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All Fluxys operational data on the Belgian territory

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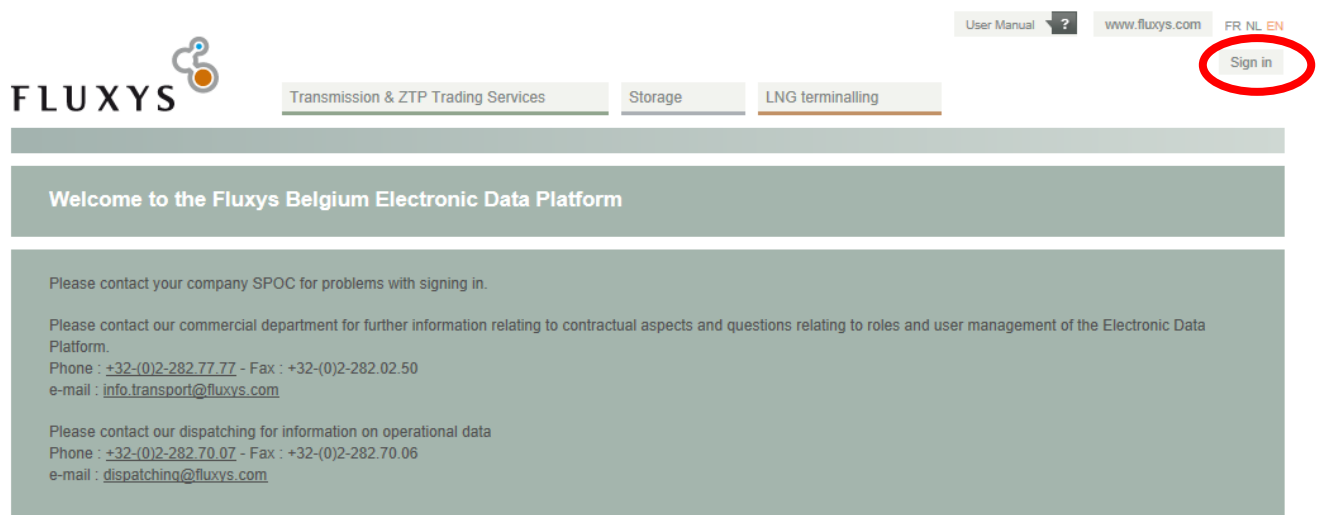
1. Introduction

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.



User Manual ? www.fluxys.com FR NL EN

FLUXYS

Transmission & ZTP Trading Services Storage LNG terminalling

Sign in

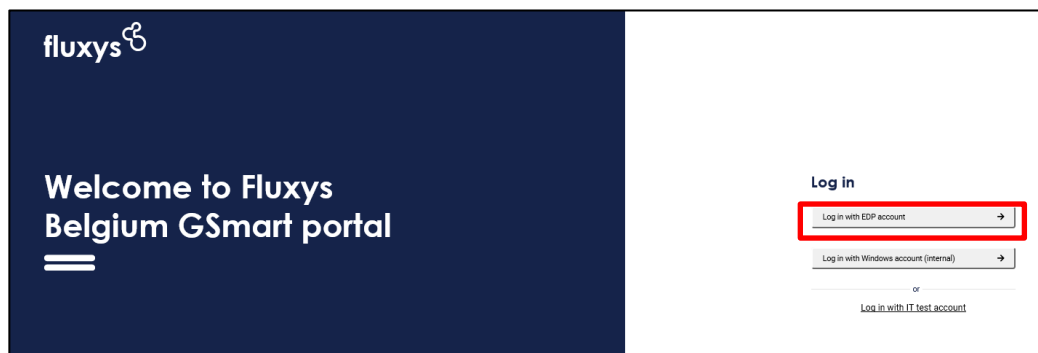
Welcome to the Fluxys Belgium Electronic Data Platform

Please contact your company SPOC for problems with signing in.

Please contact our commercial department for further information relating to contractual aspects and questions relating to roles and user management of the Electronic Data Platform.
Phone : +32-(0)2-282.77.77 - Fax : +32-(0)2-282.02.50
e-mail : info.transport@fluxys.com

Please contact our dispatching for information on operational data
Phone : +32-(0)2-282.70.07 - Fax : +32-(0)2-282.70.06
e-mail : dispatching@fluxys.com

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.



fluxys

Welcome to Fluxys
Belgium GSmart portal

Log in

Log in with EDP account

Log in with Windows account (internal)

or

Log in with IT test account



1.1 Glossary

Agreement	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)
ACT	Access Code for Transmission
Business Party (BP)	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.
Business Party Association (BPA)	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.
Electronic Booking System (EBS)	Part of the Electronic Data Platform provided by the TSO which allows Grid Users to subscribe transmission services.
Electronic Data Platform (EDP)	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.
Fluxys	Can either be Fluxys Belgium as Fluxys LNG.
Fluxys activity	Fluxys has three regulated commercial activities, being Transmission, Terminal and Storage.
Fluxys Service User	The Fluxys Service User is a generic naming for Transmission Service User, Storage User, Terminal User.
Single Point Of Contact or SPOC	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. 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.
Transmission Service User	Generic naming used in this document only for Grid User, Gas User, TSO.

User	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.
Working Hours	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.

The screenshot shows the Fluxys user interface. At the top left is the Fluxys logo. Below it is a 'Sign In' button. The main area contains a form with the instruction 'Type your user ID and password.' followed by three input fields: 'User ID', 'New Password', and 'Confirm New Password'. A 'Change Password' button is located below the 'Confirm New Password' field. Underneath the button, there is a section titled 'Password rules:' with a list of requirements:

- 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.

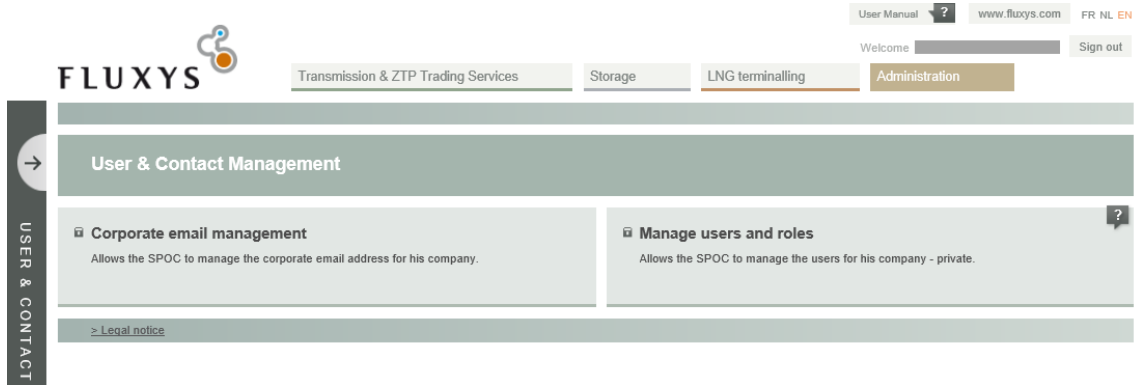
2.1 Administration rights

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 SMS¹. 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.

¹ 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

Create User

First Name:	<input type="text"/>	*
Last Name:	<input type="text"/>	
User Id:	<input type="text"/>	
Email:	<input type="text"/>	
Confirm e-mail:	<input type="text"/>	
Mobile phone:	+ <input type="text"/>	
E.g. for Belgium 32475123456. For other countries please check international regulations.		
Confirm mobile phone:	+ <input type="text"/>	
Telephone:	+ <input type="text"/>	

The user ID is generated by the system, and consists of the 7 first letters² 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.

² 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.

Log in

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).

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

USER INFORMATION		Change password	
User Id:	SimpsonL	E-mail:	[Redacted]
First name:	Lisa	Mobile phone:	[Redacted]
Last name:	Simpson	Telephone:	12345

Storage SPOC:	Terminal SPOC:	Transmission SPOC:
Name: Albert2 Demo Email: [Redacted] Mobile phone: [Redacted]		Name: Albert2 Demo Email: [Redacted] Mobile phone: [Redacted]

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 (info.transport@fluxys.com or info.lng@fluxys.com) **as soon as possible** 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	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.

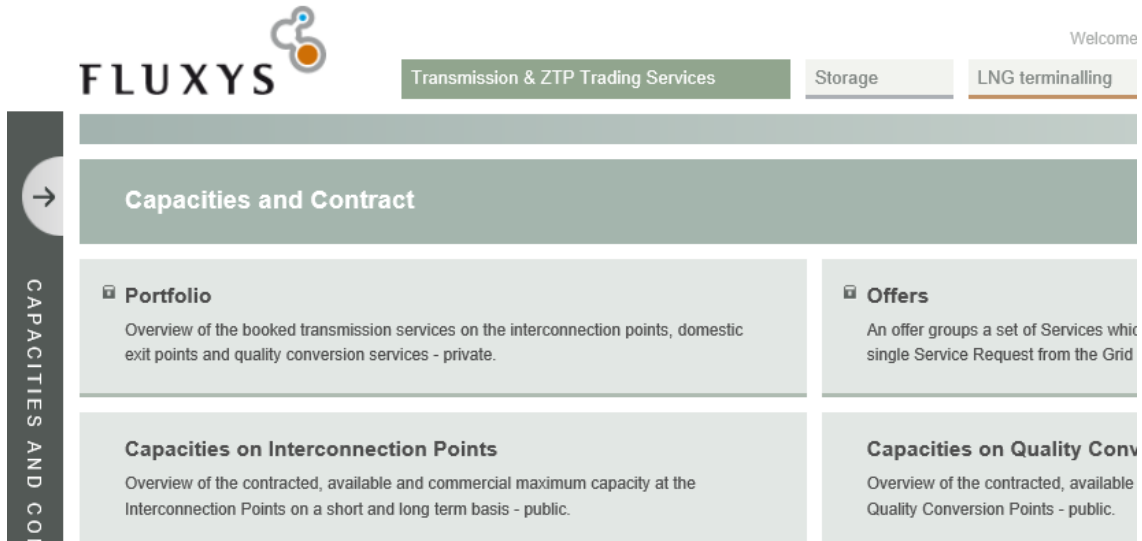
The template will be provided via info.transport@fluxys.com when the company becomes a Business Party (BP) by signing the Standard Transmission Agreement, the Standard Storage Agreement and/or the LNG Terminal Agreements.

4. Transmission & ZTP Trading Services

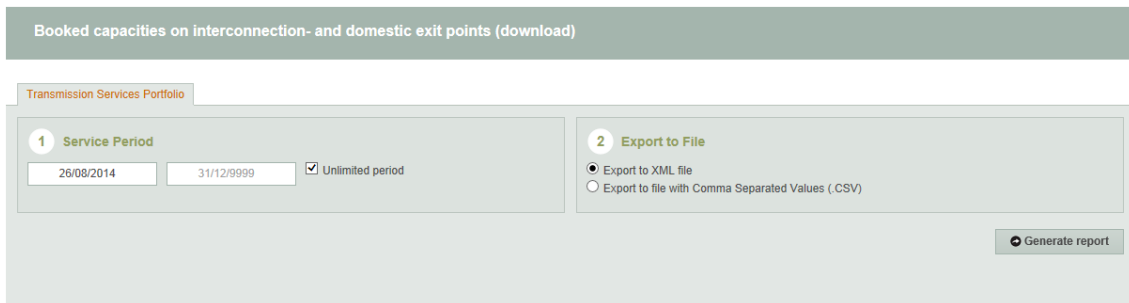
4.1 Capacities and Contracts

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.

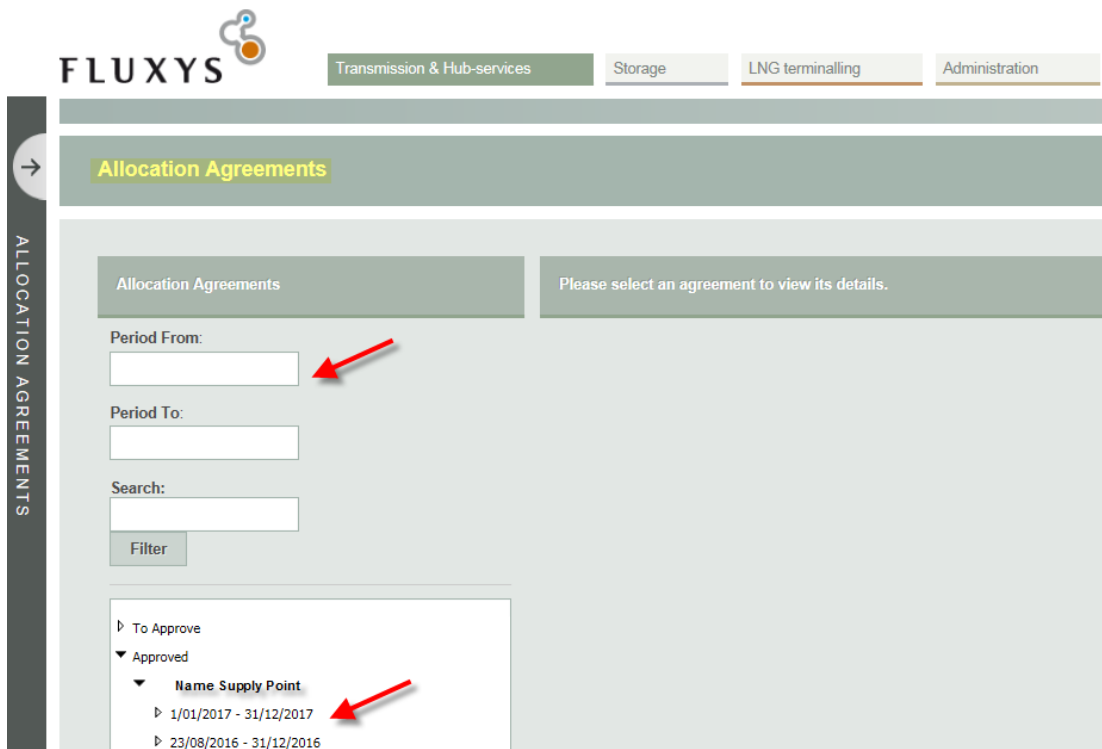
4.1.6.4 Capacity made available through congestion management procedures

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 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
All	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).

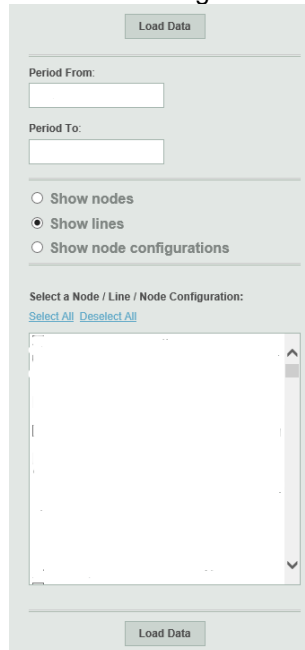
4.3 Metering

4.3.1 Daily refreshed measurements on nodes and lines – New codification

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



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 – New codification

This tab replaces the tab ‘Measurements on nodes & lines – New codification’.

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).

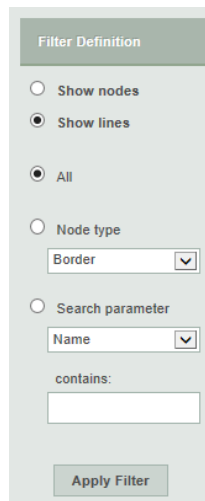
When opening this section, the Hourly View with flow measurements for the last available hour is displayed for all the nodes.

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
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
15:00 - 16:00
16:00 - 17:00
17:00 - 18:00
18:00 - 19:00

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 ◀ 14/03/2017 ▶ Next Day 🔄 Last Available Report

Filter Definition	Local Hours	Node/Line	Delivery Point	Node Name
<input type="radio"/> Show nodes	06:00 - 07:00	01110-N01/A/1	20220	HILVARENBEEK/POPPEL
<input checked="" type="radio"/> Show lines	07:00 - 08:00	01110-N01/A/2	20220	HILVARENBEEK/POPPEL
<input checked="" type="radio"/> All	08:00 - 09:00	01110-N01/A/3	20220	HILVARENBEEK/POPPEL
<input type="radio"/> Node type	09:00 - 10:00	01110-N01/A/4	20220	HILVARENBEEK/POPPEL
Border	10:00 - 11:00	01110-N01/A/5	20220	HILVARENBEEK/POPPEL
<input type="radio"/> Search parameter	11:00 - 12:00	01110-N01/A/6	20220	HILVARENBEEK/POPPEL
Name	12:00 - 13:00	01110-N01/A/7	20220	HILVARENBEEK/POPPEL
contains:	13:00 - 14:00	01110-N01/B/1	20220	HILVARENBEEK/POPPEL
	14:00 - 15:00	01110-N01/B/2	20220	HILVARENBEEK/POPPEL
	15:00 - 16:00	01110-N01/B/3	20220	HILVARENBEEK/POPPEL
	16:00 - 17:00			

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 a web interface with two tabs: 'Display' and 'Download'. The 'Download' tab is selected. Below the tabs, there is a section titled 'Data Publication Type' with several radio button options. The first option, 'Hourly Flow Measurement on Node', is selected and highlighted with a red box. Below this, there is a text input field labeled 'Containing' with the value '22222-N01' and a label 'in Node or Metering Line Codification Number'. Below that, there is a date range selector with 'From' set to '21/12/2017', 'hour' set to '1', 'to' set to '21/12/2017', and 'hour' set to '24'. Below the date range, there is a section titled 'Format Type' with two radio button options: 'CSV' (selected) and 'XML'. At the bottom of the form is a 'Download' button.

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 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

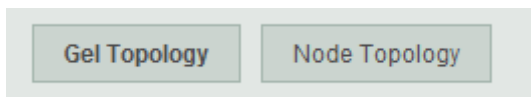
See chapter 7.

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

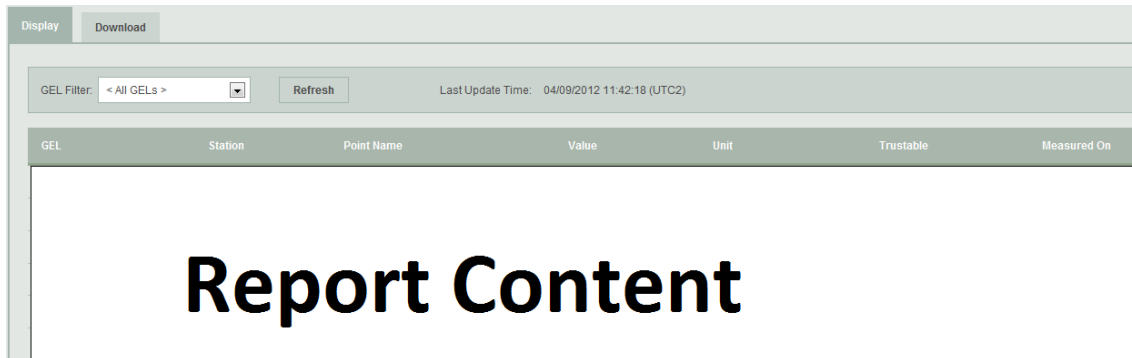
Calculation

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

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

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 – New codification

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

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	78887	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 03:06	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.

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

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).

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

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)
- 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

- 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 (m ³ /h)	Delta (m ³ /h)	Rejected	Name Encoder	Time Stamp	Index (m ³ /h)	Delta (m ³ /h)	Rejected	Name Encoder
02/01/2019 09:44	1304665	1261090	<input type="checkbox"/>		02/01/2019 09:50	355447940	53747940	<input type="checkbox"/>	
04/12/2018 09:38	1204665	1161090	<input checked="" type="checkbox"/>		04/12/2018 09:44	35544795	N/A	<input checked="" type="checkbox"/>	
02/03/2018 10:03	43575	41720	<input type="checkbox"/>	Fluxys Agent	02/03/2018 10:02	301700000	1633854	<input type="checkbox"/>	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

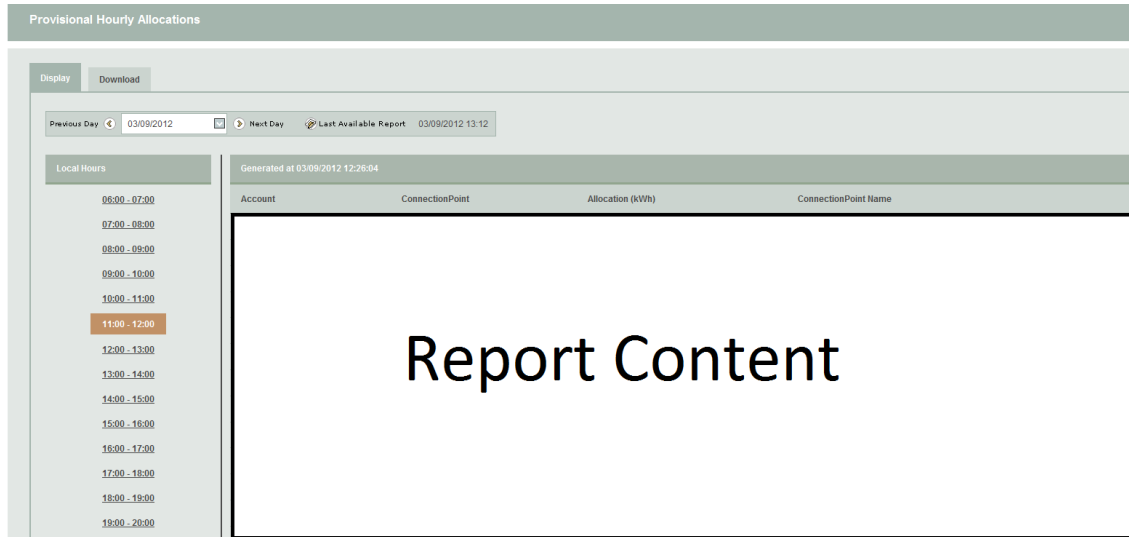
The provisional hourly allocations can be accessed in three different ways: via the display section, the download section and via a download URL.

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.

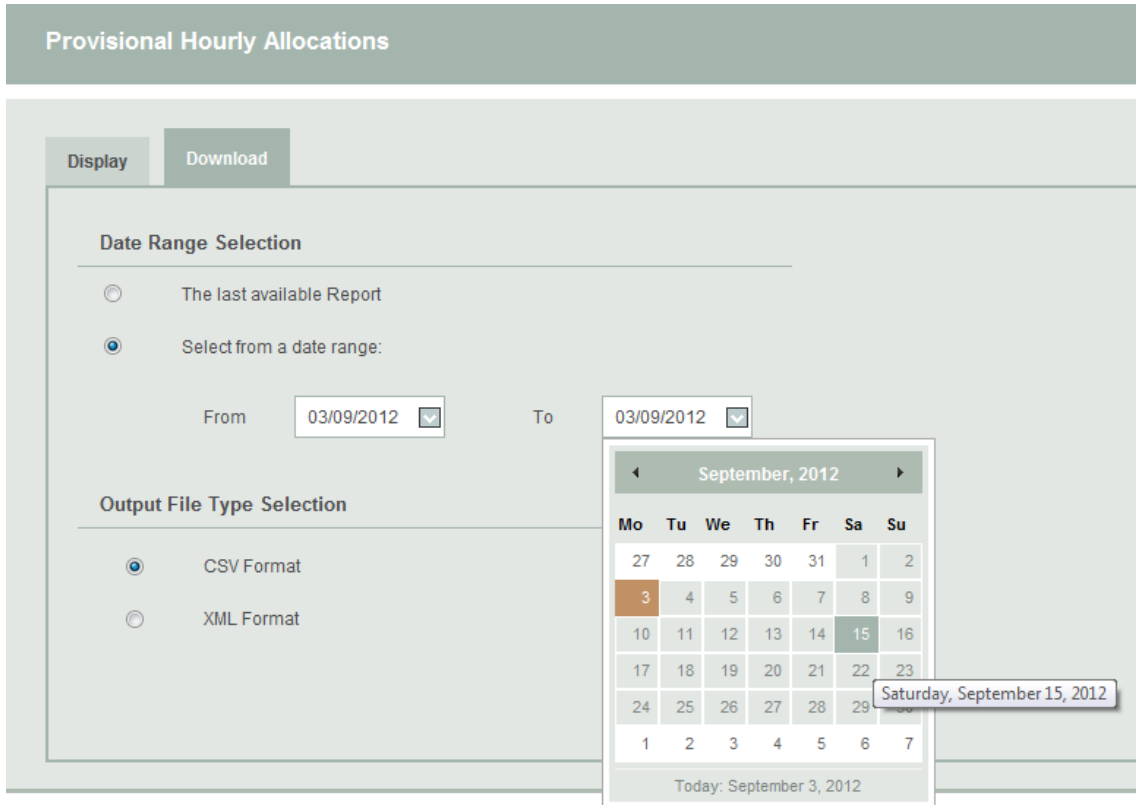
Date range selection:

- 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.

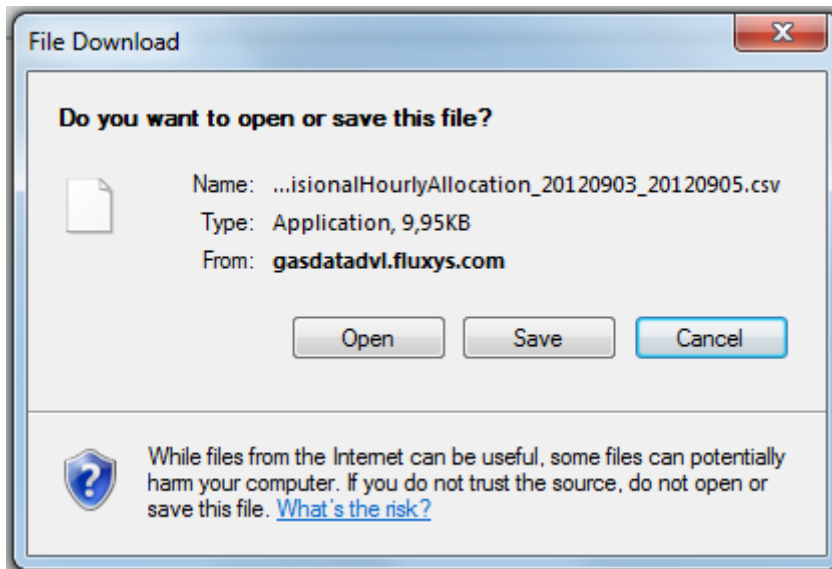
Output File Type Selection:

Three file types are available for manual download:

- CSV
- XML



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.

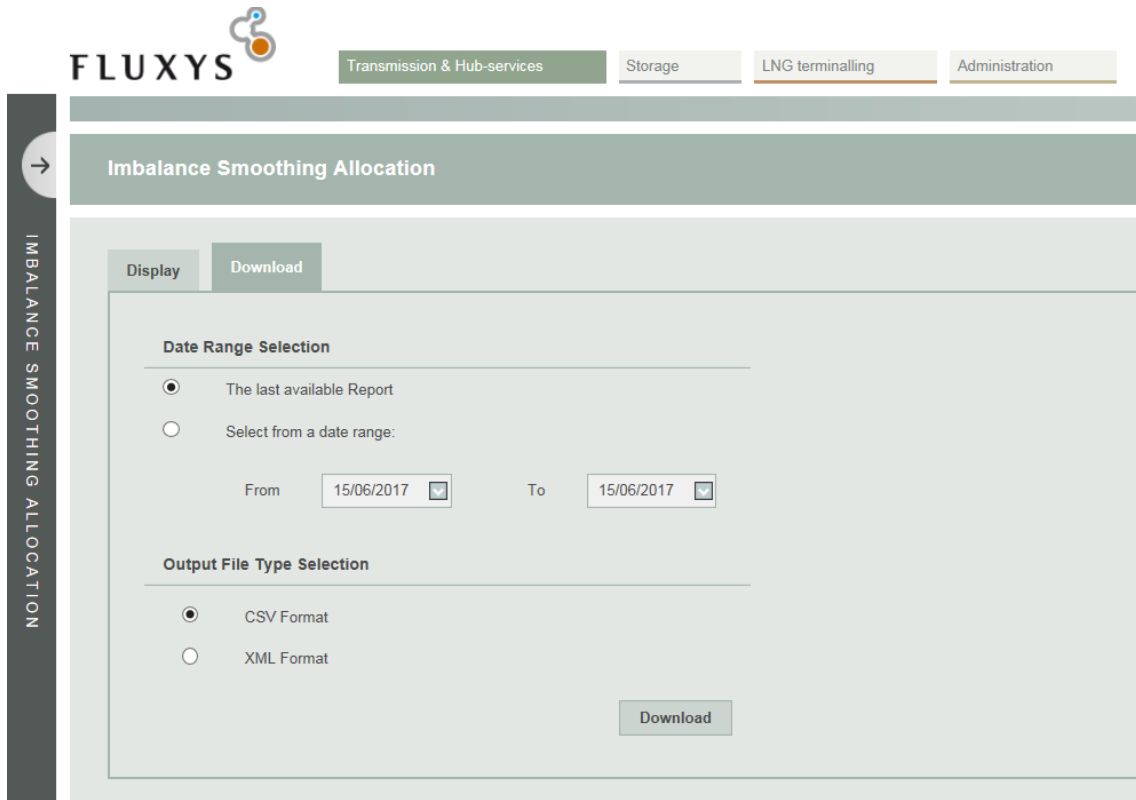
Data format

The screenshot shows the FLUXYS web application interface. At the top, there are navigation tabs: 'Transmission & Hub-services', 'Storage', 'LNG terminalling', and 'Administration'. The main content area is titled 'Imbalance Smoothing Allocation'. Below this, there are 'Display' and 'Download' buttons. A date selector shows '04/06/2017' with 'Previous Day' and 'Next Day' options. A 'Last Available Report' timestamp is '31/05/2017 14:10'. A 'Generated at' timestamp is '01/01/0001 00:00:00'. The main data is presented in a table with three columns: 'Local Hours', 'Imbalance Smoothing Allocation H-Zone (kWh)', and 'Imbalance Smoothing Allocation L-Zone (kWh)'. The table lists hourly data from 06:00 to 21:00.

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.



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
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 ³ (n) and kWh expressed in kWh/m ³ (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
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 ³ (n) and kWh expressed in kWh/m ³ (n)

4.5.3 Ex-ante and ex-post Interconnection Point information

This report is the Nominations and Flows on Interconnection Points report, using a predefined selection of criteria in accordance with ENTSOG guidelines (European Network of Transmission System Operators for Gas).

4.5.4 Ex-ante and ex-post Domestic Exit Point information

This report is the Nominations and Flows on Domestic Exit Points report, using a predefined selection of criteria in accordance with ENTSOG guidelines (European Network of Transmission System Operators for Gas).

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			
<ul style="list-style-type: none"> ▼ Entry/Exit Transmission Model ▼ 2019 <ul style="list-style-type: none"> ▼ March <ul style="list-style-type: none"> ▼ 11/03/2019 Overview <ul style="list-style-type: none"> ▶ [Redacted] - Bill ▶ [Redacted] - Self-Bill ▼ February <ul style="list-style-type: none"> ▼ 11/02/2019 Overview <ul style="list-style-type: none"> ▶ [Redacted] - Bill ▶ [Redacted] - Self-Bill ▼ January 	6164/31254/110319	11/03/2019 - Summary				
	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

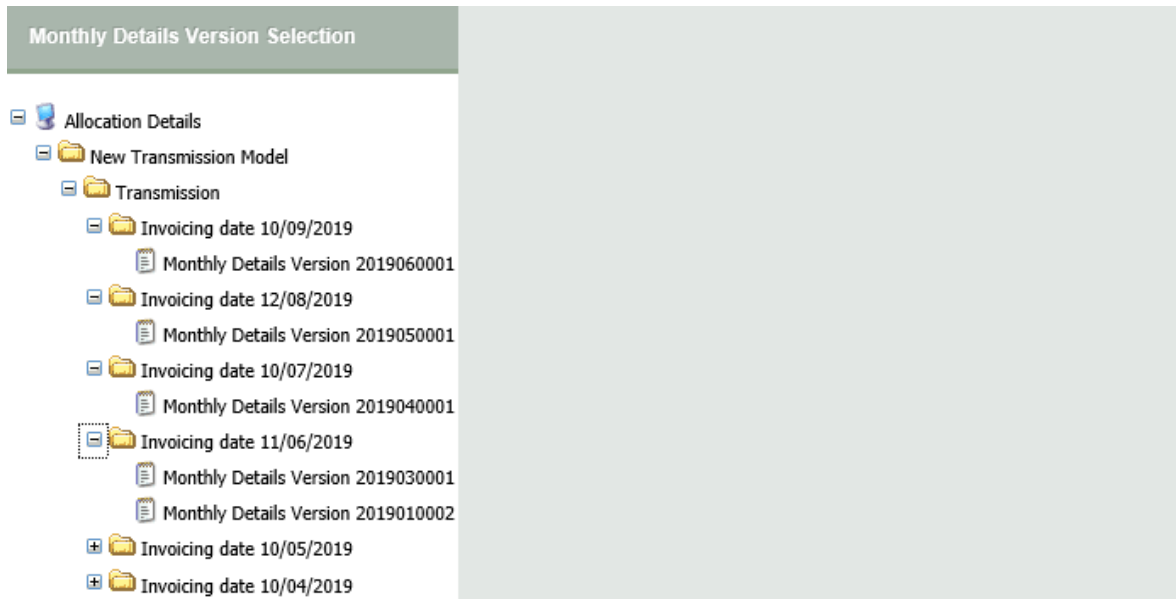
- Allocation Details
 - + New Transmission Model
 - + Transmission
- ARS Capacity Calculation
 - + Invoicing date 10/05/2016
 - + Invoicing date 11/04/2016
 - + Invoicing date 11/01/2016

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

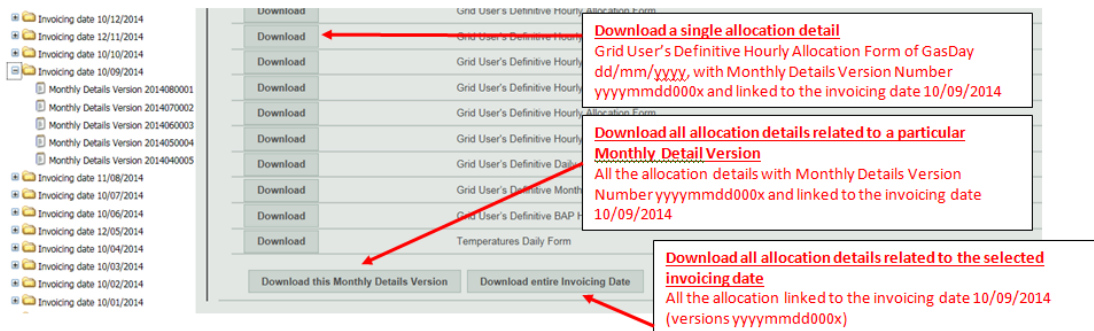
Essentially, there are two different ways in which the download features of the application can be used:

- 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

Gasday (in kWh)	ZTPH			ZTP Physical Trading Service			ZTP Notional Trading Service			ZTPL		
	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

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:

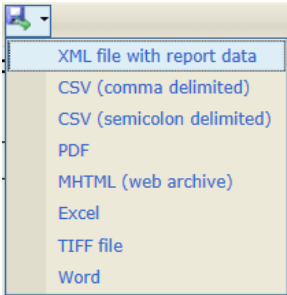
- The Imbalance Pooling Services quantity (kWh)
- The Implicit Allocations of Capacity quantity (kWh)
- The status (Forecasted and Provisional)
- The Trading details (kWh)

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)

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).

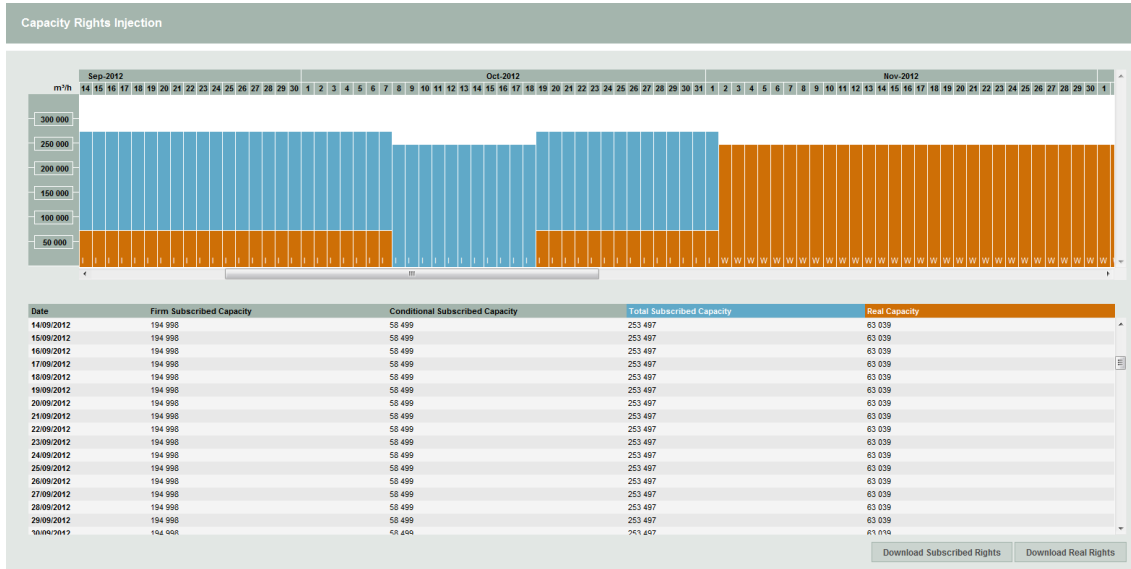
4.11 Notifications

General commercial informations.

5. Storage

5.1 Capacities and Contracts

5.1.1 Capacity Rights Injection



Injection Capacity Consult Screen

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. The values are given in m³/h and are rounded.

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:

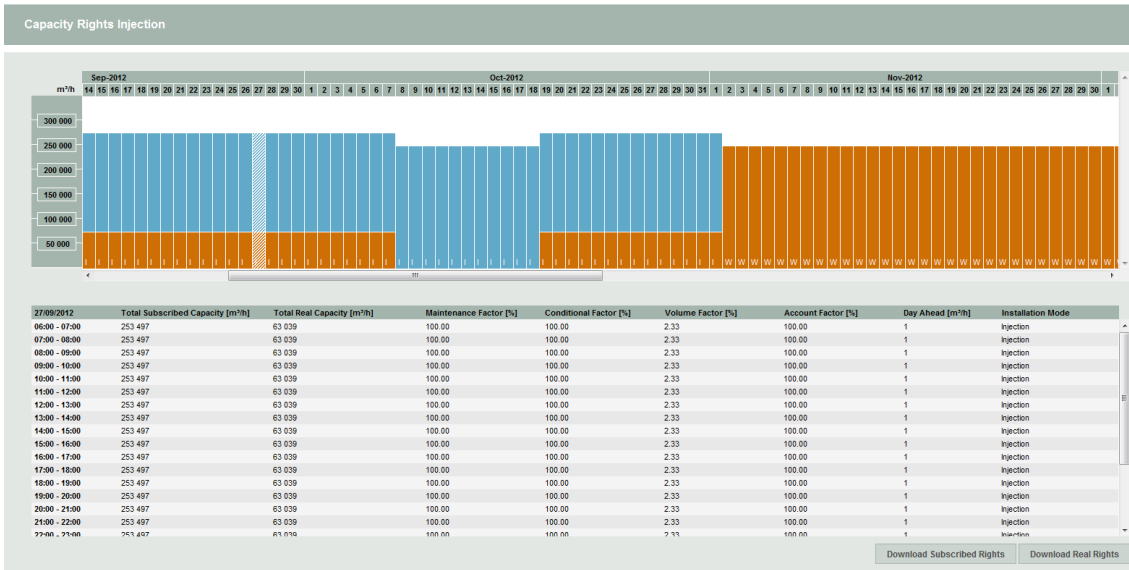
<https://www.fluxys.com/en/products-services/covering/belgium/operational-information>

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

The .xml files will provide, for the period for which the rights are available on the screen, essentially the same information as for withdrawal.

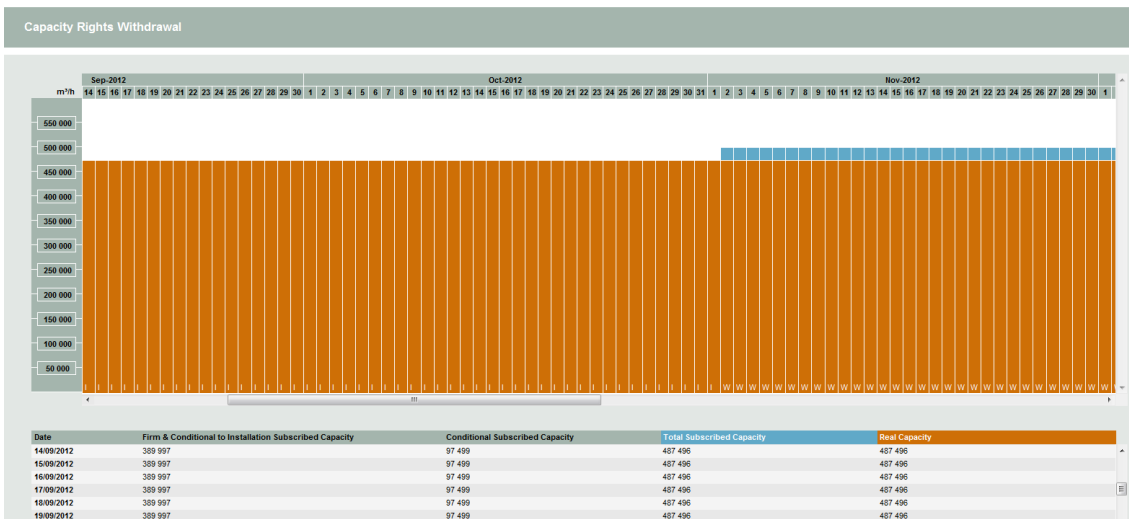
When clicking on a vertical bar representing one GasDay, the bottom half of the display changes to a detailed hourly view.

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.



Injection Capacity Consult Screen with Details (vertical bar clicked)

5.1.2 Capacity Rights Withdrawal



Withdrawal Capacity Consult Screen

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. The values are given in m³/h and are rounded.

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:

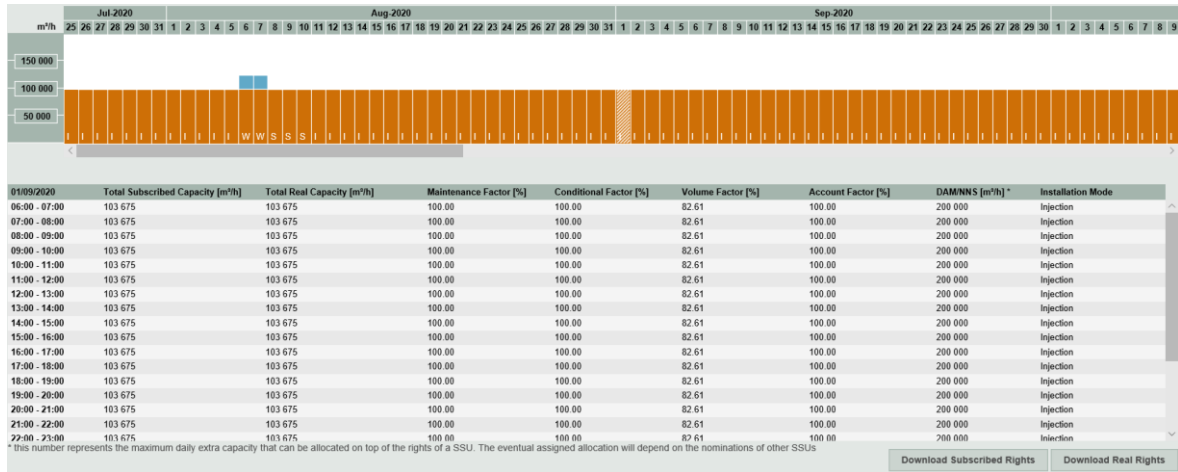
<https://www.fluxys.com/en/products-services/covering/belgium/operational-information>

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

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

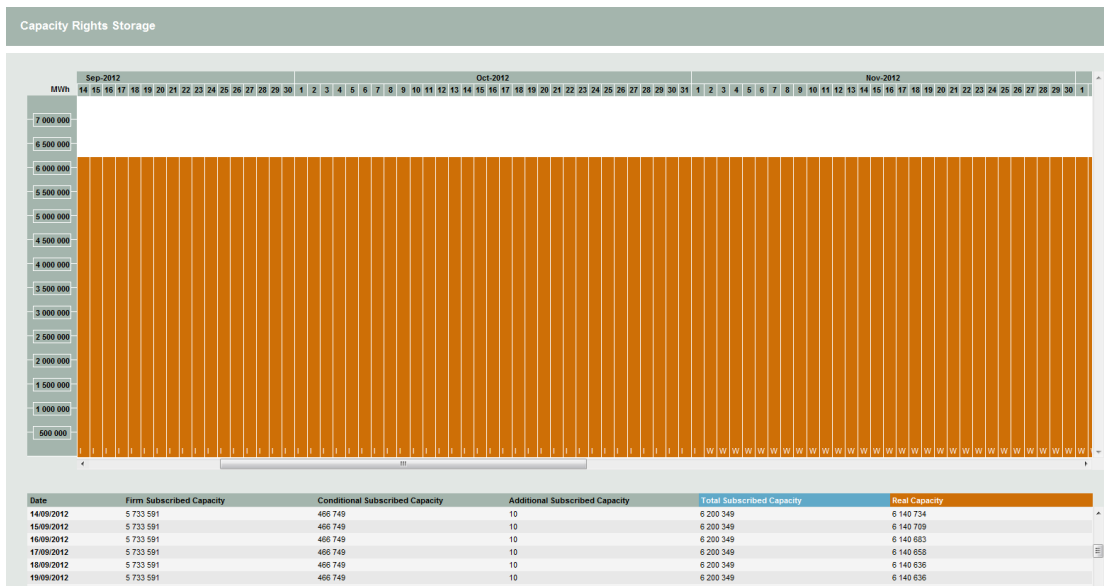
Several extra columns are also visible showing the correction factor: the maintenance, conditional, volume and account factors, the Day Ahead Market and the installation mode. Please note that the Day Ahead Market capacity is on Plant level not on storage user level.

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.

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/covering/belgium/operational-information>

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 2016		Apr 2016		May 2016		Jun 2016		Jul 2016		Aug 2016	
	Set	Set	Set	Set	Set	Set	Set	Set	Set	Set	Set	Set
Daily Values	Injection	Withdrawal	Injection	Withdrawal	Injection	Withdrawal	Injection	Withdrawal	Injection	Withdrawal	Injection	Withdrawal
1			1		1		1		1		1	
2			2		2		2		2		2	
3			3		3		3		3		3	
4			4		4		4		4		4	
5			5		5		5		5		5	
6			6		6		6		6		6	
7			7		7		7		7		7	
8			8		8		8		8		8	
9			9		9		9		9		9	
10			10		10		10		10		10	
11			11		11		11		11		11	
12			12		12		12		12		12	
13			13		13		13		13		13	
14			14		14		14		14		14	
15			15		15		15		15		15	
16			16		16		16		16		16	
17			17		17		17		17		17	
18			18		18		18		18		18	
19			19		19		19		19		19	
20			20		20		20		20		20	
21			21		21		21		21		21	
22			22		22		22		22		22	
23			23		23		23		23		23	
24			24		24		24		24		24	
25			25		25		25		25		25	
26			26		26		26		26		26	
27			27		27		27		27		27	
28			28		28		28		28		28	
29			29		29		29		29		29	
30			30		30		30		30		30	
31			31		31		31		31		31	
Monthly Totals	0	0	0	0	0	0	0	0	0	0	0	0
Netted 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/covering/belgium/operational-information>

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/covering/belgium/operational-information>

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.

5.1.7 Secondary Market report

Under this tab Storage users have the possibility to view the available capacities on the secondary market offered in an anonymous way. Storage users that want to offer capacity on this platform or interested to buy capacities have to contact the storage operator on info.storage@fluxys.com

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 1st 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 – New codification

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.

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
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
15:00 - 16:00
16:00 - 17:00
17:00 - 18:00
18:00 - 19:00

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 [m ³ (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
10:00 - 11:00	20210-N01/A/4	20210	FLUXYS LOENHOUT STORAGE	0
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 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' configuration interface. Under 'Data Publication Type', the radio button for 'Hourly Flow Measurement on Node' is selected. The 'Containing' text box contains '22222-N01'. The date range is set from '01/09/2016' to '08/12/2016' with a frequency of '1' hour and a duration of '24' hours. Under 'Format Type', 'CSV' is selected. A 'Download' button is located at the bottom left.

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/A1

The screenshot shows the 'Download' configuration interface for a metering line. Under 'Data Publication Type', the radio button for 'Hourly Flow Measurement on Metering Line' is selected. The 'Containing' text box contains '22222-N01/A1'. The date range is set from '01/09/2016' to '08/12/2016' with a frequency of '1' hour and a duration of '24' hours. Under 'Format Type', 'CSV' is selected. A 'Download' button is located at the bottom left.

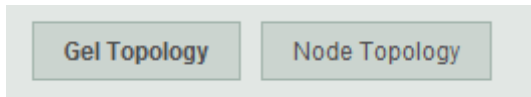
5.3.1.1.3 Automatic download by an application

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

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

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

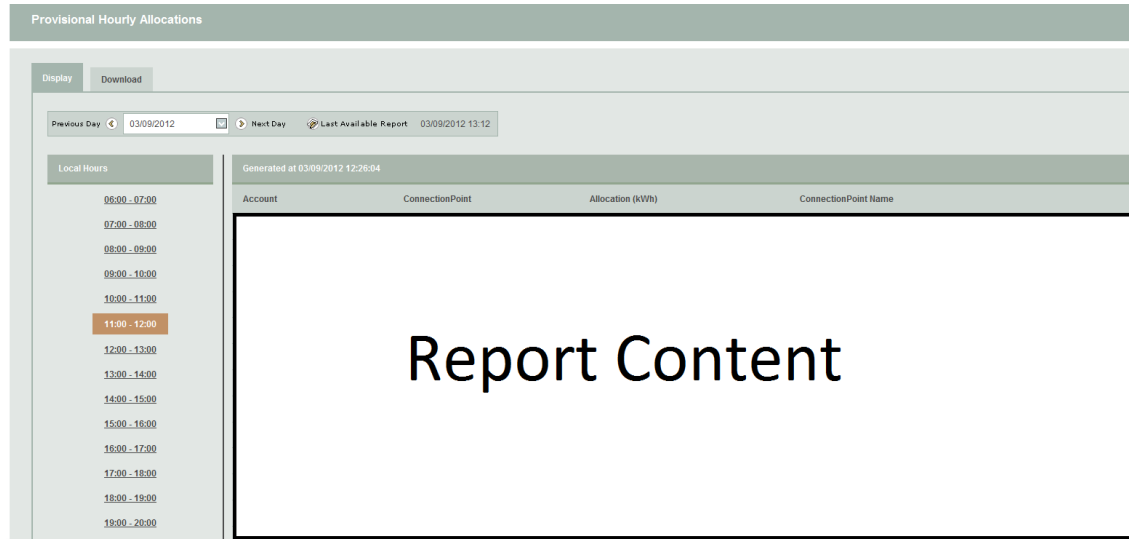
The provisional hourly allocations can be accessed in three different ways: via the display section, the download section and via a download URL.

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.

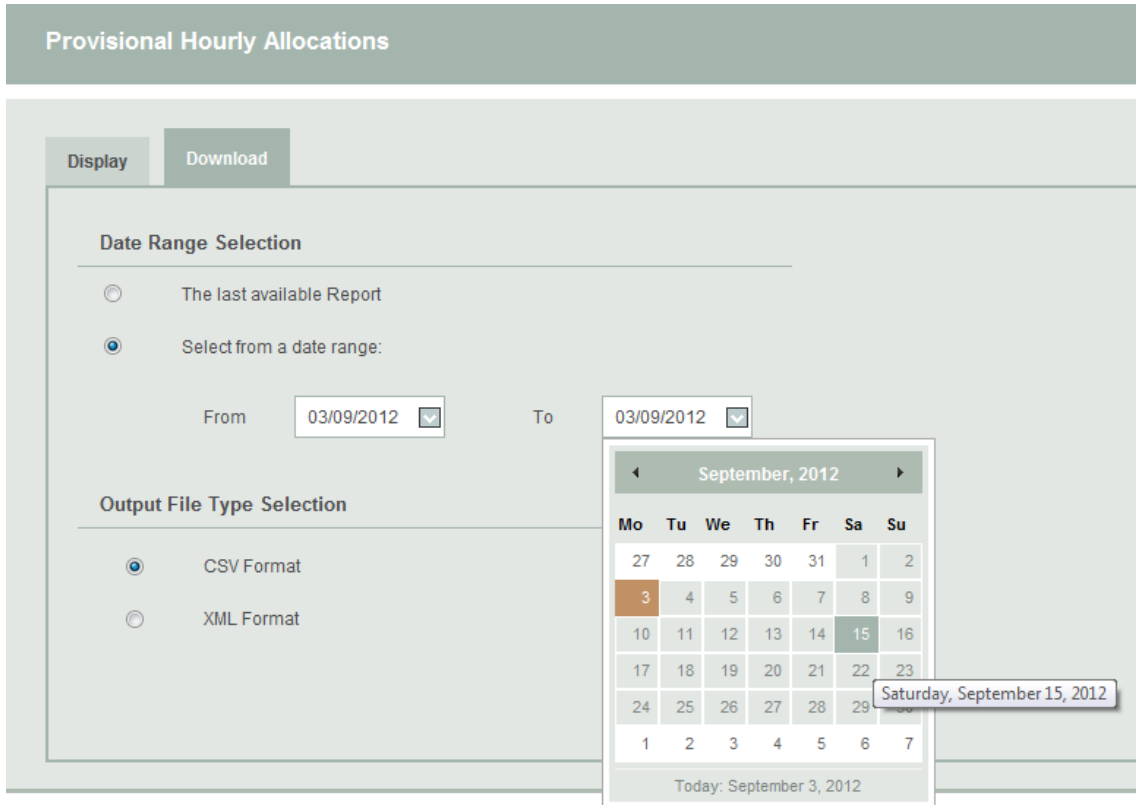
Date range selection:

- 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.

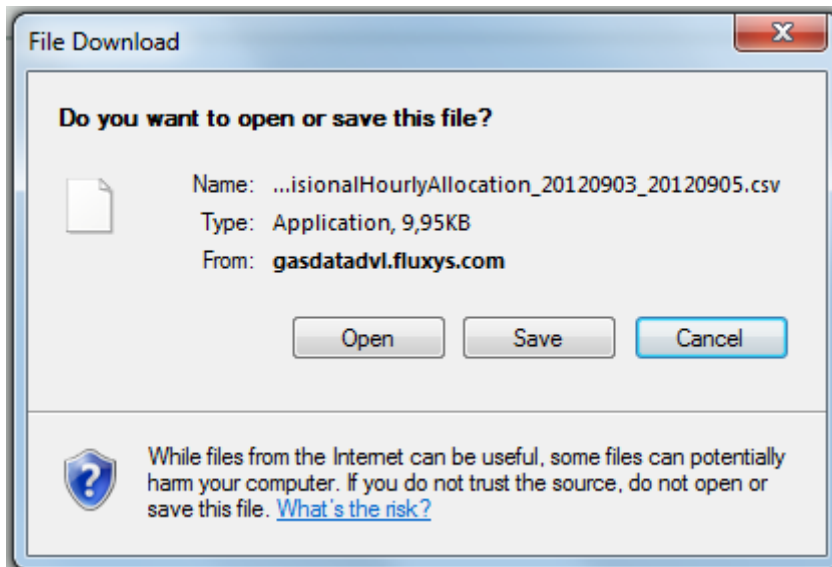
Output File Type Selection:

Three file types are available for manual download:

- CSV
- XML



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.

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			

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.

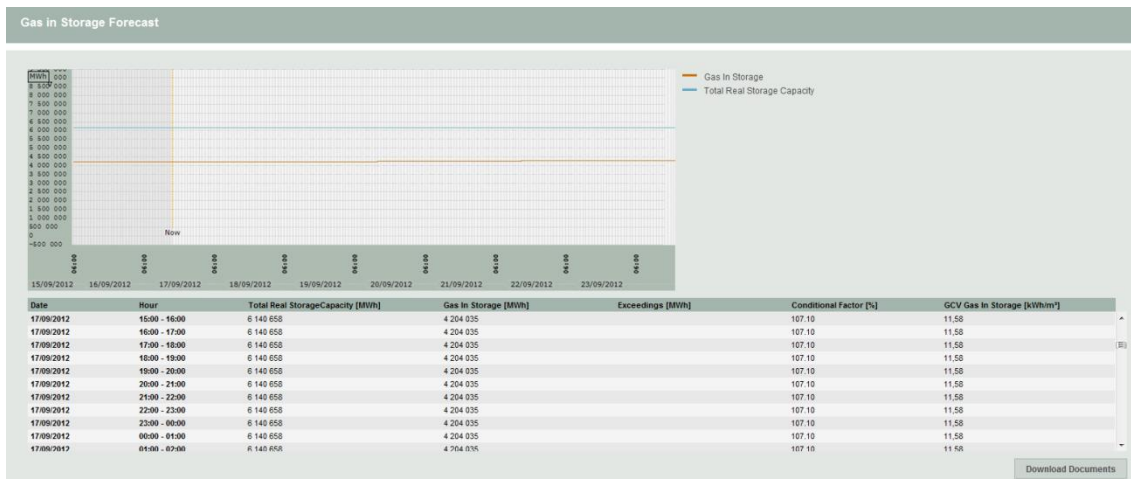
In the Gas In Storage screen, the user can specify all the parameters of the desired download.

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 **Error! Reference source not found.** for more information on downloading report information.

5.4.2.2 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 two extra columns: the conditional factor and 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

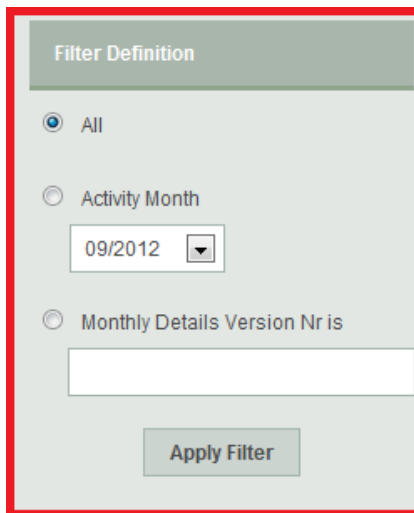
UFI	Underground Factor for Injection
CFI	Conditional Factor for Injection
MFI	Maintenance Factor for Injection
UFW	Underground Factor for Withdrawal
CFW	Conditional Factor for Withdrawal
MFW	Maintenance Factor for Withdrawal

ASC	Available Storage Capacity (= USC – CSCF – CSCC)
CSCF	Contracted Storage Capacity Firm
CSCC	Contracted Storage Capacity Conditional
USC	Usable Storage Capacity (=max(Total SBU’s;(CSCF+CSCC)) (Maximum that can be stored in current operational conditions)
GIS	Gas In Storage
WV	Working Volume (or Useful Volume as described in Access Code - Glossary) (Maximum that can be stored in optimal conditions)
DANI	Day-Ahead Nomination Injection
DANW	Day-Ahead Nomination Withdrawal
FNI	Final Nomination Injection
FNW	Final Nomination Withdrawal
AllocIN	Allocation Injection
AllocWD	Allocation Withdrawal
PF	Physical Flow
GCV	Gross Calorific Value in kWh/m ³ (n)

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.



Filter Definition

All

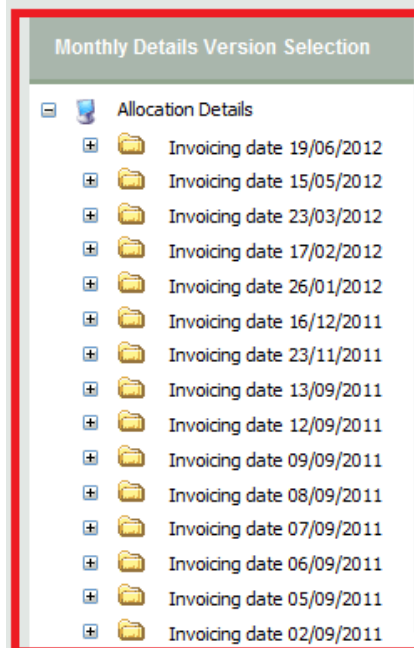
Activity Month

09/2012 ▾

Monthly Details Version Nr is

Apply Filter

Filter



Monthly Details Version Selection

[-] Allocation Details

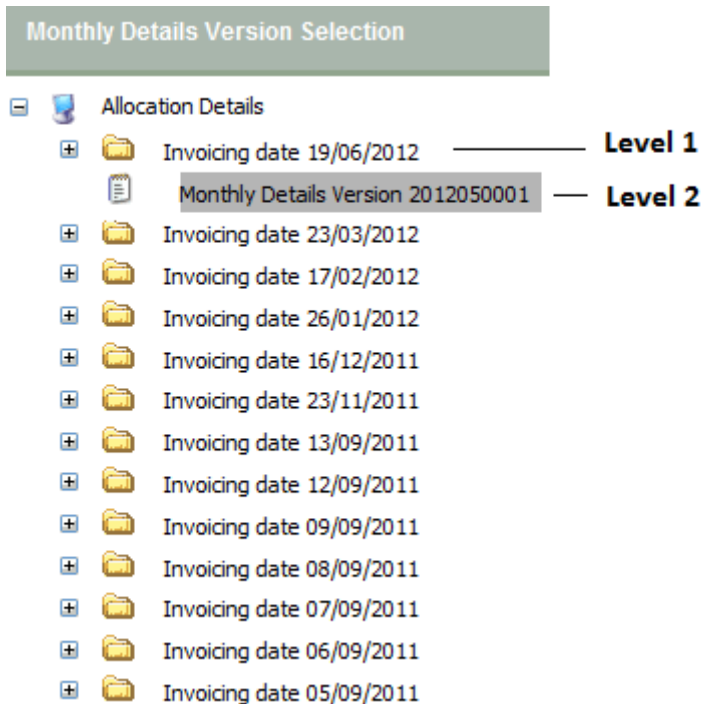
- ⊕ Invoicing date 19/06/2012
- ⊕ Invoicing date 15/05/2012
- ⊕ Invoicing date 23/03/2012
- ⊕ Invoicing date 17/02/2012
- ⊕ Invoicing date 26/01/2012
- ⊕ Invoicing date 16/12/2011
- ⊕ Invoicing date 23/11/2011
- ⊕ Invoicing date 13/09/2011
- ⊕ Invoicing date 12/09/2011
- ⊕ Invoicing date 09/09/2011
-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

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

The screenshot shows a 'Filter Definition' panel with three radio button options: 'All', 'Activity Month', and 'Monthly Details Version Nr is'. The 'Activity Month' option is selected and circled in red. Below it is a dropdown menu showing '09/2012'. The 'Monthly Details Version Nr is' option is unselected and has an empty text box below it. An 'Apply Filter' button is located at the bottom of the 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.

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

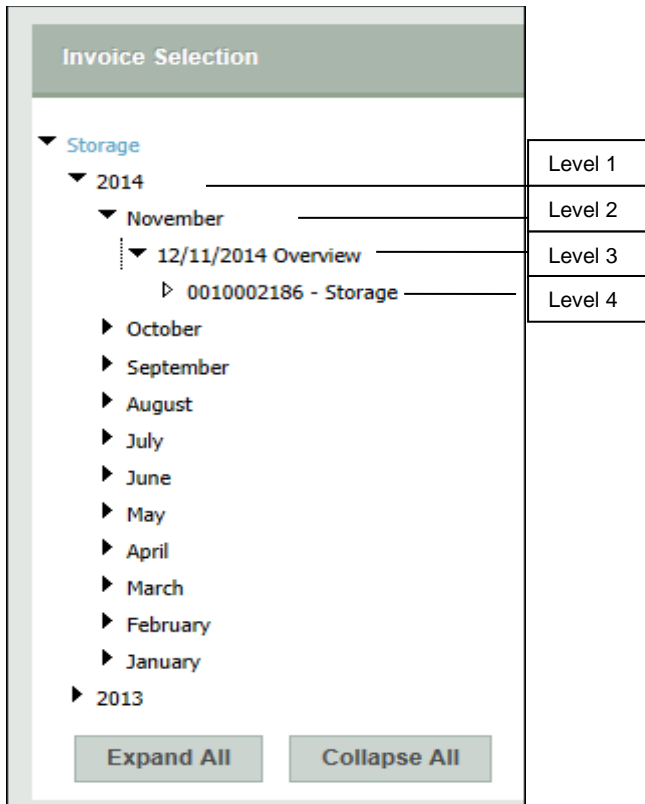
After the user has initiated a download, the File Download screen pops up giving him/her the choice to either directly open the file or save it.

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		

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 DAM-NNS 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

1. Quantities IN		
Allocated Quantities IN		2 118 000
Total Quantities IN		2 118 000

2. Quantities OUT		
Allocated Quantities OUT		21 522 000
Allocated Gas in Kind		108 030
Total Quantities OUT		21 630 030

3. Balance		
GIS at 01/10/2020 06:00		2 822 507 809
+ Quantities IN		2 118 000
- Quantities OUT		- 21 630 030
GIS at 01/11/2020 06:00		2 802 995 779
<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
<u>Delta</u>	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.			

5.7 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

Regulation on **E**nergy **M**arket **I**ntegrity and **T**ransparency

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

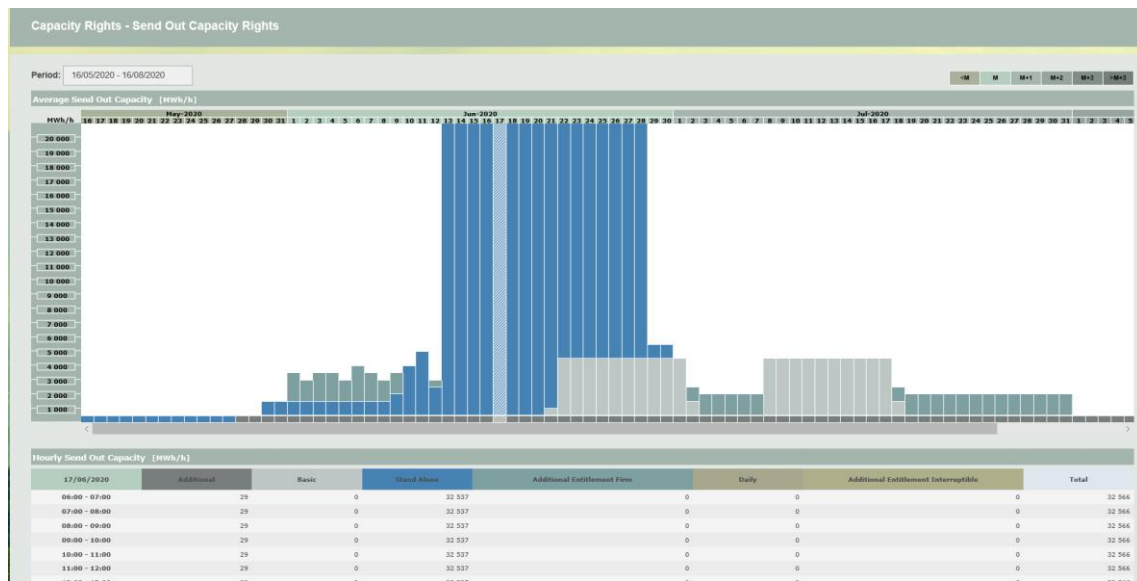
6.1.1 Available terminalling capacity

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.

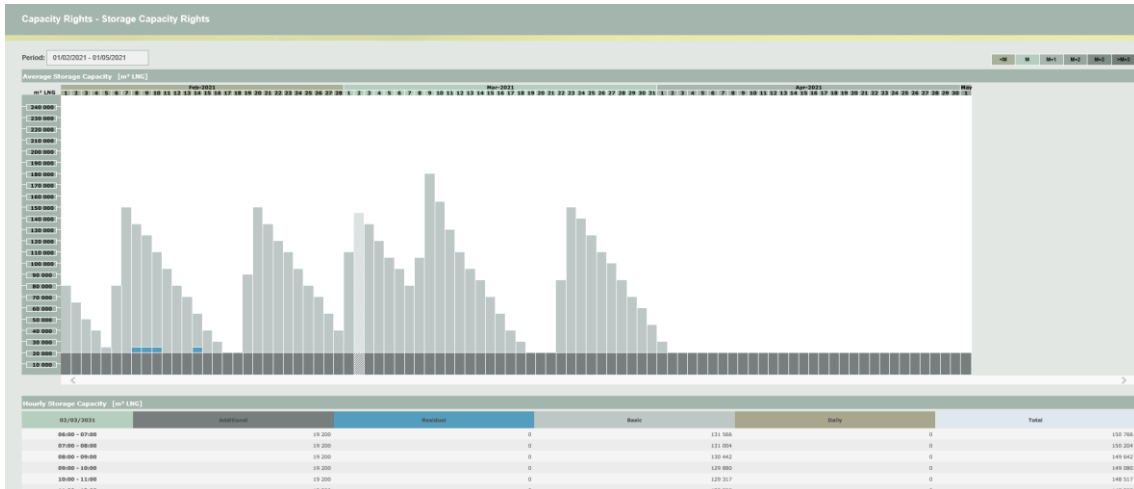
The upper section presents a daily average of the S-O capacities over the time line (horizontal axis); the major time steps are month and the minor ones are days (GasDays). Given the hourly resolution nature of the capacities, the daily average is only informational. Clicking on a given day in the upper 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.

17/06/2020	Additional	Basic	Send Ahead	Additional Entitlement Firm	Daily	Additional Entitlement Interruptible	Total
06:00 - 07:00	29	0	32 537	0	0	0	32 566
07:00 - 08:00	29	0	32 537	0	0	0	32 566
08:00 - 09:00	29	0	32 537	0	0	0	32 566
09:00 - 10:00	29	0	32 537	0	0	0	32 566
10:00 - 11:00	29	0	32 537	0	0	0	32 566
11:00 - 12:00	29	0	32 537	0	0	0	32 566
12:00 - 13:00	29	0	32 537	0	0	0	32 566
13:00 - 14:00	29	0	32 537	0	0	0	32 566
14:00 - 15:00	29	0	32 537	0	0	0	32 566
15:00 - 16:00	29	0	32 537	0	0	0	32 566
16:00 - 17:00	29	0	32 537	0	0	0	32 566
17:00 - 18:00	29	0	32 537	0	0	0	32 566
18:00 - 19:00	29	0	32 537	0	0	0	32 566
19:00 - 20:00	29	0	32 537	0	0	0	32 566
20:00 - 21:00	29	0	32 537	0	0	0	32 566
21:00 - 22:00	29	0	32 537	0	0	0	32 566
22:00 - 23:00	29	0	32 537	0	0	0	32 566
23:00 - 00:00	29	0	32 537	0	0	0	32 566
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.

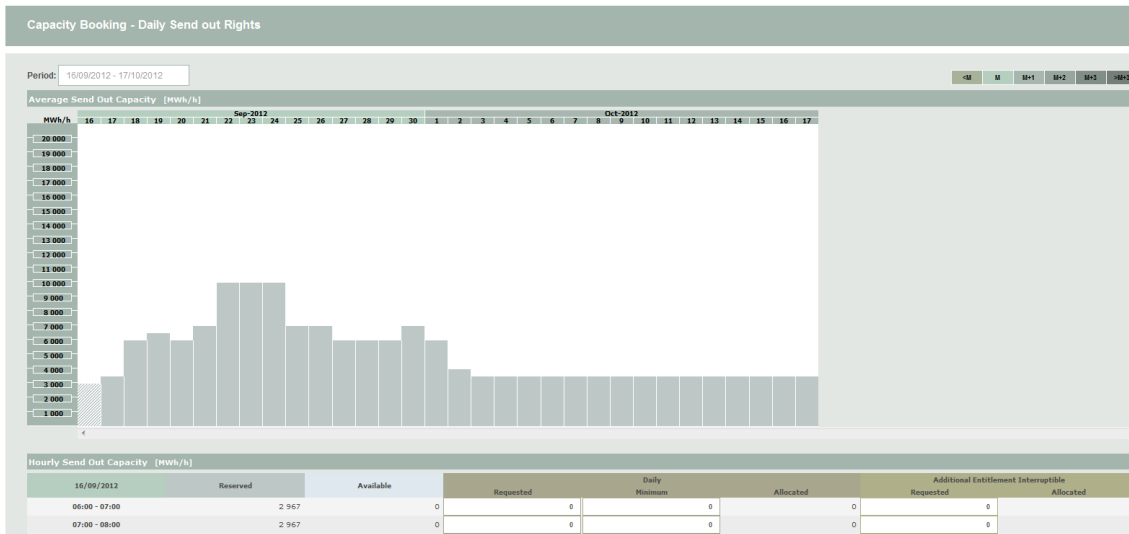
The upper section presents a daily average of the STO capacities over the time line (horizontal axis); the major time steps are month and the minor ones are days (GasDays). Given the hourly resolution nature of the capacities, the daily average is only informational. Clicking on a given day in the upper 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.

Hourly Storage Capacity [m³ LNG]	Intermediate	Intermediate	Basic	Empty	Total
06:00 - 07:00	19 200	0	131 966	0	150 766
07:00 - 08:00	19 200	0	131 904	0	150 204
08:00 - 09:00	19 200	0	130 462	0	149 662
09:00 - 10:00	19 200	0	129 886	0	149 086
10:00 - 11:00	19 200	0	129 517	0	148 517
11:00 - 12:00	19 200	0	128 755	0	147 955
12:00 - 13:00	19 200	0	128 203	0	147 393
13:00 - 14:00	19 200	0	127 631	0	146 831
14:00 - 15:00	19 200	0	127 068	0	146 268
15:00 - 16:00	19 200	0	126 506	0	145 706
16:00 - 17:00	19 200	0	125 944	0	145 144
17:00 - 18:00	19 200	0	125 382	0	144 582
18:00 - 19:00	19 200	0	124 819	0	144 019
19:00 - 20:00	19 200	0	124 257	0	143 457
20:00 - 21:00	19 200	0	123 695	0	142 895
21:00 - 22:00	19 200	0	123 133	0	142 333
22:00 - 23:00	19 200	0	122 570	0	141 770
23:00 - 00:00	19 200	0	122 008	0	141 208
00:00 - 01:00	19 200	0	121 446	0	140 646
01:00 - 02:00	19 200	0	120 884	0	140 084
02:00 - 03:00	19 200	0	120 321	0	139 521
03:00 - 04:00	19 200	0	119 759	0	138 959
04:00 - 05:00	19 200	0	119 197	0	138 397
05:00 - 06:00	19 200	0	118 635	0	137 835

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.

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

Default Value:

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.

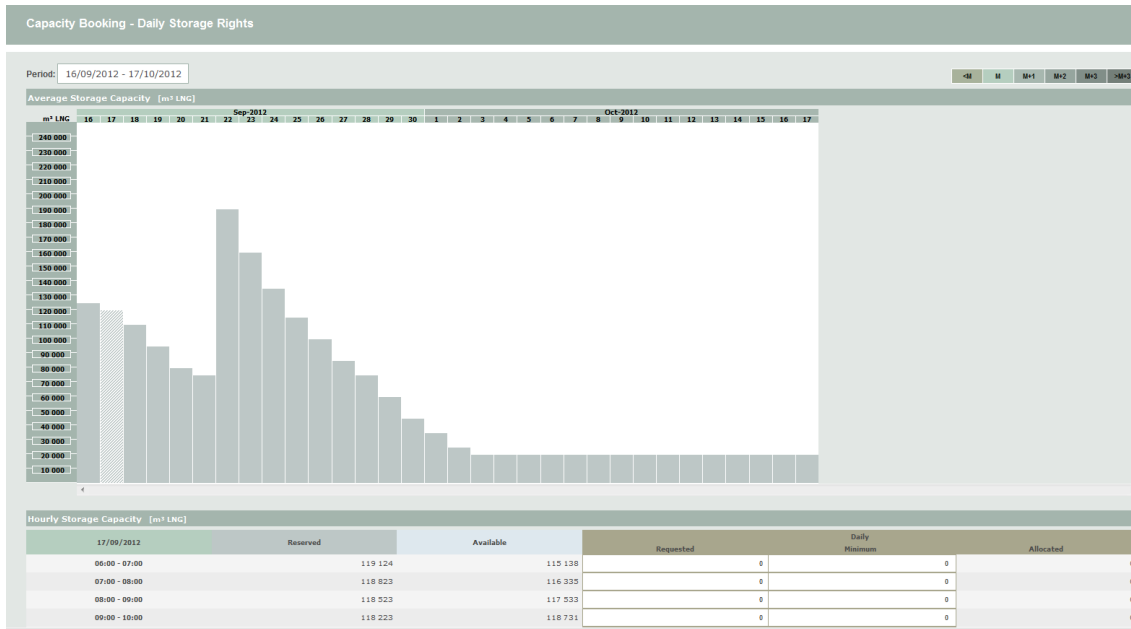
When allocated (daily for next day @ 11 am), the capacities are available in the Allocated column and the update booking button is disabled. "N/A" in this column must be interpreted as not yet allocated, while "0" is to be interpreted as zero quantity allocated. Allocated quantities are also available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

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

Default Value:

Hourly details of allocated S-O for one given day

6.1.6 Capacity Booking - Daily storage Rights



Book Daily S-O Screen

Information about storage 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 STO capacities over the time line (horizontal axis); the major time steps are months and the minor ones are days (GasDays). Given the hourly resolution 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 m³ LNG and are rounded.

Hourly Storage Capacity [m ³ LNG]									
19/09/2012	Reserved	Available	Requested	Daily Minimum	Allocated				
06:00 - 07:00	99 219	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				

Set Maximum

Default Value: 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 FCS 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 registered tariffs are updated every month on the Fluxys website [here](#).

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):

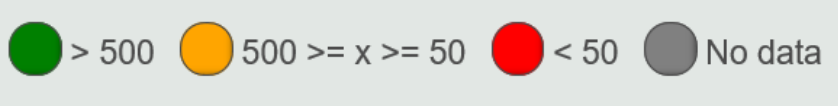
Quantity: MWh/h

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

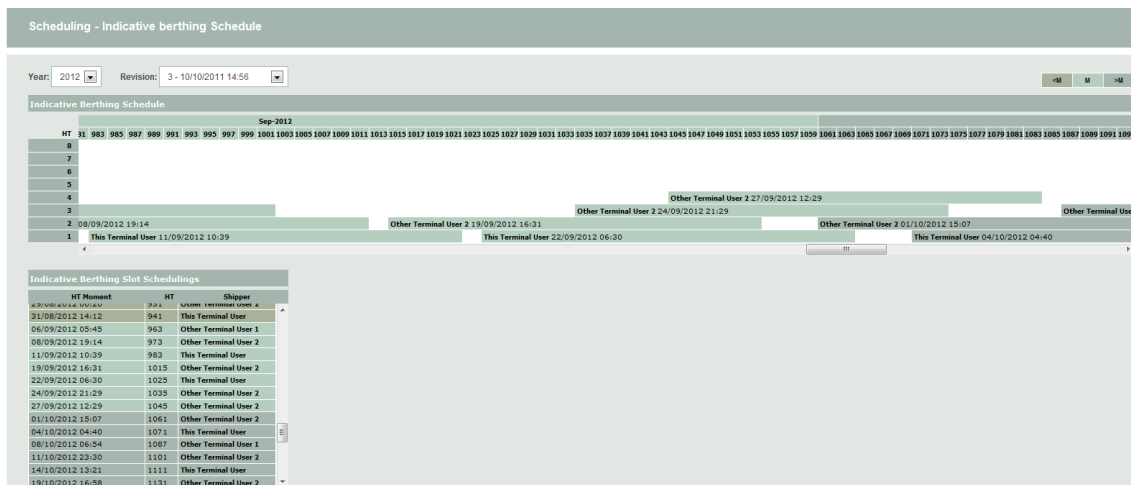
Available Monthly Slots	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Additional Slots	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Extra Slots	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Available Slots	9.34	8.72	9.34	9.03	9.34	9.03	9.34	11.52	8.45	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.

Scheduling - Indicative Berthing Schedule

Year: 2012 Revision: 3 - 10/10/2011 14:56

Indicative Berthing Schedule

Sep-2012

HT	HT Moment	HT	Shipper
8	31/08/2012 14:12	941	This Terminal User
7	06/09/2012 05:45	963	Other Terminal User 1
6	08/09/2012 19:14	973	Other Terminal User 2
5	11/09/2012 10:39	983	This Terminal User
4	19/09/2012 16:31	1015	Other Terminal User 2
3	22/09/2012 06:30	1025	This Terminal User
2	24/09/2012 21:29	1035	Other Terminal User 2
1	27/09/2012 12:29	1045	Other Terminal User 2
	01/10/2012 15:07	1061	Other Terminal User 2
	04/10/2012 04:40	1071	This Terminal User
	08/10/2012 06:54	1087	Other Terminal User 1
	11/10/2012 23:30	1101	Other Terminal User 2
	14/10/2012 13:21	1111	This Terminal User
	19/10/2012 16:58	1131	Other Terminal User 2

Slot Details

High Tide Moment:	22/09/2012 06:30
High Tide:	1025
Shipper:	This Terminal User
Ship:	My Ship

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.

Scheduling - Indicative Berthing Schedule

Year: 2012 Revision: 3 - 10/10/2011 14:56

Indicative Berthing Schedule

Sep-2012

HT	HT Moment	HT	Shipper
8	31/08/2012 14:12	941	This Terminal User
7	06/09/2012 05:45	963	Other Terminal User 1
6	08/09/2012 19:14	973	Other Terminal User 2
5	11/09/2012 10:39	983	This Terminal User
4	19/09/2012 16:31	1015	Other Terminal User 2
3	22/09/2012 06:30	1025	This Terminal User
2	24/09/2012 21:29	1035	Other Terminal User 2
1	27/09/2012 12:29	1045	Other Terminal User 2
	01/10/2012 15:07	1061	Other Terminal User 2
	04/10/2012 04:40	1071	This Terminal User
	08/10/2012 06:54	1087	Other Terminal User 1
	11/10/2012 23:30	1101	Other Terminal User 2
	14/10/2012 13:21	1111	This Terminal User
	19/10/2012 16:58	1131	Other Terminal User 2

Slot Details

High Tide Moment:	19/09/2012 16:31
High Tide:	1015
Shipper:	Other Terminal User 2
Ship:	N/A

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

Scheduling - Rolling Berthing Schedule

Year: 2012 Revision: 45 - 31/08/2012 15:31

Rolling Berthing Schedule

Sep-2012

HT	HT Moment	HT	Shipper
8	15/08/2012 13:11	879	Other Terminal User 2
7	18/08/2012 02:38	889	Other Terminal User 1
6	20/08/2012 16:10	899	This Terminal User
5	23/08/2012 06:02	909	Other Terminal User 2
4	25/08/2012 20:20	919	Other Terminal User 2
3	29/08/2012 00:20	931	Other Terminal User 2
2	31/08/2012 14:12	941	This Terminal User
1	03/09/2012 03:51	951	Other Terminal User 3
	06/09/2012 05:45	963	Other Terminal User 1
	08/09/2012 19:14	973	Other Terminal User 2
	11/09/2012 10:39	983	This Terminal User
	19/09/2012 16:31	1015	Other Terminal User 2
	22/09/2012 06:30	1025	This Terminal User
	24/09/2012 21:29	1035	Other Terminal User 2

Download Documents

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.

The screenshot displays the RBS interface for the year 2012, revision 45-31/08/2012 15:31. The top section shows a timeline for September 2012 with high tides (HT) numbered 1 through 109. Below the timeline, a table lists 'Rolling Berthing Slot Scheduling' with columns for HT Moment, HT, and Shipper. The selected slot is HT 1025 on 22/09/2012 at 06:30, shipped by 'This Terminal User'. The 'Slot Details' panel on the right provides specific information for this slot:

Category	Value
LNG Transfer	
Volume Quantity	140 395 m³ LNG
Energy Quantity	945 000 000 kWh
Gross Heating Value	6 731 kWh/m³ LNG
Basic Send Out Rights	
Capacity	4 200 MW/h
Duration	249 GasHours
Basic Storage Rights	
Capacity	140 000 m³ LNG
Duration	249 GasHours

A 'Download Documents' button is located at the bottom right of the interface.

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.

This screenshot shows the RBS interface with the same timeline and scheduling table as the previous image. The selected slot is HT 1015 on 19/09/2012 at 16:31, shipped by 'Other Terminal User 2'. The 'Slot Details' panel on the right shows the following information:

Category	Value
LNG Transfer	
Volume Quantity	N/A m³ LNG
Energy Quantity	N/A kWh
Gross Heating Value	N/A kWh/m³ LNG
Basic Send Out Rights	
Capacity	N/A MW/h
Duration	N/A GasHours
Basic Storage Rights	
Capacity	N/A m³ LNG
Duration	N/A GasHours

The 'Download Documents' button is also present at the bottom right.

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	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
132	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	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
132	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 Tendered	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 Gateway In Position	22/09/2012 04:45	Expected
NORTU Tendered	22/09/2012 05:45	Expected
Arms Connected	22/09/2012 06:15	Expected
NORTU Accepted	22/09/2012 07:15	Expected
Cooldown Deckpiping / LNG Arms Started	22/09/2012 07:35	Expected
Cooldown 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
Vaporizer Arms Disconnected	23/09/2012 01:20	Expected
Shore Gateway 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 type="text"/>	*
	<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 type="text"/>	*
		
Validation	<input type="text"/>	*
	<small>Enter the characters from the image above</small>	
<input type="button" value="Submit"/>		

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/products-services/lng-ship-approval-procedure>

6.3.4 Nautical management measures

General nautical rules applicable for LNG vessels within the Zeebrugge port area.

Link to Fluxys site:

http://www.fluxys.com/belgium/en/Services/LNGTerminalling/ShipApprovalProcedure/~~/media/files/services/lng%20terminalling/shipapprovalprocedure/nautical_management_measures%20pdf.ashx

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: Past Current Planned

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.



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 – New codification

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.

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
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
15:00 - 16:00
16:00 - 17:00
17:00 - 18:00
18:00 - 19:00

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 [m ³ (n)]
<u>06:00 - 07:00</u>	04100-N02/A/1	146	TERMINAL ZEEBRUGGE 1	41 755
<u>07:00 - 08:00</u>	04100-N02/A/2	146	TERMINAL ZEEBRUGGE 1	768
<u>08:00 - 09:00</u>	04100-N02/A/3	146	TERMINAL ZEEBRUGGE 1	147
<u>09:00 - 10:00</u>	04100-N02/A/4	146	TERMINAL ZEEBRUGGE 1	39 505
10:00 - 11:00	04100-N02/B/1	146	TERMINAL ZEEBRUGGE 1	41 695
<u>11:00 - 12:00</u>	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 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 with two tabs: 'Display' and 'Download'. The 'Download' tab is active. Under 'Data Publication Type', the first radio button 'Hourly Flow Measurement on Node' is selected and highlighted with a red box. Below it, a text input field labeled 'Containing' has '22222-N01' entered and is also highlighted with a red box. To the right of this field is the text 'in Internal Codification Number or Internal Business Identifier'. Below the input field, a date range is specified: 'From' '01/09/2016' (with a calendar icon), 'hour' '1' (with a dropdown arrow), 'to' '08/12/2016' (with a calendar icon), 'hour' '24' (with a dropdown arrow). This entire date and time selection area is highlighted with a red box. Under 'Format Type', the 'CSV' radio button is selected. At the bottom left, there is a 'Download' button.

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

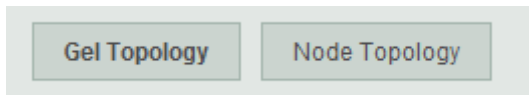
6.5.1.1.3 Automatic download by an application

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 ³ (n)

The Gas in Storage is either expressed in Energy (kWh) or in volume of LNG (m³[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

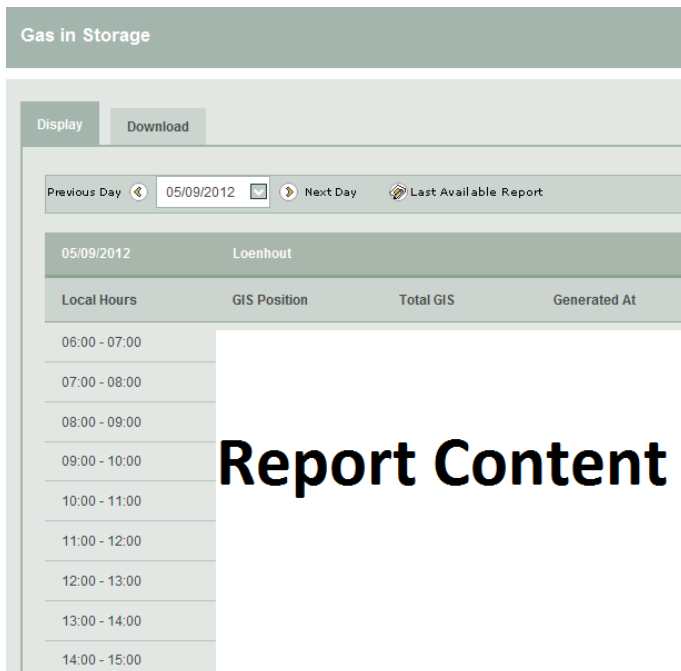
The Gas In Storage screen opens by default the last available GIS Report.

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			
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			

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.

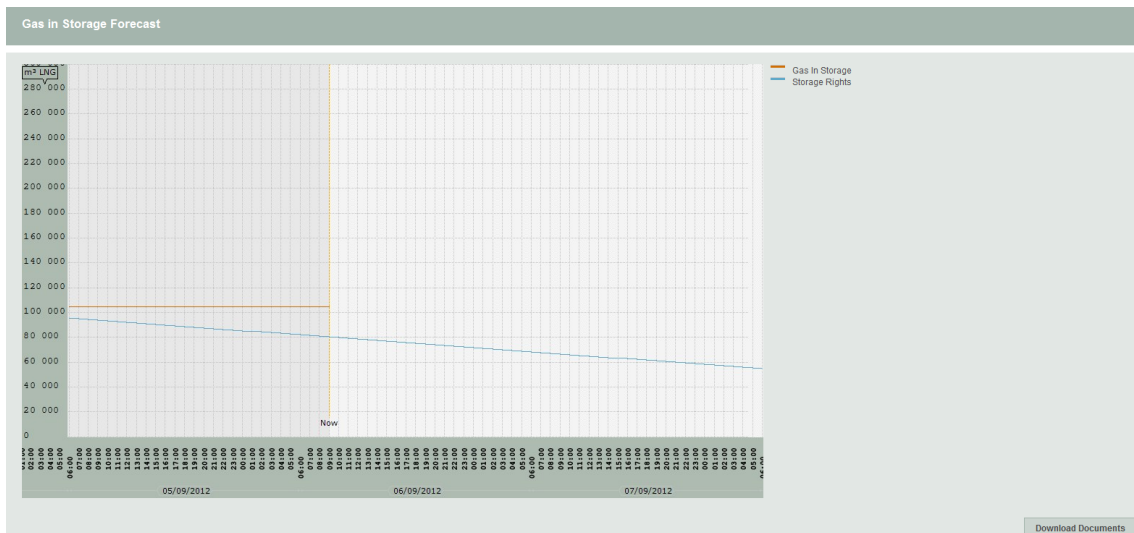
The download procedure for the GIS Reports follows the same rules and principles as the download procedure of the Provisional Hourly Allocations. Therefore, we refer to paragraph **Error! Reference source not found.** for more information on downloading report information.

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

6.6.2.2 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.

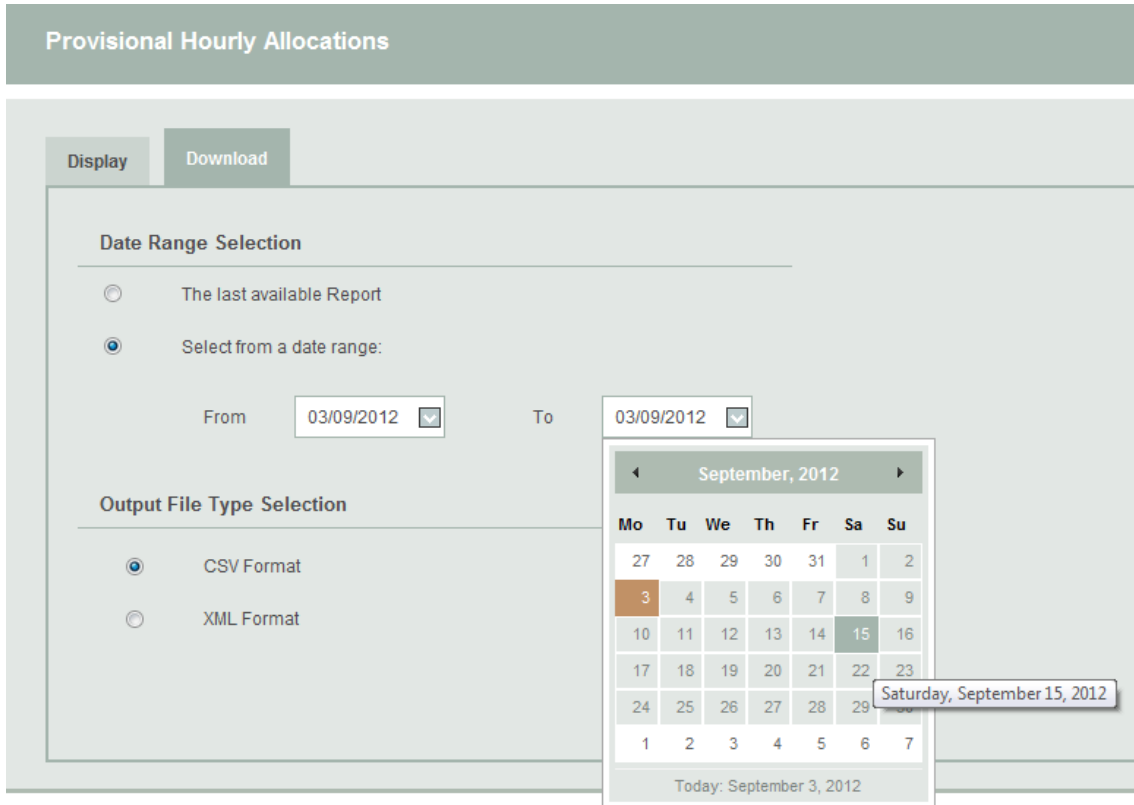
Date range selection:

- 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.

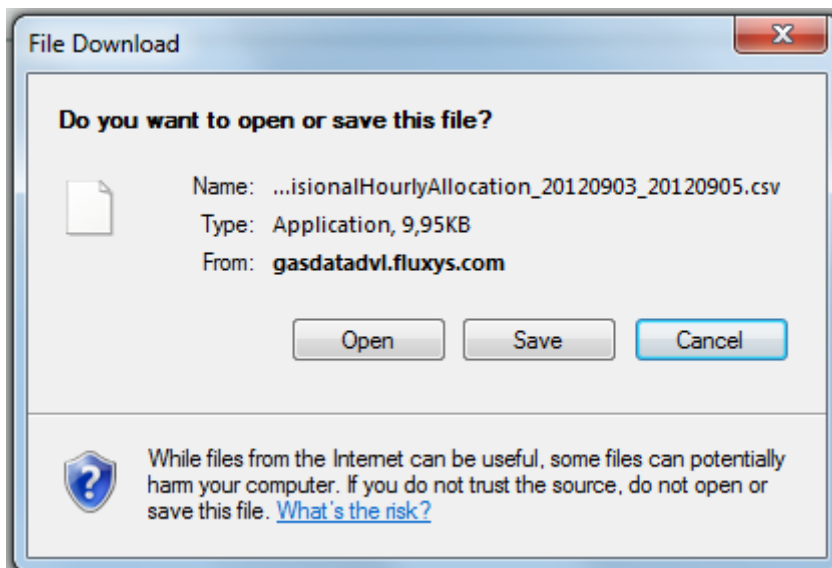
Output File Type Selection:

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.



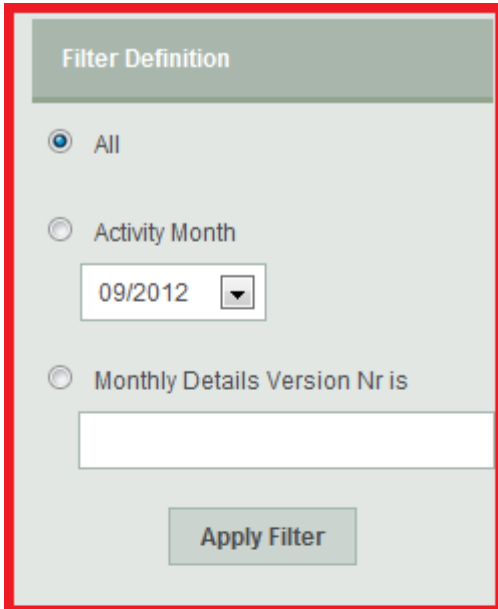
6.6.4.2.3 Automatic download URL

See chapter 7.

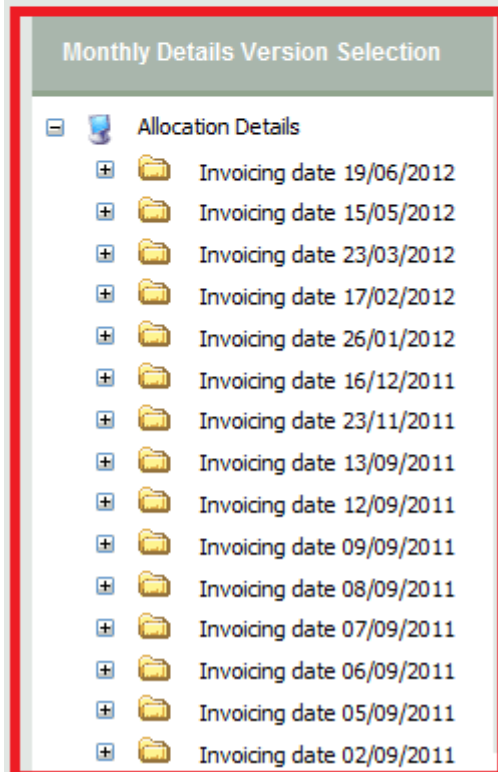
6.7 Invoicing

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

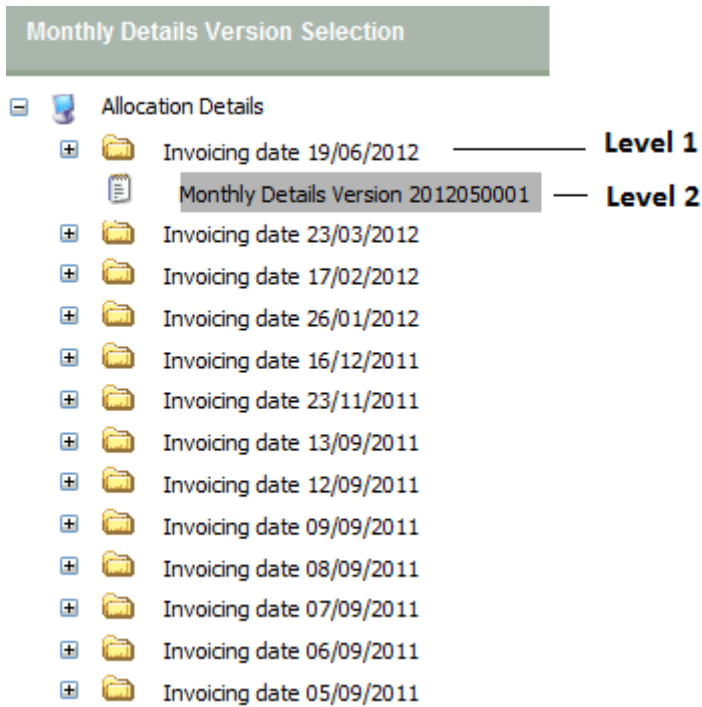


Navigation Tree

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.

Download	Grid User's Definitive Hourly Allocation Form	Download a single allocation detail	12/02/2012
Download	Grid User's Definitive Hourly Allocation Form	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	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	Download all allocation details related to a particular Monthly Details Versoin	16/02/2012
Download	Grid User's Definitive Hourly Allocation Form	All the allocation details with Monthly Details Version Number 2012020001 and linked to the invoicing date 31/03/2012	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	Download all allocation details related to the selected invoicing date	01/02/2012
Download	Temperatures Daily Form	All the allocation details linked to the invoicing date 31/03/2012 (versions 2012020001, 2012010002 and 2011120003)	01/02/2012
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.

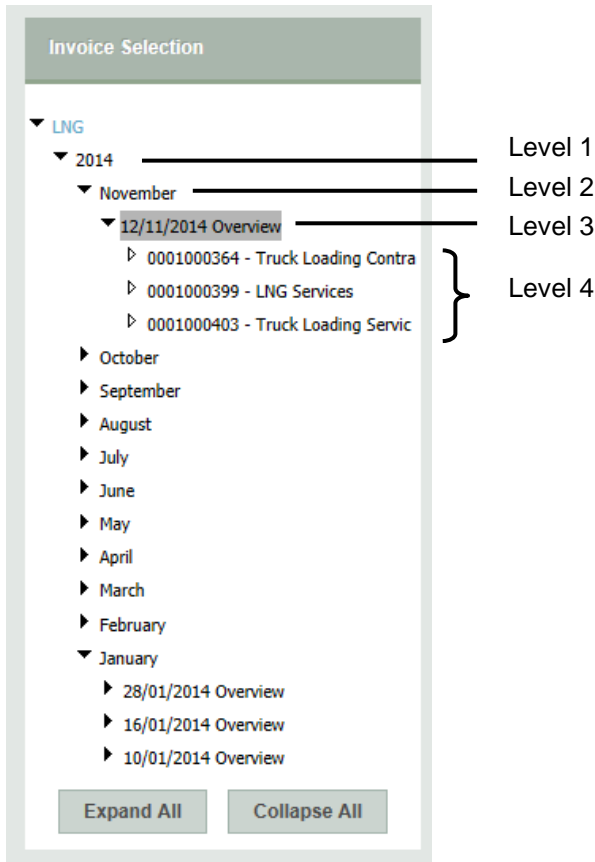
After the user has initiated a download, the File Download screen pops up giving him/her the choice to either directly open the file or save it.

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).

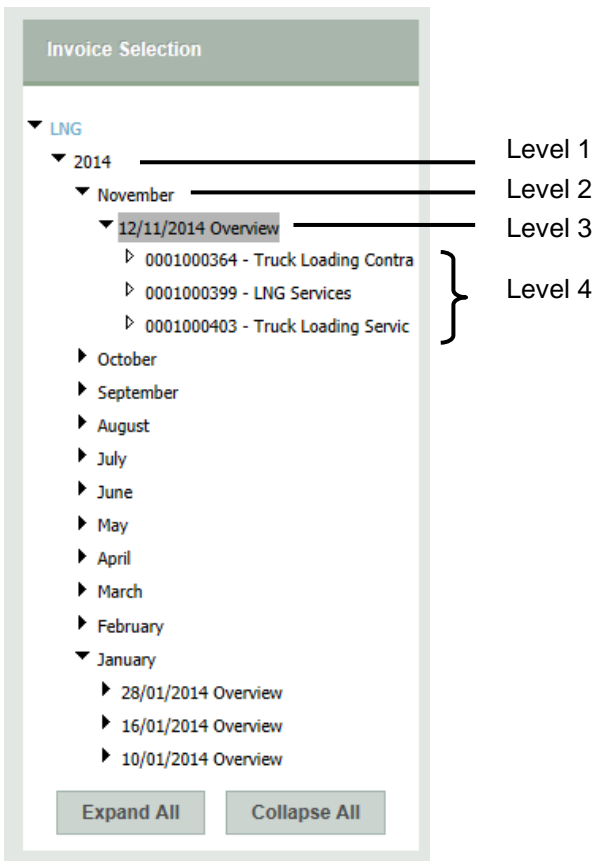
Document nr	Description	Invoice	Invoice Appendix	Invoice Appendix Xml
0001000364	12/11/2014 - Truck Loading Contra			
0001000399	12/11/2014 - LNG Services			
0001000403	12/11/2014 - Truck Loading Servic			

6.7.3 Other invoices – Fluxys LNG

This section of EDP gives access to private data concerning invoices and appendixes 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


1. Quantities IN		
LNG Ship Unloading		
ship 1	xx/xx/xxxx	1 110 867 000
ship 2	xx/xx/xxxx	188 483 000
Allocated Quantities IN		0
Allocated Fuelgas IN		0
Distribution of Monthly Energy Balance :		
xxx-xxxx		- 1 816 280
xxx-xxxx		- 2 584 744
Distribution of Difference Deemed vs Allocated Fuel Gas :		
xxx-xxxx		0
Total Quantities IN		1 292 728 995

2. Quantities OUT		
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
Total Quantities OUT		2 219 648 000

3. Balance	
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 - xxxxx			
			
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	65.246.269	kWh	
Your validated GIS account	65.246.269	kWh	
<u>Delta</u>	0	kWh	
This quantity will be synchronized on xx/xx/xxxx at gashour 06:00-07:00 GH1			

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

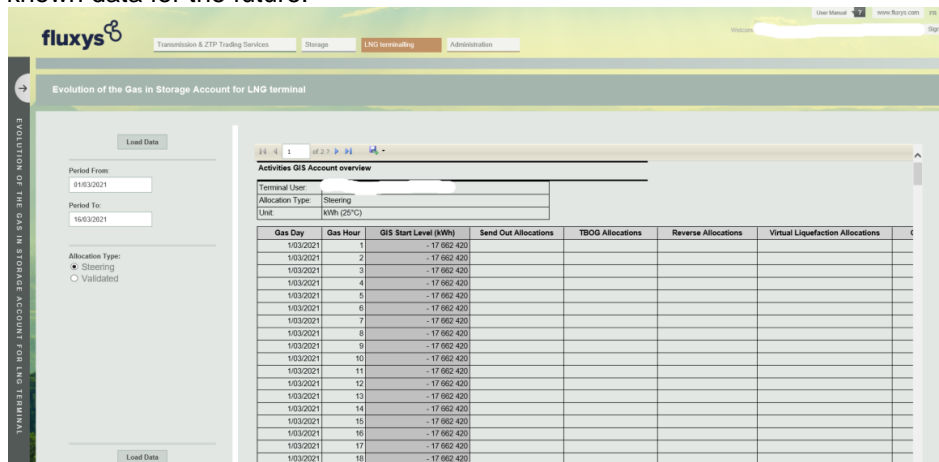
Distribution of the Monthly Fuelgas Balance and the Monthly Energy Balance at the Zeebrugge LNG Terminal.

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			
			
The following quantities will be transferred to your Gas in Storage account :			
Monthly Energy Balance	0	kWh	
Monthly Fuelgas Balance	0	kWh	
This quantity will be transferred on xx/xx/xxxx at gashour 06:00-07:00 (GH1)			

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.



Gas Day	Gas Hour	GIS Start Level (kWh)	Send Out Allocations	TBOG Allocations	Reverse Allocations	Virtual Liquefaction 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.

6.8 Regulatory and contractual documents

6.8.1 Terminalling model

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

6.8.2 Terminalling services offer

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

6.8.3 Tariffs

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

6.8.4 Specific requirements at the LNG Terminal Delivery point

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

6.8.5 Specific requirement at the LNG Terminal Redelivery point

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

6.9 Truck planning for shippers

6.9.1 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.

6.9.2 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.

6.9.3 Truck Manager

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

6.10 Truck planning for trucking companies

6.10.1 Contract overview

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

6.10.2 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.

6.10.3 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.

6.10.4 Truck Manager

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

6.11 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).

6.12 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:

<https://www.fluxys.com/en/products-services/supplying-europe/belgium/operational-information>

Section: Electronic Data Platform -> Comply with some technical requirements : For TSO and for Balancing Operator

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

<https://www.fluxys.com/en/products-services/supplying-europe/belgium/operational-information>