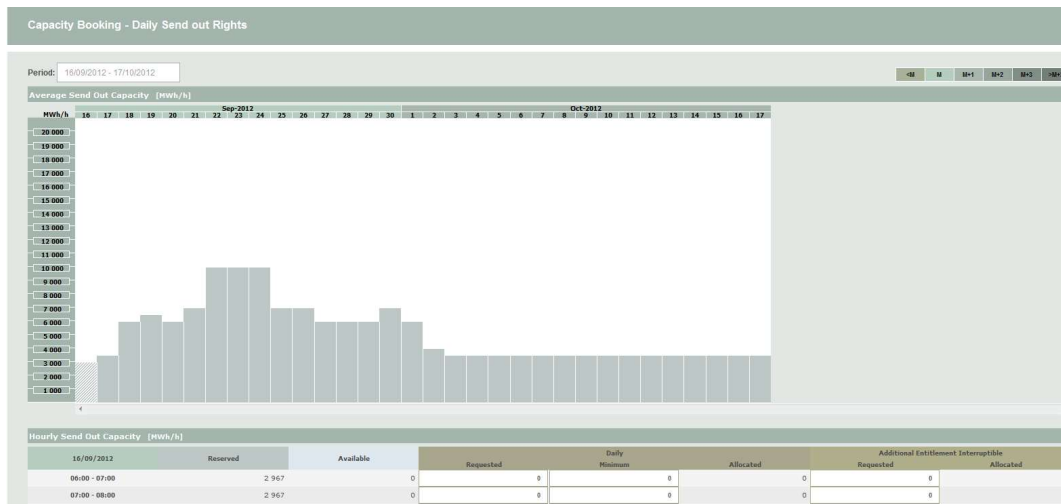
The upper section presents a daily average of the STO capacities over the time line (horizontal axis); the major time steps are month and the minor ones are days (GasDays). Given the hourly resolution nature of the capacities, the daily average is only informational. Clicking on a given day in the upper section will load the hourly details for that day. By default, “tomorrow” is loaded. Note that values are given in m³ LNG and are rounded.

Monthly Storage Capacity [m³ LNG]					
Period	Inflow	Outflow	Stock	Entry	Total
01/01 - 01/01	10 200	0	131 504	0	131 704
01/01 - 01/02	10 200	0	131 504	0	131 704
01/02 - 01/03	10 200	0	131 504	0	131 704
01/03 - 01/04	10 200	0	131 504	0	131 704
01/04 - 01/05	10 200	0	131 504	0	131 704
01/05 - 01/06	10 200	0	131 504	0	131 704
01/06 - 01/07	10 200	0	131 504	0	131 704
01/07 - 01/08	10 200	0	131 504	0	131 704
01/08 - 01/09	10 200	0	131 504	0	131 704
01/09 - 01/10	10 200	0	131 504	0	131 704
01/10 - 01/11	10 200	0	131 504	0	131 704
01/11 - 01/12	10 200	0	131 504	0	131 704
01/12 - 01/01	10 200	0	131 504	0	131 704
01/01 - 01/02	10 200	0	131 504	0	131 704
01/02 - 01/03	10 200	0	131 504	0	131 704
01/03 - 01/04	10 200	0	131 504	0	131 704
01/04 - 01/05	10 200	0	131 504	0	131 704
01/05 - 01/06	10 200	0	131 504	0	131 704
01/06 - 01/07	10 200	0	131 504	0	131 704
01/07 - 01/08	10 200	0	131 504	0	131 704
01/08 - 01/09	10 200	0	131 504	0	131 704
01/09 - 01/10	10 200	0	131 504	0	131 704
01/10 - 01/11	10 200	0	131 504	0	131 704
01/11 - 01/12	10 200	0	131 504	0	131 704
01/12 - 01/01	10 200	0	131 504	0	131 704

Storage capacities hourly details for one given day.

The “Download Documents” button will allow the download of this information in XML format.

## 6.1.5 Capacity Booking - Daily Send out Rights



Book Daily S-O Screen

Information about send out capacity bookings is retrieved for a period of 32 days: yesterday, today and 30 days in the future. The color code will help to identify the current month.

The upper section presents a daily average of the S-O capacities over the time line (horizontal axis); the major time steps are months and the minor ones are days (GasDays). Given the hourly resolution nature of the capacities, the daily average is only informational. The grey boxes represent the total booked capacity (via basic or additional rights), while the olive ones relates to either booked (future) or allocated (yesterday and today after 11am) capacities. Clicking on a given day in the upper section will load the hourly details for that day. By default, “today” is loaded. Note that values are given in MWh/h and are rounded.

Hourly Send Out Capacity (MWh/h)							
16/09/2012	Reserved	Available	Requested	Daily Minimum	Allocated	Additional Entitlement Interruptible	
06:00 - 07:00	3 773	0	0	0	N/A	0	N/A
07:00 - 08:00	3 773	0	0	0	N/A	0	N/A
08:00 - 09:00	3 773	0	0	0	N/A	0	N/A
09:00 - 10:00	3 773	0	0	0	N/A	0	N/A
10:00 - 11:00	3 773	0	0	0	N/A	0	N/A
11:00 - 12:00	3 773	0	0	0	N/A	0	N/A
12:00 - 13:00	3 773	0	0	0	N/A	0	N/A
13:00 - 14:00	6 656	0	0	0	N/A	0	N/A
14:00 - 15:00	6 656	0	0	0	N/A	0	N/A
15:00 - 16:00	6 656	0	0	0	N/A	0	N/A
16:00 - 17:00	6 656	0	0	0	N/A	0	N/A
17:00 - 18:00	6 656	0	0	0	N/A	0	N/A
18:00 - 19:00	6 656	0	0	0	N/A	0	N/A
19:00 - 20:00	6 656	0	0	0	N/A	0	N/A
20:00 - 21:00	6 656	0	0	0	N/A	0	N/A
21:00 - 22:00	6 656	0	0	0	N/A	0	N/A
22:00 - 23:00	6 656	0	0	0	N/A	0	N/A
23:00 - 00:00	6 656	0	0	0	N/A	0	N/A
00:00 - 01:00	6 656	0	0	0	N/A	0	N/A
01:00 - 02:00	6 656	0	0	0	N/A	0	N/A
02:00 - 03:00	6 656	0	0	0	N/A	0	N/A
03:00 - 04:00	6 656	0	0	0	N/A	0	N/A
04:00 - 05:00	6 656	0	0	0	N/A	0	N/A
05:00 - 06:00	6 656	0	0	0	N/A	0	N/A

Hourly details of S-O bookings for one given day.

The buttons and text fields in the red rectangle are only available for users with role “validator” and/or “composer” in the LNG activity.

The “Set Maximum” button can be used to copy the content (exact value – without rounding) of the *Available* column to the *Requested* column(s). The “Set Default” button, used in combination with the “Default Value” box will copy the same value in all rows of a column. Use the “Update Bookings” button to validate the requested quantities. In contrast to the Transmission activity,



where the composer user prepares bookings and the validator user validates these bookings, there is no validate action needed in the LNG activity. Both the composer user and the validator user can make bookings, and these are immediately accepted without any validation action.

When allocated (daily for next day @ 11 am), the capacities are available in the Allocated column and the update booking button is disabled. “N/A” in this column must be interpreted as not yet allocated, while “0” is to be interpreted as zero quantity allocated. Allocated quantities are also available in the consult S-O screen

Hourly Send Out Capacity [MWh/h]										
06/10/2012	Reserved	Available	Daily Minimum			Allocated		Additional Entitlement Interchangeable		
			Requested					Requested		Allocated
06:00 - 07:00	3 019	10 958	2300		1500		2300	5230		5230
07:00 - 08:00	3 019	10 958	2300		1500		2300	5230		5230
08:00 - 09:00	3 019	10 958	2300		1500		2300	5230		5230
09:00 - 10:00	3 019	10 958	2300		1500		2300	5230		5230
10:00 - 11:00	3 019	10 958	2300		1500		2300	5230		5230
11:00 - 12:00	3 019	10 958	2200		2200		2300	5230		5230
12:00 - 13:00	3 019	10 958	2300		1500		2300	5230		5230
13:00 - 14:00	3 019	10 958	2300		1500		2300	5230		5230
14:00 - 15:00	3 019	10 958	2300		1500		2300	5230		5230
15:00 - 16:00	3 019	10 958	2300		1500		2300	5230		5230
16:00 - 17:00	3 019	10 958	2300		1500		2300	5230		5230
17:00 - 18:00	3 019	10 958	2300		1500		2300	5230		5230
18:00 - 19:00	3 019	10 958	2300		1500		2300	5230		5230
19:00 - 20:00	3 019	10 958	2300		1500		2300	5230		5230
20:00 - 21:00	3 019	10 958	2200		2200		2300	5230		5230
21:00 - 22:00	3 019	10 958	2300		1500		2300	5230		5230
22:00 - 23:00	3 019	10 958	2300		1500		2300	5230		5230
23:00 - 00:00	3 019	10 958	2300		1500		2300	5230		5230
00:00 - 01:00	3 019	10 958	2300		1500		2300	5230		5230
01:00 - 02:00	3 019	10 958	2300		1500		2300	5230		5230
02:00 - 03:00	3 019	10 958	2300		1500		2300	5230		5230
03:00 - 04:00	3 019	10 958	2300		1500		2300	5230		5230
04:00 - 05:00	3 019	10 958	2300		1500		2300	5230		5230
05:00 - 06:00	3 019	10 958	2200		2200		2300	5230		5230
			Set Maximum			Set Maximum				
Default Value:			5230		Set Default		Set Default			
Update Bookings										

represent the total booked capacity (via basic or additional rights), while the olive ones relates to either booked (future) or allocated (yesterday and today after 11am) capacities. Clicking on a given day in the upper section will load the hourly details for that day. By default, “today” is loaded. Note that values are given in m<sup>3</sup> LNG and are rounded.

Hourly Storage Capacity [m <sup>3</sup> LNG]							
19/09/2012	Reserved	Available		Requested	Daily Minimum	Allocated	
06:00 - 07:00	99 218	180 741		1200	1200		N/A
07:00 - 08:00	98 654	182 430		1200	1200		N/A
08:00 - 09:00	98 089	184 119		1200	1200		N/A
09:00 - 10:00	97 525	185 808		1200	1200		N/A
10:00 - 11:00	96 960	187 497		1200	1200		N/A
11:00 - 12:00	96 396	189 186		1200	1200		N/A
12:00 - 13:00	95 831	190 875		1200	1200		N/A
13:00 - 14:00	95 267	192 564		1200	1200		N/A
14:00 - 15:00	94 702	194 253		1200	1200		N/A
15:00 - 16:00	94 138	195 942		1200	1200		N/A
16:00 - 17:00	93 573	197 631		1200	1200		N/A
17:00 - 18:00	93 009	199 320		1200	1200		N/A
18:00 - 19:00	92 444	201 009		1200	1200		N/A
19:00 - 20:00	91 880	202 698		1200	1200		N/A
20:00 - 21:00	91 315	204 387		1200	1200		N/A
21:00 - 22:00	90 751	206 076		1200	1200		N/A
22:00 - 23:00	90 186	207 765		1200	1200		N/A
23:00 - 00:00	89 622	209 454		1200	1200		N/A
00:00 - 01:00	89 057	211 143		1200	1200		N/A
01:00 - 02:00	88 493	212 832		1200	1200		N/A
02:00 - 03:00	87 928	214 521		1200	1200		N/A
03:00 - 04:00	87 364	216 210		1200	1200		N/A
04:00 - 05:00	86 799	217 899		1200	1200		N/A
05:00 - 06:00	86 234	219 588		1200	1200		N/A

Default Value:

Set Maximum

Set Default

Set Default

Update Bookings

Hourly details of Storage bookings for one given day.

The buttons and text fields in the red rectangle are only available for users with role “validator” and/or “composer” in the LNG activity.

The “Set Maximum” button can be used to copy the content (exact value – without rounding) of the Available column to the Requested column. The “Set Default” button, used in combination with the “Default Value” box will copy the same value in all rows of a column. Use the “Update Bookings” button to validate the requested quantities. In contrast to the Transmission activity, where the composer user prepares bookings and the validator user validates these bookings, there is no validate action needed in the LNG activity. Both the composer user and the validator user can make bookings, and these are immediately accepted without any validation action.

When allocated (daily for next day @ 11 am), the capacities are available in the *Allocated* column and the update booking button is disabled. “N/A” in this column must be interpreted as not yet allocated, while “0” is to be interpreted as zero quantity allocated. Allocated quantities are also available in the consult Storage screen

Hourly Storage Capacity [m³ LNG]							
19/09/2012	Reserved	Available	Requested	Daily Minimum	Allocated		
06:00 - 07:00	99 218	180 741	1200	1200	1200		1200
07:00 - 08:00	98 654	182 430	1200	1200	1200		1200
08:00 - 09:00	98 089	184 119	1200	1200	1200		1200
09:00 - 10:00	97 525	185 808	1200	1200	1200		1200
10:00 - 11:00	96 960	187 497	1200	1200	1200		1200
11:00 - 12:00	96 396	189 186	1200	1200	1200		1200
12:00 - 13:00	95 831	190 875	1200	1200	1200		1200
13:00 - 14:00	95 267	192 564	1200	1200	1200		1200
14:00 - 15:00	94 702	194 253	1200	1200	1200		1200
15:00 - 16:00	94 138	195 942	1200	1200	1200		1200
16:00 - 17:00	93 573	197 631	1200	1200	1200		1200
17:00 - 18:00	93 009	199 320	1200	1200	1200		1200
18:00 - 19:00	92 444	201 009	1200	1200	1200		1200
19:00 - 20:00	91 880	202 698	1200	1200	1200		1200
20:00 - 21:00	91 315	204 387	1200	1200	1200		1200
21:00 - 22:00	90 751	206 076	1200	1200	1200		1200
22:00 - 23:00	90 186	207 765	1200	1200	1200		1200
23:00 - 00:00	89 622	209 454	1200	1200	1200		1200
00:00 - 01:00	89 057	211 143	1200	1200	1200		1200
01:00 - 02:00	88 493	212 832	1200	1200	1200		1200
02:00 - 03:00	87 928	214 521	1200	1200	1200		1200
03:00 - 04:00	87 364	216 210	1200	1200	1200		1200
04:00 - 05:00	86 799	217 899	1200	1200	1200		1200
05:00 - 06:00	86 234	219 588	1200	1200	1200		1200

Default Value:

Hourly details of allocated Storage for one given day

## 6.1.7 Capacity Booking – Stand Alone Send Out Rights

Start Date:   
End Date (included):   
Requested Quantity:  MWh/h

Stand Alone Send Out can be booked FCF5 either within day (as a balance of day product, with a minimum lead time of full hour + 2) or as from day-ahead for any duration of gas days. The End Date cannot be later than 31/12/2023. The regulated tariffs are updated every month on the Fluxys website [page](#).

The buttons and text fields are only available for users with role “validator” and/or “composer” in the LNG activity.

In contrast to the Transmission activity, where the composer user prepares bookings and the validator user validates these bookings, there is no validate action needed in the LNG activity. Both the composer user and the validator user can make bookings, and these are immediately accepted without any validation action.

Stand Alone Send Out can be booked for a minimum period of 1 Gas Day and with an End Date not later than 31/12/2023.

Your booking was successfully saved

Start Date:   
End Date (included):   
Quantity:  MWh/h

The confirmation for the booking is made on the screen with the mention ‘Your booking was successfully saved’ (see above).

You can find your booking in the ‘Stand Alone’ column in the tab ‘Capacity Rights – Send Out Capacity Rights’ (see 6.1.3.).

## 6.1.8 Available Virtual Liquefaction capacity

The Virtual liquefaction service allows Terminal Users to create LNG by counter nominating gas to the Terminal. It's a conditional service since the availability depends on the total net nominations for regasification exceeding the minimum send out requirements.



Daily expected Virtual Liquefaction availabilities in MWh/h at Terminal Zeebrugge for the concerned gas day, based on the difference between nominations received at 4PM CET and the minimum regasification flow needed.

## 6.2 Scheduling

### 6.2.1 AMS - Available Monthly Slots

Scheduling (Available Monthly Slots)

Year: 2012 Revision: 24 - 31/07/2012 08:10

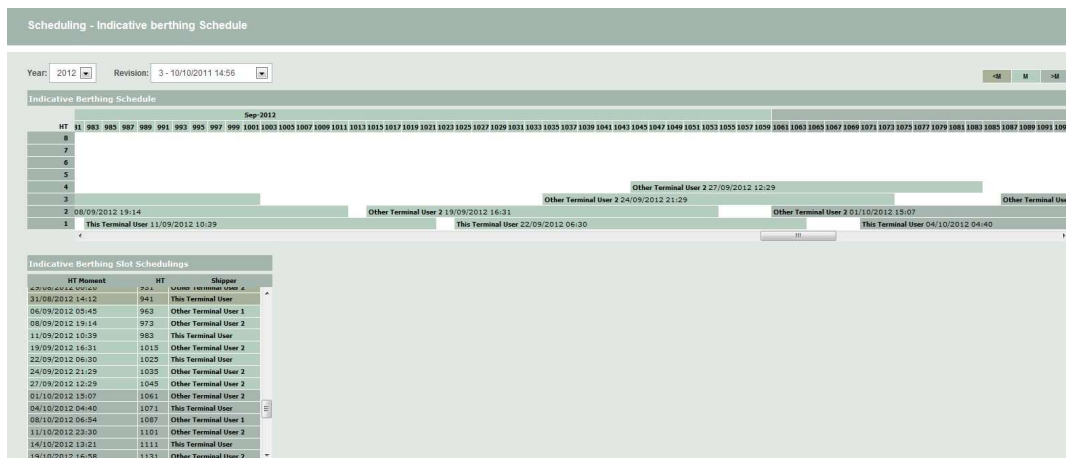
Available Monthly Slots	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Additional Slots	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Extra Slots	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Available Slots	9.34	8.72	9.34	9.03	9.34	9.03	9.34	11.52	8.45	11.52	11.14	11.52	118.33
Individual Slot Entitlements	3.85	2.66	3.85	3.76	5.85	4.76	3.85	3.85	2.09	2.85	2.76	2.85	43.00

Download Documents

By default the last published version for the current year is loaded. The color code will help to identify the current month; the combo boxes allow a quick navigation to any published version of the AMS for the previous, current and next year.

The “Download Documents” button will allow the download of this information in XML format

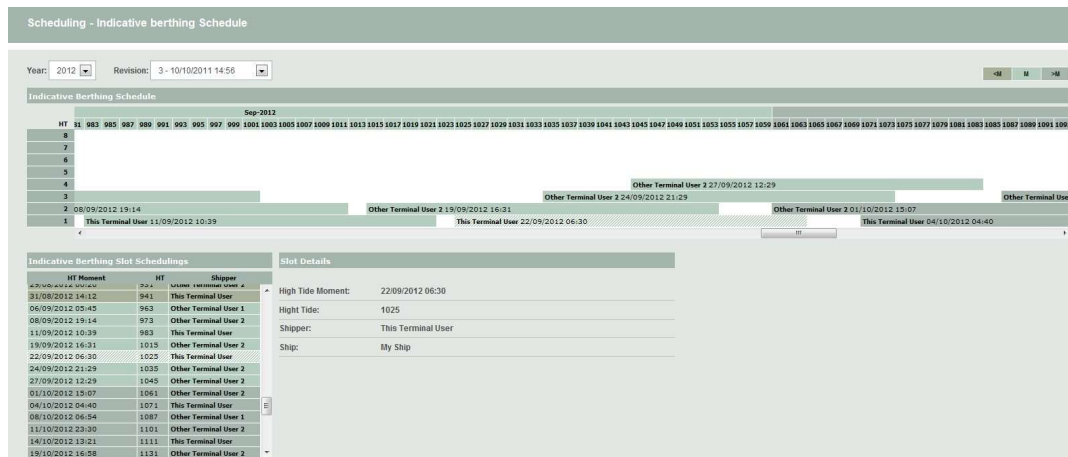
### 6.2.2 IBS - Indicative berthing Schedule



IBS Consult Screen

By default the last published version for the current year is loaded. The color code will help to identify the current month; the combo boxes allow a quick navigation to any published version of the IBS for the previous, current and next year.

The upper section presents the planned slots over the time line (horizontal axis); the major time steps are months and the minor ones are High-Tides. Slots are represented as boxes with a duration of 20 High Tides. The lower section presents the same information in a tabular view. Using the scrollbars, the user can move over the timeline. Clicking on a slot in both the upper and lower section will load detailed information about the planned slot.



Slot details in IBS for own slots

Note that details are only available for own slots. Slots owned by other parties are also visualized, but not all details can be accessed.



Slot details in IBS for other grid user's slots

The “Download Documents” button will allow the download of this information in XML format.

## 6.2.3 RBS - Rolling Berthing Schedule



RBS Consult Screen

By default the last published version for the current year is loaded. The color code will help to identify the current month as well as M+1, M+2 and M+3 related information; the combo boxes allow a quick navigation to any published version of the RBS for the previous, current and next year.

The upper section presents the planned slots over the time line (horizontal axis); the major time steps are months and the minor ones are High-Tides. Slots are represented as boxes with a duration of 20 High Tides. The lower section presents the same information in a tabular view. Using the scrollbars, the user can move over the timeline. Clicking on a slot in both the upper and lower section will load detailed information about the planned slot.



Slot details in RBS for own slots

Note that details are only available for own slots. Slots owned by other parties are also visualized, but not all details can be accessed. Unsubscribed slots (not owned by any parties but reserved by Fluxys LNG for further commercialization) are also explicitly visible.



Slot details in RBS for other grid user's slots

The "Download Documents" button will allow the download of this information in XML format.

## 6.2.4 BS - Berthing Schedule

Scheduling - Berthing Schedule

Period: 11/08/2012 - 11/09/2013

Departed Berthing Expected Queuing Cancelled

Slot	Priority	Scheduled	Shipper	Ship	ETA	Expected Berthing Moment	Timing	Berthing	Status	Type
126	1	03/09/2012 03:51	Other Terminal User 3	N/A	29/08/2012 21:56	30/08/2012 01:56	Early	Berthing	N/A	
72	1	19/09/2012 16:31	Other Terminal User 2	N/A	19/09/2012 10:31	19/09/2012 14:36	Early	Expected	N/A	
28	1	22/09/2012 06:30	This Terminal User	My Ship	22/09/2012 00:30	22/09/2012 04:35	Early	Expected	Unloading	

Download Documents

BS Consult Screen

The list of past, current and planned berthing/unloading is loaded for a period of one month in the past and one year in the future.

The upper section presents the information in a tabular view, using a color scheme to distinguish past from upcoming events. The timing information ("Early", "On Time", "Late") relates to the difference between the last communicated ETA (Estimated Time of Arrival) and the slot start time, with regards to the berthing window. This timing is only informational. The status information ("Expected", "Berthing", "Queuing", "Departed", "Cancelled") relates to the progress of the (un)loading. The type can be loading or unloading according to the type of berthing purpose.

Clicking on a row (one berthing) will load detailed information over the berthing time-sheet of this (un)loading. Note that this information is only available for own slots. Event moment is indicated with a status ("Expected", "Registered", "Validated") and always reflects the last updated situation. "Expected" relates to the calculated event moment, based on standard process time and previous event time. "Registered" refers to the provisional event moment (if "registered" differs from "expected", upcoming events will be updated). "Validated" refers to the final event moment.

Scheduling - Berthing Schedule

Period: 11/08/2012 - 11/09/2013

Departed Berthing Expected Queuing Cancelled

Slot	Priority	Scheduled	Shipper	Ship	ETA	Expected Berthing Moment	Timing	Berthing	Status	Type
126	1	03/09/2012 03:51	Other Terminal User 3	N/A	29/08/2012 21:56	30/08/2012 01:56	Early	Berthing	N/A	
72	1	19/09/2012 16:31	Other Terminal User 2	N/A	19/09/2012 10:31	19/09/2012 14:36	Early	Expected	N/A	
28	1	22/09/2012 06:30	This Terminal User	My Ship	22/09/2012 00:30	22/09/2012 04:35	Early	Expected	Unloading	

Download Documents

Berthing Time Sheet

Event Name	Event Moment	Status
Arrived At PBS	22/09/2012 00:30	Expected
NOR Tenders	22/09/2012 00:35	Expected
NOR Accepted	22/09/2012 00:35	Expected
Pilots On Board	22/09/2012 00:40	Expected
All Fast	22/09/2012 04:35	Expected
Shore Gangway In Position	22/09/2012 04:45	Expected
NORTH Tenders	22/09/2012 05:45	Expected
Arms Connected	22/09/2012 06:15	Expected
NORTH Accepted	22/09/2012 07:15	Expected
Coldown Deckpiping / LNG Arms Started	22/09/2012 07:35	Expected
Coldown Deckpiping / LNG Arms Ended	22/09/2012 08:50	Expected
Unloading Started	22/09/2012 09:00	Expected
Unloading Ended	22/09/2012 23:15	Expected
LNG Arms Disconnected	23/09/2012 01:15	Expected
Vaporor Arms Disconnected	23/09/2012 01:00	Expected
Shore Gangway Off Board	23/09/2012 02:50	Expected
Clearance For Departure	23/09/2012 03:00	Expected
Leave Berth	23/09/2012 03:20	Expected

Download Documents

Berthing timesheet details

The "Download Documents" button will allow the download of this information in XML format.



## 6.3 Ship approval

### 6.3.1 Request for Ship Approval

The Grid-User has to fill out the 'Request for Ship Approval' when a Grid-User intends to use an LNG vessel which has not yet been approved and is therefore not mentioned on the 'List of Approved Ships for Zeebrugge LNG Terminal'.

Link to Fluxys site: <https://www.fluxys.com/en/products-services/lng-ship-approval-procedure>

**Ship Approval Procedure**  
 Request for Ship Approval

First name	<input type="text"/>	*
Name	<input type="text"/>	*
Company	<input type="text"/>	*
Phone	<input type="text"/>	*
E-mail	<input type="text"/>	*
Terminal user	<input type="text"/>	*
Vessel name(s) and IMO number(s)	<input style="width: 90%;" type="text"/> <div style="float: right; text-align: center;">             ^ v           </div>	*
<small>If identical sister ships, mark with "=", e.g. -Ship 1 (IMO xxx)=Ship 2 (IMO xxx) -Ship 3 (IMO xxx)</small>		
What is the expected berthing slot to be used?	<input style="width: 90%;" type="text"/> <div style="float: right; text-align: center;">             ^ v           </div>	*



Validation

Enter the characters from the image above

### 6.3.2 List of approved ships for the Zeebrugge LNG Terminal

List the ships which are currently approved according to the relevant procedures, to berth at the Zeebrugge LNG Terminal facility.

[Link](#) to Fluxys site

### 6.3.3 Fluxys LNG ship approval procedure

Relevant Fluxys procedure for approval of ships.

Link to Fluxys site: <https://www.fluxys.com/en/natural-gas-and-biomethane/products-services/lng-ship-approval-procedure>

## 6.4 Maintenance

### 6.4.1 Work and intervention impact on LNG Terminal Zeebrugge

Terminal Operator shall, operate, maintain and repair the LNG Terminal and keep the LNG



Terminal in good working order and condition in order to fulfil its obligations and operate the LNG Terminal in accordance with the standards of a Reasonable and Prudent Operator. Terminal Operator has the right to shut-off, reduce or curtail all or part of the LNG Terminal for maintenance, repair or replacement works of the LNG Terminal which works may have an impact on the availability of the LNG Services.

The works and interventions overview lists the works and interventions planned for the current year that could affect the execution of your LNG terminal contracts

FLUXYS BELGIUM SA  
Planned Works and Interventions 2014-2015  
LNG Terminal Zeebrugge



Year	Month	Week	Nr Days Shutdown	Description	Impact	Impact From	Impact To	Status
2014	9	38	6	Shutdown 2014: Send Out	Reduced Send Out: 47 % from the send out available	14/09/2014	20/09/2014	Done
2015	5	20	8	Shutdown 2015	Reduced Send Out: 47% from the send out available	16/05/2015	24/05/2015	Scheduled
2015	5	20	2	Shutdown 2015	No slots available for loading/unloading LNG vessels	16/05/2015	18/05/2015	Scheduled
2015	5	20	4	Shutdown 2015	1 Ship unloading operation possible. No loading	18/05/2015	22/05/2015	Scheduled
2015	5	21	2	Shutdown 2015	No slots available for loading/unloading LNG vessels	22/05/2015	24/05/2015	Scheduled

Long Term Planned Works and interventions with a possible impact on LNG Terminal Zeebrugge - Status on 31/10/2014

## 6.4.2 Planned Maintenance Events

Planned Maintenance Events

Year: 2012

Past

Current

Planned

Planned Maintenance Events

Start Time	End Time	Installation	Impacted Service	Type	Factor	Status
08/09/2012 12:00	18/09/2012 13:00	LngTerminalZeebrugge	SendOut	LongTerm	47%	Planned

Download Documents

The list of past, current and planned maintenance events is loaded for a given year. The combo box allows an easy navigation to the previous and upcoming year. By default the current year is loaded.

The upper section presents the information in a tabular view, using a color scheme to distinguish past from upcoming events. The status information (“Past”, “Current”, “Planned”) relates to the progress of the planned maintenance (today compared to start date) and not the actual execution of the maintenance itself. Clicking on a row will load detailed information about the event.

Planned Maintenance Events

Year: 2012

Planned Maintenance Events

Start Time	End Time	Installation	Impacted Service	Type	Factor	Status
08/09/2012 12:00	18/09/2012 13:00	LngTerminalZeebrugge	SendOut	LongTerm	47%	Current

Planned Maintenance Event Details

Installation: LngTerminalZeebrugge

Impacted Service: SendOut

Impact Description: S02 out of service

Maintenance Factor: 47%

Download Documents

Maintenance event details

The “Download Documents” button will allow the download of this information in XML format.

## 6.5 Metering

### 6.5.1 Hourly refreshed measurements on nodes and lines

The data is based on the codification which makes it possible to visualize information on line- level for every type of metering configuration (e.g. 2 meters in series in one metering line).

When opening this section, the Hourly View with flow measurements for the last available hour is displayed for all the nodes.

On the left hand side a bar with all the available hours in the selected gasday is presented. Clicking on a specific hour will select this hour and display the measurements of this hour in the measurements grid. When changing the gasday the first gashour of that day is selected.

Local Hours
<a href="#">06:00 - 07:00</a>
<a href="#">07:00 - 08:00</a>
<a href="#">08:00 - 09:00</a>
<a href="#">09:00 - 10:00</a>
<a href="#">10:00 - 11:00</a>
<a href="#">11:00 - 12:00</a>
<a href="#">12:00 - 13:00</a>
<b>13:00 - 14:00</b>
<a href="#">14:00 - 15:00</a>
<a href="#">15:00 - 16:00</a>
<a href="#">16:00 - 17:00</a>
<a href="#">17:00 - 18:00</a>
<a href="#">18:00 - 19:00</a>

The center of the screen shows all the flow measurements on the selected gasday and gashour. For each node or metering line, a line is displayed with the following measurements:

- The amount of **Volume** that flowed through the node or metering line (Converted to normal conditions (0°C and 1 atm))
- The amount of **Energy** that flowed through the node or metering line during this hour
- The **GCV** calculated from the gas flow. This value is calculated as the fraction of Energy/Volume.
- The **Pressure** of the gas (absolute pressure – expressed in Bara)
- The **Temperature** of the gas
- The **Gross Volume** is the physical volume of the gas at measured conditions.
- The **VnConv** is the normalized Volume that is measured by the volume converter.
- For a metering line, the value **Weight/In Maintenance** indicates the weight of the line (-1 / 0 / 0,5 / 1). Some examples :
  - If a metering line is in maintenance or subcounting, the weight of the metering line will be '0'.
  - If two meters are installed in the same meteringline, the weight will be '0.5'

This makes that the metering results on node level are the summation of the consumptions (in Volume or Energy) of the different depending metering lines multiplied by their weight.

- The **Status** field shows the validation status of the measurements:
  - **No Data**
  - **Raw** data are measurements that are not at all verified or validated
  - **Verified data** means that a preliminary verification check has been done
  - **Validated data** means that extra checks have been executed and that the measurement is considered as accountable

Hourly refreshed measurements on nodes and lines – New Codification				
Display		Download		
Previous Day		05/09/2017	Next Day	Last Available Report
Local Hours	Node/Line	Delivery Point	Node Name	Volume [m³(n)]
06:00 - 07:00	04100-N02/A/1	146	TERMINAL ZEEBRUGGE 1	41 755
07:00 - 08:00	04100-N02/A/2	146	TERMINAL ZEEBRUGGE 1	768
08:00 - 09:00	04100-N02/A/3	146	TERMINAL ZEEBRUGGE 1	147
09:00 - 10:00	04100-N02/A/4	146	TERMINAL ZEEBRUGGE 1	39 505
10:00 - 11:00	04100-N02/B/1	146	TERMINAL ZEEBRUGGE 1	41 695
11:00 - 12:00	04100-N02/B/2	146	TERMINAL ZEEBRUGGE 1	0

### 6.5.1.1 Download

There are essentially two main options to download measurement information from the application:

- The user can download the information manually by using the Graphical User Interface.
- It is also possible to address the download feature directly by using the Download URL.

#### 6.5.1.1.1 Manual download by the user

The user can download the required information manually by navigating to the Download section for a certain gasday period on the filtered nodes and metering lines:

- Hourly Flow Measurements on Node
- Hourly Flow Measurements on Metering Line
- Hourly Gas Analysis on Node
- Daily Gas Analysis on Node

It is possible to choose between two different file formats:

- CSV
- XML

#### 6.5.1.1.2 Selection in manual download

In general:

If you do not filter on a node or metering line (in the cell 'containing'), the selected period must not exceed 1 month. The downloaded file will contain all the data of the nodes/metering lines for which you have view rights.

Containing	<input type="text"/>	in Internal Codification Number or Internal Business Identifier
------------	----------------------	-----------------------------------------------------------------

If you filter on a part of a node or metering line (some characters in the cell 'containing'), the selected period must not exceed 1 month. The downloaded file will contain all the data of the

nodes/metering lines which contain the characters you put in the filter and for which you have view rights.

Some particularities:

If you select 'Hourly Flow Measurements on Node' or 'Hourly Gas Analysis on Node', and you filter on the exact codification of a node (in cell 'containing'). The selected period can be up to 1 year.

Attention: The codification must be absolutely accurate (You can find the codification for nodes and lines in the display section or in topology section).

The codification (for node) must consist of 5 digits + N + 2 digits: 12345-N12

The screenshot shows a web interface for data export. At the top, there are two tabs: 'Display' and 'Download'. Below the tabs, the 'Data Publication Type' section has four radio button options: 'Hourly Flow Measurement on Node' (selected), 'Hourly Flow Measurement on Metering Line', 'Hourly Gas Analysis on Node', and 'Daily Gas Analysis on Node'. Below this, there is a filter section with a 'Containing' label, a text input field containing '22222-N01', and a label 'in Internal Codification Number or Internal Business Identifier'. Below the filter, there is a date range selector with 'From' and 'to' labels, date pickers for '01/09/2016' and '08/12/2016', and time selectors for 'hour' with values '1' and '24'. At the bottom, the 'Format Type' section has two radio button options: 'CSV' (selected) and 'XML'. A 'Download' button is located at the bottom left of the form.

If you select 'Hourly Flow Measurements on Metering Line', and you filter on the exact codification of a line (in cell 'containing'). The selected period can be up to 1 year.

The codification must be absolutely accurate (You can find the codification for nodes and lines in the display section or in topology section).

The codification (for line) must consist of 5 digits + N + 2 digits + / + 1 letter + / + the number of the line: 12345-N12/A/1

#### 6.5.1.1.3 Automatic download by an application

See chapter 7.

### 6.5.2 Topology

This section provides information about the metering topology elements on which the user has the right to view data. The view rights are derived from the contracts which are based on Gas Exchange Locations. These gas exchange locations can be subdivided in a set of Nodes.

#### 6.5.2.1 Content

A Gas Exchange Location (GEL) consists of node memberships. A node can be a member of a GEL during a given time period. The membership has a weight with which the measurements of the respective node are aggregated in the result for the associated GEL. All this information can be found per GEL under the button **GEL Topology**. This option is accessible to limited users (It depends of their contractual link with Fluxys).

Under the **Node Topology** button a drop-down box can be found with all the nodes on which the user has the right to view data.

The whole history of the node and the underlying metering lines are shown after selecting a node. The node history consists of the name changes and the EAN number. The metering line history consists of the measured before status, operational status and the EAN number.

#### 6.5.2.2 Download

There are essentially two main options to download topology information from the application:

- The user can download the information manually by using the Graphical User Interface.
- It is also possible to address the download feature directly by using the Download URL.

#### 6.5.2.2.1 Manual download by the user

The user can download the required information manually by navigating to the Download section. This section provides selections to download the whole history of either:

- Gas Exchange Location Topology: for all GELs on which the user has the right to view data
- Node Topology: for all GELs on which the user has the right to view data

It is possible to choose between two different file formats:

- CSV
- XML

#### 6.5.2.2.2 Automatic download by an application

See chapter 7.

### 6.5.3 Further remarks about Metering and Topology

#### 6.5.3.1 Aggregation of measurements

Since a Gas Exchange Location (GEL) consists of a set of nodes and a node consists of a set of metering lines, the measurements for a complete GEL should be aggregated.

We advise to start the aggregation for a complete GEL from the set of nodes and not from the set of metering lines! A metering line can go 'In Maintenance' or the measurements can already be accounted in the measurements of another metering line, i.e. 'Measured Before'.

The measurements on the node level take these two parameters into account and can therefore readily be used for the aggregations.

#### Example

What is the total energy on gas exchange location A at gas day X, hour Y?

The topology of gas exchange location A at gas day X and hour Y is:

- Membership 1: Node n1, weight w1 = -1
- Membership 2: Node n2, weight w2 = -1
- Membership 3: Node n3, weight w3 = 1

The measurements of nodes n1, n2 and n3 at gas day X and hour Y are:

- Node n1: e1 = 100 kWh
- Node n2: e2 = 200 kWh
- Node n3: e3 = 500 kWh

Calculation

$$\begin{aligned} \text{Total energy (e)} &= e1 * w1 + e2 * w2 + e3 * w3 \\ &= 100 * -1 + 200 * -1 + 500 * 1 \\ &= 200 \text{ kWh} \end{aligned}$$

## 6.6 LNG Inventory & Allocations

### 6.6.1 Inventories LNG Report

GIS	Gas In Storage
DANCF	Day-Ahead Nomination in Counter Flow
DANSO	Day-Ahead Nomination in Send-Out
FNCF	Final Nomination in Counter Flow
FNSO	Final Nomination in Send-Out
AllocCF	Allocation Counter Flow
AllocSO	Allocation Send-Out
PF	Physical Flow
GCV	Gross Calorific Value in kWh/m <sup>3</sup> (n)

The Gas in Storage is either expressed in Energy (kWh) or in volume of LNG (m<sup>3</sup>[LNG]).

### 6.6.2 Gas In Storage

GIS data allows grid users to keep track of the amount of energy they have in storage in the Fluxys storage installations.

#### 6.6.2.1 Display

The Gas In Storage screen opens by default the last available GIS Report.

The GIS Report screen gives the ability to navigate through his user's GIS Reports of the last past 3 years. Therefore, he will find a calendar menu item where he can select the appropriate day for which he wants to consult the GIS Report. So, by changing the date, the user can navigate through all his available Reported Daily Imbalance Reports.

The title of each GIS Report consists of the gasday for which the report applies. The GIS data is delivered on a per hour basis. For every hour (expressed in local time) following elements are displayed:

- Begin and end time of the hour
- For each plant at which a grid user is active
  - Amount of gas in storage (kWh)
  - Total amount of gas in the tank (kWh)
  - Generation time of the GIS message

The report is built up as the gasday progresses with a new line being added every hour. These are provisional data.

Gas in Storage			
Display		Download	
Previous Day		05/09/2012	Next Day
		Last Available Report	
05/09/2012		Loenhout	
Local Hours	GIS Position	Total GIS	Generated At
06:00 - 07:00			
07:00 - 08:00			
08:00 - 09:00			
09:00 - 10:00			
10:00 - 11:00			
11:00 - 12:00			
12:00 - 13:00			
13:00 - 14:00			
14:00 - 15:00			

## Report Content

#### 6.6.2.2 Download

There are two different ways in which the download features of the application can be used. These different options are intended for different sorts of use. On one hand, the user can download the desired information by using the Graphical User Interface. On the other hand, it is also possible to address the download feature directly by using the Download URL.EPORT CONTENT

##### 6.6.2.2.1 Manual download by the user

On one hand, the user can download the last available report or a range of reports using the Graphical User Interface by navigating to the download section of the application.



In the Gas In Storage screen, the user can specify all the parameters of the desired download.

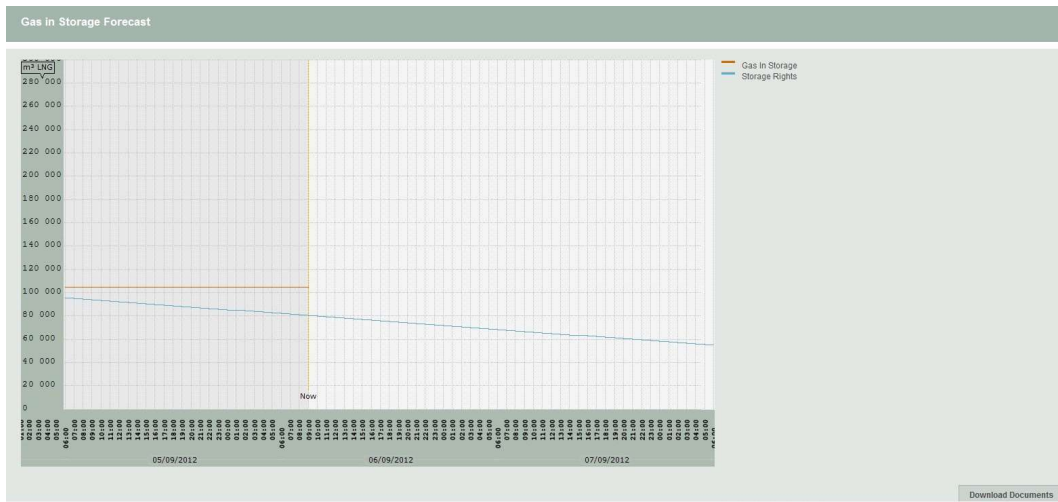
The download procedure for the GIS Reports follows the same rules and principles as the download procedure of the Provisional Hourly Allocations. Therefore, we refer to paragraph 7. **Automatic downloads** for more information on downloading report information.

The screenshot shows a web interface with two tabs: 'Display' and 'Download'. The 'Download' tab is active. Under 'Date Range Selection', the first radio button 'The last available Report' is selected. Below it, there are 'From' and 'To' date pickers, both showing '05/09/2012'. Under 'Output File Type Selection', the first radio button 'CSV Format' is selected. A 'Download' button is located at the bottom right of the form.

#### 6.6.2.2.2 Automatic download by an application

See chapter 7.

### 6.6.3 Gas in Storage Forecast



A picture is loaded representing two curves: the GIS level in red, calculated until the last gashour and the total storage rights in blue. The picture displays an hourly detail for a period of 3 gasdays (yesterday, today and tomorrow).

The “Download Documents” button will allow the download of this information in XML format.

## 6.6.4 Provisional Hourly Allocations

The 'Provisional Hourly Allocation Report' screen gives the ability to navigate through all of the user's Provisional Hourly Allocation reports of the past 3 years. The allocations are categorised by their respective gashour.

### 6.6.4.1 Published data

For each gashour a list of all provisional allocations is given. Every allocation detail concludes the gashour and gasday, the shipper account, the EDIGAS-code of the location and the allocation value (expressed in kWh).

### 6.6.4.2 Access to publications

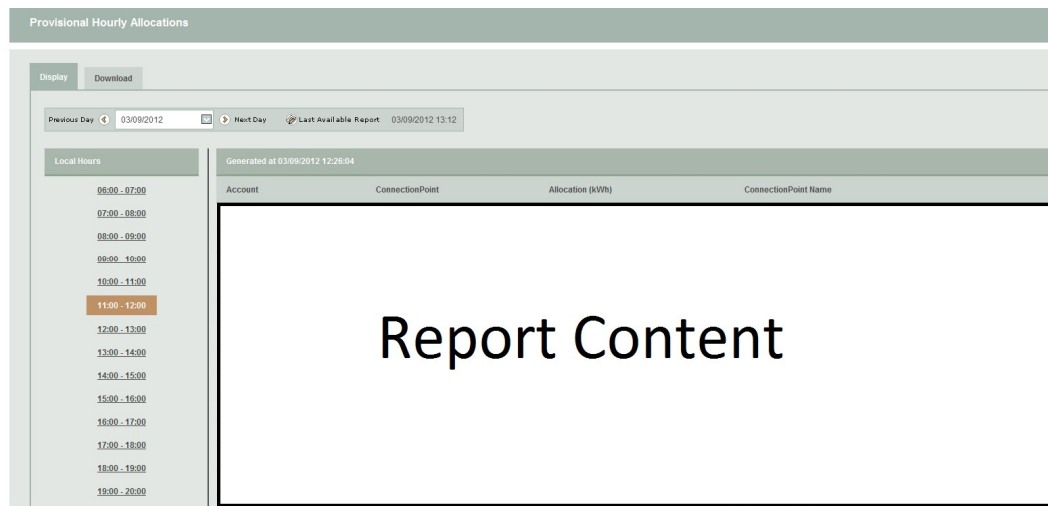
The provisional hourly allocations can be accessed in three different ways: via the display section, the download section and via a download URL.

The display section allows the grid user to view and consult the provisional hourly allocations online and the download section and download URL give the grid user the ability to download the available allocations in different file formats for further usage.

#### 6.6.4.2.1 Display section

The last available Provisional Hourly Allocation Report will be displayed by default.

If the user wants to display the allocations for a different gashour, then he should first select the correct gasday with the calendar tool at the top left corner of the screen. By default the Allocations first gashour of the day is displayed. Then the correct gashour can be chosen from the bar on the left side of the screen.



Additionally to the allocation data, the generation date and time of the report is displayed on top of the screen.

#### 6.6.4.2.2 Download section

To manually download provisional hourly allocations, the user should select the download tab.

The download screen gives two options to download the provisional hourly allocations. The gasday or range of gasdays and the output file format can be chosen by the user.

##### Date range selection:

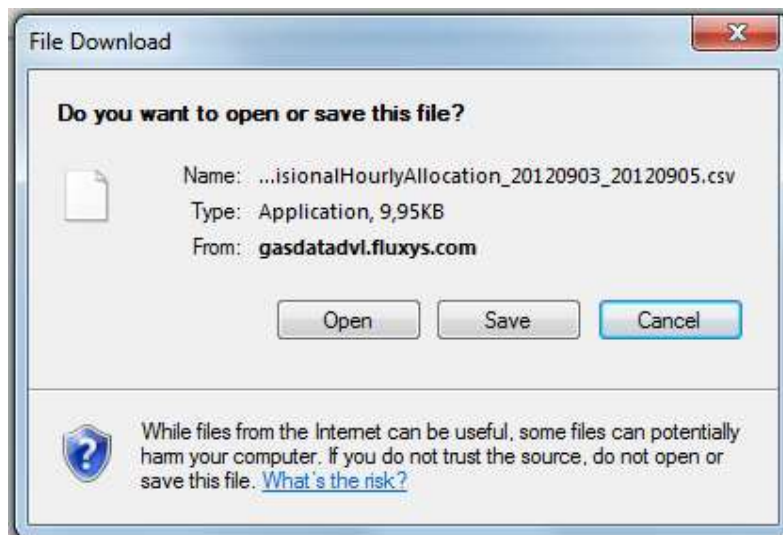
- Last available report  
This option returns the provisional hourly allocations for the last gasday.
- Date range:  
Select all the gasdays starting at gasday 'From' until gasday 'To'. The FROM date may not be later in time than the TO date and the maximum date range is limited to one week. The screen automatically changes the FROM or TO date if the maximum date range of one week is exceeded.

**Output File Type Selection:**

Three file types are available for manual download:

- CSV
- XML

After the user has set the right parameters to download the desired Provisional Hourly Allocations and clicked the Download button, the File Download screen pops up, giving him/her the choice to directly open the file, or to save it.

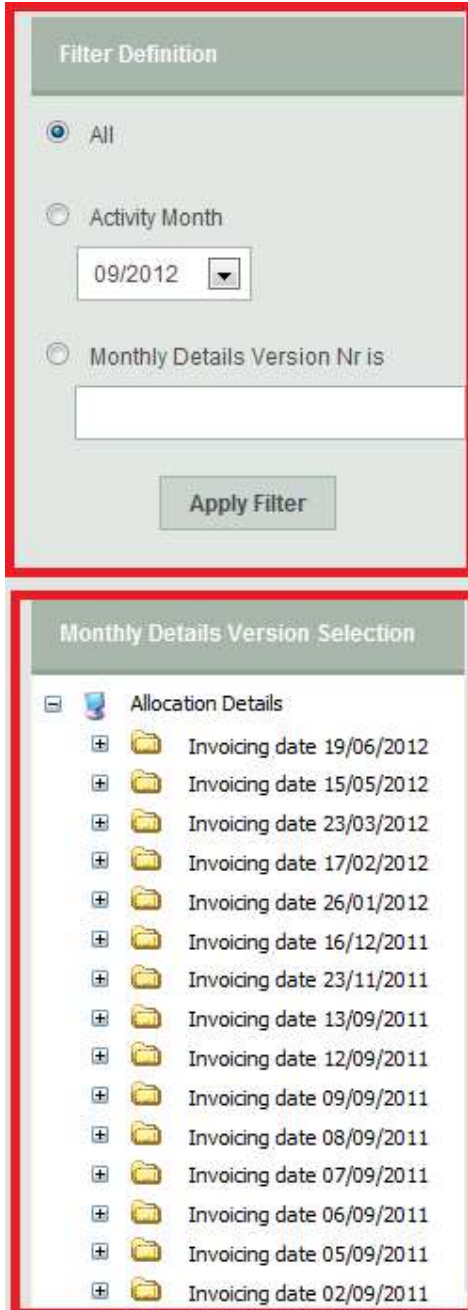
**6.6.4.2.3 Automatic download URL**

See chapter 7.

## 6.7 Invoicing

### 6.7.1 Allocation Details

As the filter option "All" is selected on the panel by default, the navigation panel shows all available invoicing months and allocation details versions. The user can use the Navigation Tree to select an allocation detail and view or download the document.



**Filter Definition**

☒ All

☐ Activity Month

09/2012 ▼

☐ Monthly Details Version Nr is

Apply Filter

**Monthly Details Version Selection**

Allocation Details

- Invoicing date 19/06/2012
- Invoicing date 15/05/2012
- Invoicing date 23/03/2012
- Invoicing date 17/02/2012
- Invoicing date 26/01/2012
- Invoicing date 16/12/2011
- Invoicing date 23/11/2011
- Invoicing date 13/09/2011
- Invoicing date 12/09/2011
- Invoicing date 09/09/2011
- Invoicing date 08/09/2011
- Invoicing date 07/09/2011
- Invoicing date 06/09/2011
- Invoicing date 05/09/2011
- Invoicing date 02/09/2011

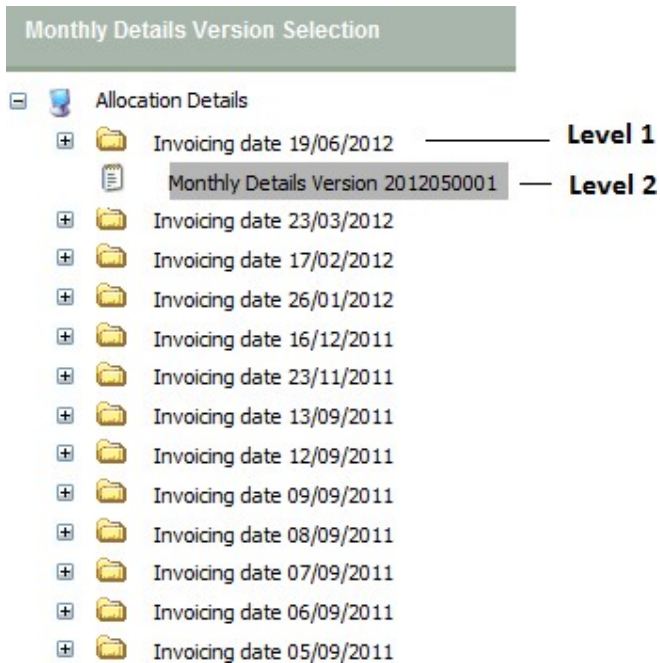
Filter

Navigation Tree

The user can modify the filter applied on the collection of available allocation details organized in the navigation tree. The allocation details are grouped per invoicing month and per monthly details version number.

The Navigation Tree, the Filter Panel and the different downloading options will be discussed in the following sections.

### 6.7.1.1 Navigation Tree



The navigation provides a tree structure of all invoicing dates (i.e. document date of the allocation details) of the last 3 years and the associated bundled/linked Monthly Details Version Numbers:

- **Level 0: label 'Allocation Details'.**  
This navigation tree is built for the quick navigation through the archived collection of allocation details of the last 3 years. The filter above provides additional browsing facilities and is applicable on the tree content.
- **Level 1: Invoicing Dates (invoicing data available for the past 3 years).**  
This level of the navigation tree contains the invoicing dates or document dates of the last 36 invoicing months.
- **Level 2: Monthly Details Version Number**  
In the second level, the user can find all the Monthly Details Version Numbers that are attached/bundled/linked to a particular invoicing date or document date. If a Monthly Details Version Number has been selected in the navigation tree, the user will have the possibility to download all the allocation details associated with that particular Monthly Details Version Number, and related to the invoicing date of the previous level. All the related allocation details for a particular Monthly Details Version Number and Invoicing Month/Document date will be shown in the Allocation Details Download Panel to the right of the Navigation Tree. These particular allocation details can be downloaded separately or all together in a zip file.

### 6.7.1.2 Filter Panel

=> Only the Monthly Details Versions of Activity Month September 2012 are shown in the navigation tree, even though the invoicing dates contain other Monthly Details Versions

The Filter Panel gives the user the possibility to filter/limit the available Monthly Details Version Numbers in the navigation tree for easy and quick navigation. After applying a desired filter-option by selecting the preferred filter option and clicking the “Apply Filter” button, this option is highlighted. The filter panel consists of the following criteria/options.

- All  
If this option is chosen, no filter is applied. The option “All” gives all the available Monthly Details Version Numbers grouped by the Invoicing Date (=document date) to which they are linked/bundled.
- Activity Month  
This filter criterion gives the user the option to restrict the available Monthly Details Version Numbers shown in the navigation tree to a pre-defined Activity Month in the combo-box.
- Monthly Details Version Number  
This option offers the possibility to search and request a specific Monthly Details Version Number that fully matches the expression entered in the corresponding edit-box. As so, the user can limit the Monthly Details Version Numbers shown in the navigation tree to one particular version.

### 6.7.1.3 Download

Essentially, there are two different ways in which the download features of the application can be used:

- Download the desired information through the Graphical User Interface.
- Address the download feature directly by using the Download URL.

#### 6.7.1.3.1 Manual download by the user

The user can download the allocation details of a selected invoicing date or linked to the selected Monthly Details Version Number by navigating to the desired invoicing month (level 1) and Monthly Details Version Number (level 2).

If a Monthly Details Version Number has been selected in the fourth level of the navigation tree, all the related allocation details for a particular Monthly Details Version Number and Invoicing Date/Document Date are shown in the Allocation Details Download Panel to the right of the Navigation Tree.

The screenshot shows a software interface with a list of allocation details. On the left, there is a tree view showing folders for 'Invoicing date' and 'Monthly Details Version'. The main table has columns for 'Download', 'Grid User's Definitive Hourly Allocation Form', and a date. Red circles highlight the 'Download' buttons and the 'Download this Monthly Details Version' and 'Download entire Invoicing Date' options. Red arrows point from these options to text boxes explaining their functions.

Download	Grid User's Definitive Hourly Allocation Form		
Download	Grid User's Definitive Hourly Allocation Form	<b>Download a single allocation detail</b> Grid User's Definitive Hourly Allocation Form of GasDay 13/02/2012, with Monthly Details Version Number 2012020001 and linked to the invoicing date 31/03/2012	12/02/2012
Download	Grid User's Definitive Hourly Allocation Form		13/02/2012
Download	Grid User's Definitive Hourly Allocation Form		14/02/2012
Download	Grid User's Definitive Hourly Allocation Form		15/02/2012
Download	Grid User's Definitive Hourly Allocation Form	<b>Download all allocation details related to a particular Monthly Details Version</b> All the allocation details with Monthly Details Version Number 2012020001 and linked to the invoicing date 31/03/2012	16/02/2012
Download	Grid User's Definitive Hourly Allocation Form		17/02/2012
Download	Grid User's Definitive Monthly Allocation Form		01/02/2012
Download	Grid User's Definitive BAP Hourly Allocation Form		01/02/2012
Download	Grid User's Definitive BAP Daily Allocation Form	<b>Download all allocation details related to the selected invoicing date</b> All the allocation details linked to the invoicing date 31/03/2012 (versions 2012020001, 2012010002 and 2011120003)	01/02/2012
Download	Temperatures Daily Form		01/02/2012

The user has the possibility to choose the granularity of the group of allocation details to download:

- A particular single allocation detail can be downloaded by clicking the download button in front of the associated allocation detail line. Subsequently, this allocation detail file is downloaded as a CSV file which can be opened with either Notepad or Excel, and/or can also be saved to a local drive.
- All the allocation details related to a particular Monthly Details Version Number can be downloaded by selecting the option "Download this Monthly Details Version" and clicking the "Start Download" button. This bundle of allocation details is downloaded as a ZIP file containing all the allocation details in CSV file format.
- The download of all the allocation details of all the allocation details versions related to the selected invoicing date of the previous level is executed by selecting the option "Download entire Invoicing Date", and clicking the "Start Download Button". This group of allocation details is downloaded as a ZIP file containing all the allocation details in CSV file format.

After the user has initiated a download, the File Download screen pops up giving him/her the choice to either directly open the file or save it.

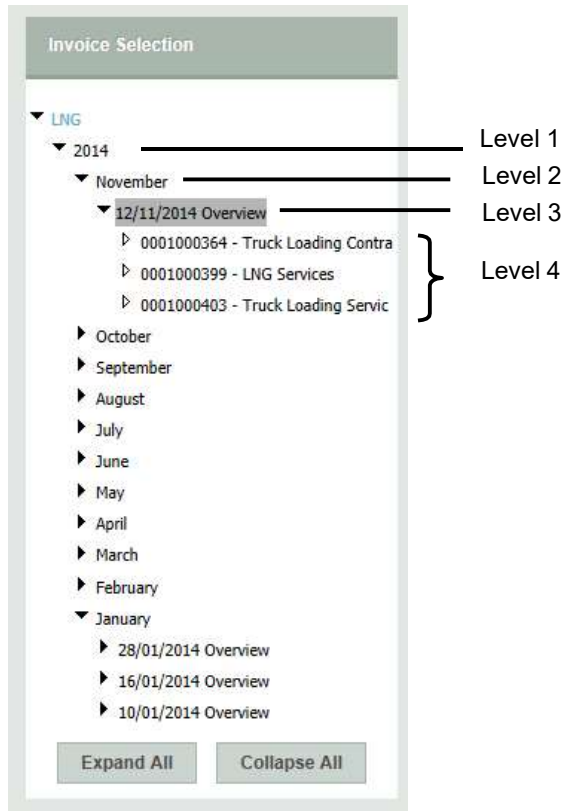
#### 6.7.1.3.2 Automatic download by an application

See chapter 7.



## 6.7.2 Invoices

### 6.7.2.1 Navigation Tree



The navigation provides a tree structure of all invoicing dates from January 2014 and the associated bundled/linked Invoice Numbers:

- Level 0: label 'LNG'.  
This navigation tree is built for the quick navigation through the archived collection of invoices from January 2014.
- Level 1: Invoicing year  
This level of the navigation tree contains the invoicing year.
- Level 2: Invoicing month  
This level of the navigation tree contains the invoicing month.
- Level 3: Invoicing Dates (invoicing data available from January 2014).  
This level of the navigation tree contains the invoicing dates. If a invoicing version number has been selected in the navigation tree, the user will have the possibility to download all the invoices associated
- Level 4: Invoicing Number  
In this level, the user can find all the invoicing version numbers that are attached/bundled/linked to a particular invoicing date.

#### 5.7.2.2 Download

A manual download for the desired information through the Graphical User Interface can be done.

##### 6.7.2.1.1 Manual download by the user

The user can download the document of a selected invoicing date or linked to the selected invoice number by navigating to the desired invoicing month (level 2).



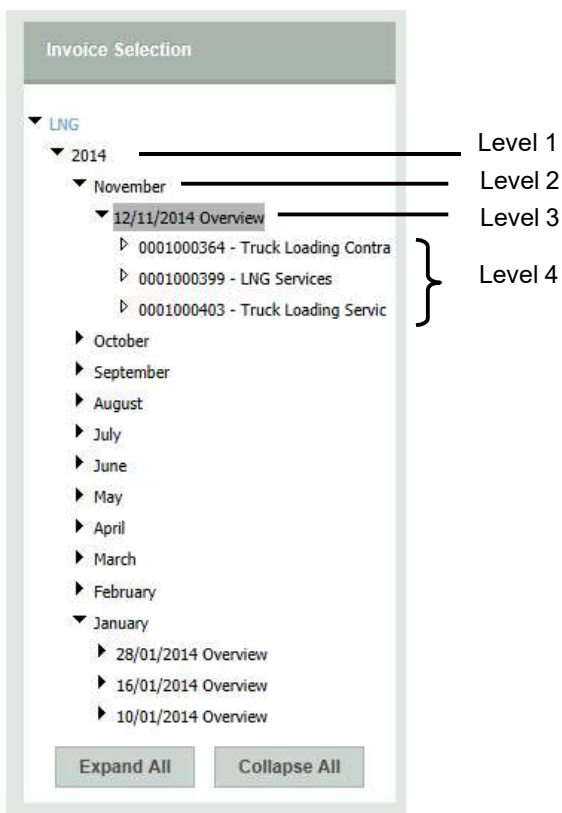
Document nr	Description	Invoice	Invoice Appendix	Invoice Appendix Xml
0001000364	12/11/2014 - Truck Loading Contra			
0001000399	12/11/2014 - LNG Services			
0001000403	12/11/2014 - Truck Loading Servic			

### 6.7.3 Other invoices – Fluxys LNG

This section of EDP gives access to private data concerning invoices and appendices for non-regulated activities.

### 6.7.4 Invoices for truck companies

#### 6.7.4.1 Navigation Tree



The navigation provides a tree structure of all invoicing dates from January 2014 and the associated bundled/linked Invoice Numbers:

- Level 0: label 'LNG'.  
This navigation tree is built for the quick navigation through the archived collection of invoices from January 2014.
- Level 1: Invoicing year  
This level of the navigation tree contains the invoicing year.
- Level 2: Invoicing month

This level of the navigation tree contains the invoicing month.

- Level 3: Invoicing Dates (invoicing data available from January 2014).  
This level of the navigation tree contains the invoicing dates. If an invoicing version number has been selected in the navigation tree, the user will have the possibility to download all the invoices associated
- Level 4: Invoicing Number  
In this level, the user can find all the invoicing version numbers that are attached/bundled/linked to a particular invoicing date.

#### 6.7.4.2 Download

A manual download for the desired information through the Graphical User Interface can be done.

##### 6.7.4.2.1 Manual download by the user

The user can download the document of a selected invoicing date or linked to the selected invoice number by navigating to the desired invoicing month (level 2).

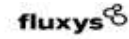
Document nr	Description	Invoice	Invoice Appendix	Invoice Appendix Xml
0001000364	12/11/2014 - Truck Loading Contra			
0001000399	12/11/2014 - LNG Services			
0001000403	12/11/2014 - Truck Loading Servic			

#### 6.7.5 Gas In Storage Account for LNG Terminal

This report contains the monthly detail of the individual total inventory position (GIS account level) at the Zeebrugge LNG Terminal during the month.

The Gas In Storage account is published every month on Electronic Data Platform.


## LNG-TERMINAL ZEEBRUGGE



GIS Account for	xxxxxx	
Unloading Month	October 2020	kWh
<b>1. Quantities IN</b>		
LNG Ship Unloading		
ship 1	xx/xx/xxxx	1 110 667 000
ship 2	xx/xx/xxxx	186 463 000
Allocated Quantities IN		0
Allocated Fuelgas IN		0
Distribution of Monthly Energy Balance :		
xxx-xxxx		- 1 816 260
xxx-xxxx		- 2 584 744
Distribution of Difference Deemed vs Allocated Fuel Gas :		
xxx-xxxx		0
<b>Total Quantities IN</b>		<b>1 292 728 995</b>
<b>2. Quantities OUT</b>		
LNG Ship Loading		
ship 3	xx/xx/xxxx	1 082 315 000
ship 4	xx/xx/xxxx	1 065 918 000
Allocated Quantities OUT		71 415 000
Allocated Send-Out		0
Allocated TBOG	999 999 999	
Allocated Fuelgas OUT		0
<b>Total Quantities OUT</b>		<b>2 219 648 000</b>
<b>3. Balance</b>		
GIS at 29/09/2020 06:00		992 165 274
+ Quantities IN		1 292 728 995
- Quantities OUT		-2 219 648 000
GIS at 01/11/2020 06:00		65 246 269
Change in GIS		- 926 919 005

### 6.7.6 Synchronization GIS-level LNG Terminal

The synchronization between the steering and validation level of the Gas In Storage account at the Zeebrugge LNG Terminal. The scheduling date for this synchronization is communicated by Fluxys with the publication on Electronic Data Platform.

Synchronisation Steering level at Terminal Zeebrugge - <span>xxxxxx</span>							
These figures are based on the levels at <span>01/11/2020 06:00</span>							
(Steering level is the level based on provisional figures - this is the level as it is forwarded each hour by Fluxys by use of an electronic message)							
Your steering GIS account		<div>65.246.269</div>	kWh				
Your validated GIS account		<div>65.246.269</div>	kWh				
<u>Delta</u>		<div>0</div>	kWh				
This quantity will be synchronized on		<span>xx/xx/xxxx</span>	at gashour		<span>06:00-07:00</span>	<span>GH1</span>	

### 6.7.7 Transfers Monthly Energy Balance & Monthly Fuelgas Balance for LNG Terminal

Distribution of the Monthly Fuelgas Balance and the Monthly Energy Balance at the Zeebrugge LNG Terminal.

This operation is done the following month. The scheduling date for this transfer is communicated by Fluxys with the publication on Electronic Data Platform.

Monthly Energy & Fuelgas Balance transfers at Terminal Zeebrugge - xxxxxx																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
---------------------------------------------------------------------------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

### 6.7.8 Evolution of the Gas in Storage Account for LNG Terminal

Evolution of your GIS account in energy with hourly granularity, contains data from the past and already known data for the future.

fluxys					
Transmission & ZTP Trading Services Storage LNG Terminals Administration					
Evolution of the Gas in Storage Account for LNG terminal					
Load Data					
Period From: 01/01/2021					
Period To: 16/03/2021					
Allocation Type: <input checked="" type="radio"/> Steering <input type="radio"/> Validated					
Load Data					
Activities GIS Account overview					
Terminal User: Steering					
Allocation Type: kWh (25°C)					
Line:					
Gas Day	Gas Hour	GIS Start Level (kWh)	Send Out Allocations	TBOG Allocations	Reverse Allocations
16/03/2021	1	-17.662 420			
16/03/2021	2	-17.662 420			
16/03/2021	3	-17.662 420			
16/03/2021	4	-17.662 420			
16/03/2021	5	-17.662 420			
16/03/2021	6	-17.662 420			
16/03/2021	7	-17.662 420			
16/03/2021	8	-17.662 420			
16/03/2021	9	-17.662 420			
16/03/2021	10	-17.662 420			
16/03/2021	11	-17.662 420			
16/03/2021	12	-17.662 420			
16/03/2021	13	-17.662 420			
16/03/2021	14	-17.662 420			
16/03/2021	15	-17.662 420			
16/03/2021	16	-17.662 420			
16/03/2021	17	-17.662 420			
16/03/2021	18	-17.662 420			

#### 6.7.8.1 Download

A manual download for the desired information can be done only in .xls format via export drop down menu.

## 6.7.9 Ship Loading & Unloading reports

These reports contain the details for each ship loading at the Zeebrugge LNG Terminal (Certificate of quality and quantity).

File Name	Date	Size (KB)
20221203_1930.pdf	28/02/2023 15:23:49	259
20221211_2243.pdf	28/02/2023 15:23:31	320
20230220_2024.pdf	23/02/2023 09:00:17	185

Showing 1 to 3 of 3 entries

First Previous 1 Next Last

## 6.1 Regulatory and contractual documents

### 6.1.1 Terminalling model

[Link](#) to contractual documents and [tariffs](#) for all LNG services in Zeebrugge.

### 6.1.2 Terminalling services offer

[Program for LNG Terminalling](#): overview of services offered at the LNG terminal in Zeebrugge.

### 6.1.3 Tariffs

[Link](#) to tariffs for all LNG services in Zeebrugge.

### 6.1.4 Specific requirements at the LNG Terminal Delivery point

[List of LNG quality requirements](#) for delivery in Zeebrugge.

### 6.1.5 Specific requirement at the LNG Terminal Redelivery point

[List of natural gas quality requirements](#) of regasified LNG.

## 6.2 Truck planning for shippers

### 6.2.1 LNG truck quality and quantity document

When the LNG Truck has been loaded, the Terminal User can download a PDF document to see how much LNG was loaded of which quality.

### 6.2.2 LNG truck loadings

When LNG Trucks have been loaded, the Terminal User can download an Excel document to see how much LNG was loaded of which quality.

### 6.2.3 Truck Manager

New tool to schedule appointments to load an LNG Truck in Zeebrugge.

## 6.3 Truck planning for trucking companies

### 6.3.1 Contract overview

The trucking company can see how many LNG Truck Loading Services have been subscribed for which period.

### 6.3.2 LNG truck quantity and quantity document

When the LNG Truck has been loaded, the trucking company can download a PDF document to see how much LNG was loaded of which quality.

### 6.3.3 LNG Truck loading

When LNG Trucks have been loaded, the Trucking Company can download an Excel document to see how much LNG was loaded of which quality.

### 6.3.4 Truck Manager

New tool to schedule appointments to load an LNG Truck in Zeebrugge.

## 6.4 REMIT messages

**Regulation on Energy Market Integrity and Transparency**

**Purpose** : Publishing information to foster open and fair competition through reporting that may impact price and applies to market participants (including TSO's or Grid-Users who enters into transactions in wholesale energy markets).

### 6.5 Notifications

General commercial informations.

## 7. Automatic downloads

For most of the reports in the Electronic Data Platform and Electronic Booking System, it is possible to let a system perform automatic downloads through an URL with parameters.

### 7.1 Authentication Parameters

#### 7.1.1 Credentials in URL (default approach)

While a user will be presented with a login dialog when accessing a private section of the Electronic Data Platform, applications need to pass their credentials as parameters in the URL. This can be done by specifying username and password as the first two parameters in the URL.

#### 7.1.2 Api Gateway (new securised approach)

Downloading some reports requires this new method to authenticate.

See procedure in Technical Requirement in Operational Information (mentioned below) :  
The Implementation Information provides a full overview of the reports under consideration, the URLs, the parameters, and the format of the output files.  
The Implementation Information and all the relevant files can be retrieved at

#### **Transmission :**

<https://www.fluxys.com/en/products-services/empowering-you/operational-information/operational-information-transmission-belgium>

→ Downloads : [https://www.fluxys.com/-/media/project/fluxys/public/corporate/fluxyscom/documents/fluxys-belgium/commercial/operational-information/automatic-downloads/20221214---transmission\\_automatic-downloads.zip](https://www.fluxys.com/-/media/project/fluxys/public/corporate/fluxyscom/documents/fluxys-belgium/commercial/operational-information/automatic-downloads/20221214---transmission_automatic-downloads.zip)

#### **Storage :**

<https://www.fluxys.com/en/products-services/empowering-you/operational-information/operational-information-storage-belgium>

→ Downloads : [https://www.fluxys.com/-/media/project/fluxys/public/corporate/fluxyscom/documents/fluxys-belgium/commercial/operational-information/automatic-downloads/20221214---storage\\_automatic\\_downloads.zip](https://www.fluxys.com/-/media/project/fluxys/public/corporate/fluxyscom/documents/fluxys-belgium/commercial/operational-information/automatic-downloads/20221214---storage_automatic_downloads.zip)

#### **News as from 16/03/2022 for Capacities :**

- A new CapacityServiceNatureType “PriorityBooster” is added.
- The CapacityServiceNatureType “Conditional” is no longer available for dates starting from 01/04/22.
- All injection and withdrawal capacities are reported in the unit kWh/h instead of the unit m<sup>3</sup>/h. For dates before 01/04/22 a conversion from the unit m<sup>3</sup>/h to the

unit kWh/h is done with a fixed GCV of 11,3 kWh/ m<sup>3</sup>.

News as from 16/03/2022 for Real Capacities :

- The FactorType "ConditionalFactor" is no longer published for dates starting from 01/04/22.
- A new FactorType "ClaimedFactor" is added.
- The FactorType "AccountFactor" is renamed to "GisExceedingFactor".
- The CapacityServiceType "DAM/NNS" is renamed to "BoosterCapacity".
- All injection and withdrawal capacities are reported in the unit kWh/h instead of the unit m<sup>3</sup>/h. For dates before 01/04/22 a conversion from the unit m<sup>3</sup>/h to the unit kWh/h is done:
  - A fixed GCV of 11,3 kWh/m<sup>3</sup> is used for subscribed capacities.
  - The measured GCV is used for real capacities.

**LNG Terminalling :**

<https://www.fluxys.com/en/products-services/empowering-you/operational-information/operational-information-fluxys-lng>

→ Downloads : [https://www.fluxys.com/-/media/project/fluxys/public/corporate/fluxyscom/documents/fluxys-belgium/commercial/operational-information/automatic-downloads/20221214---terminalling\\_automatic\\_downloads.zip](https://www.fluxys.com/-/media/project/fluxys/public/corporate/fluxyscom/documents/fluxys-belgium/commercial/operational-information/automatic-downloads/20221214---terminalling_automatic_downloads.zip)