
HEnEx's Natural Gas Trading Platform Mock Sessions

HEnEx OASIS Trading System

Guidelines & Scenarios for Testing Period

Athens, November 2021

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1. Introduction

The Hellenic Energy Exchange (HEEx) in association with EnEx Clearing House (EnExClear) is organising mock sessions in the testing systems (UAT) for all interested parties to become familiar with the new Natural Gas Trading Platform. The testing period is scheduled to start on **Wednesday 17th of November**. The purpose of these mock sessions is to verify the proper functionality of the IT systems supporting the new market and the relevant procedures by simulating normal trading and clearing activities. Mock Sessions will provide to all parties the appropriate level of familiarization and will enable their smooth participation in the production environment. General Mock Sessions will follow in the production systems two days before the GO-Live Date.

In this document, **Trading Participants** could find guidelines and a set of scenarios that will support users during the Testing Period, indicatively:

- General Guidelines concerning the connectivity procedure to the testing environment via XNet Trader web application.
- Market Data & Market Schedule
- Mock Scenarios recommended for Trading Participants

Active participation of all involved parties is crucial for testing the trading and clearing systems that will support the operation of the Natural Gas Trading Platform.

2. HEnEx OASIS Trading System

The HEnEx OASIS supports, among else, the HEnEx's Natural Gas Trading Platform, and specifically Daily Products with a Gas Day Delivery Period, which consists of:

1. Within Day Contracts for the current Gas Day
2. Day Ahead Contracts for the next three Gas Days.

The Trading Participants, should install:

1. the latest version of XNet Trader web application in UAT Environment that supports the Natural Gas Trading Platform

The main HEnEx OASIS functionalities that will be tested are the following:

1. Orders' entry through XNet Trader
2. Trading Limits.
3. Credit Limits.
4. Order entry using as unique key the **Latin alphabet OASIS product Symbol** (Series Name, e.g. GRGD220301 refers to the GAS Day Product delivered starting on 01 March 2022).
5. Automatic Volatility Interruption Mechanism (AVIM) and shifting to Trading Method 2 (Call Auction).

The supported peripheral subsystems functionalities will be tested accordingly.

3. General Guidelines

3.1. HEnEx’s Natural Gas Trading Platform

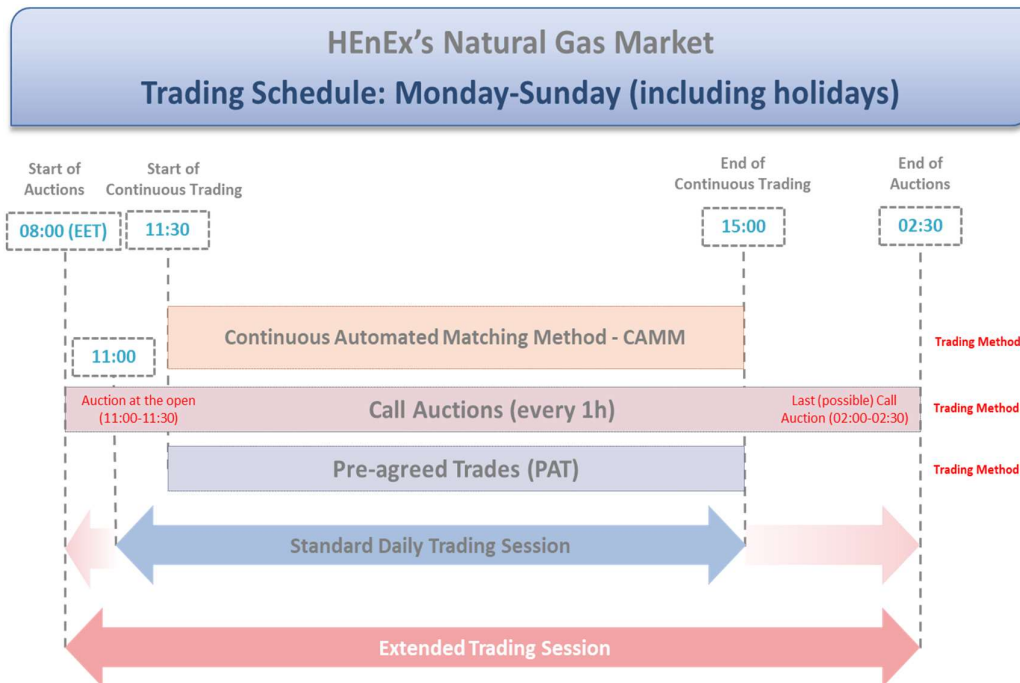
The relevant parameterization of HEnEx’s Natural Gas Trading Platform in OASIS is presented in the table below:

Product Type	Venue	Exchange	Market Id	Market Category
Other	HGSP	NGAS	5	Natural Gas Spot Market

3.2. Mock Sessions Systems Schedule

3.2.1. Trading System Schedule

HEnEx’s Natural Gas Trading Platform schedule for the **UAT Environment** is presented in the following scheme (in EET zone):



There will be available three different Trading Methods: the main method “Trading Method 1: Continuous Trading”, “Trading Method 2: Call Auction” and “Trading Method 3: Pre-agreed Trades”.

3.3. Access to HEnEx OASIS

Access to the HEnEx OASIS in testing environment will be granted to the interested parties that have submitted the relevant form “G1-5_Connection to the Gas Trading System Form v1.1”, and the choice of UAT environment selected.

The OASIS Member ID (which has the form “XX”) that has been configured in the UAT environment will be the same in the Production System as well.

3.3.1. Access UAT XNet Trader

Important note:

In case your company is also a Derivatives Market Trading Member of HEnEx and you have already installed the XNet Trader for UAT, there is no need to re-install the application.

In case you have never installed the application before, please install the application and follow the installation steps as provided. After installing it, a shortcut of the XNet Trader application will be created on your desktop.

Windows Users:

<http://xnettrader.inbroker.com/deploy/RTYUIOP/XNetTrader-ATHEXUAT-installer.exe>,

Linux Users:

<http://xnettrader.inbroker.com/deploy/RTYUIOP/XNetTrader-ATHEXUAT-installer.run>,

MAC Users:

<http://xnettrader.inbroker.com/deploy/RTYUIOP/XNetTrader-ATHEXUAT-installer.dmg>

Please note the following regarding the installation and log in to UAT XnetTrader:

- 1) Client Authentication Certificate for the Natural Gas Trading System is not currently required **for the UAT environment**. However It is a **prerequisite for the production environment** to activate the HEnEx’s Client Authentication Certificate as provided by [ATHEX - Digital Certificates Services \(PKI-CA\)](#) and the completion of the relevant installation procedure, as described below:
 - The P12 certificate sent by ATHEX PKI CA Service, should be copied to the path that the XNet Trader has been installed, in the folder “**certs**”, (e.g. C:\Program Files (x86)\XNetTraders-ATHEX\certs)
 - Once the application opens, the **Certificate** field will display the certificate that it has saved and the user should type the **Password** of the Certificate in the corresponding field as shown in the following picture:



- 2) In order to login, each of the declared users should use the following credentials:

- **Username:** declared e-mail of the user

- **Password:** the password created using the following procedure:

Type the username and the fill in the certificate information as described above and press the “Create new password” bottom, as indicated below:

The following window (Reset password) shall appear. Please enter **the last 4 digits of the mobile phone number you have declared in the relevant form** and press the “Send challenge” bottom. An SMS will be delivered with a temporary password. Type the temporary password in the “Your reply” field and press the OK bottom.

The following window (Change your password) shall appear. Type your preferred new password and press the OK bottom.

Once the password has been successfully changed, the following message appears:

In the **XNet Trader User Manual** document you may find the guide for the connectivity and functionalities of the XNet Trader application.

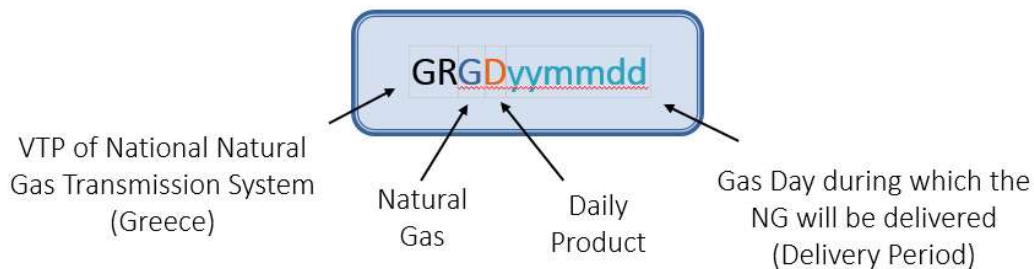
4. Mock Trading Data

4.1. Data in OASIS Trading System

4.1.1. Available Products

The Products Coding contains the following characters:

Product Code



Other specifications:

Contract Volume	1 MWh/d	Price Tick	0.01 €/MWh
Contract Size	1 MWh	Minimum Order Price	0.01 €/MWh
Minimum Quantity	1 Contract	Maximum Order Price	999.99 €/MWh
Maximum Quantity	8,000 Contracts	Price Unit	€/MWh with two decimals
Trading Unit (Lot Size)	1 Contract	Settlement Currency	Euro

4.1.2. Application of Automatic Volatility Interruption Mechanism

The Automatic Volatility Interruption Mechanism (AVIM) applies to all Contracts of HEnEx's Natural Gas Market.

The following price limits are set:

- **Static limit**, which is set at **80%** of the reference price. As reference price, in this case, is considered to be the last auction price (Method 2) before the respective order to be executed or, if there is no such price, the starting price of the relevant trading session.
- **Dynamic limit**, which is set at **70%** of the reference price. As reference price, in this case, is considered to be the last trade price before the respective order to be executed.

Method 2 (call auction) is performed in accordance with the provisions of par. 4.4.3 of the Rulebook. Especially for the purposes of the AVIM, the following are applicable:

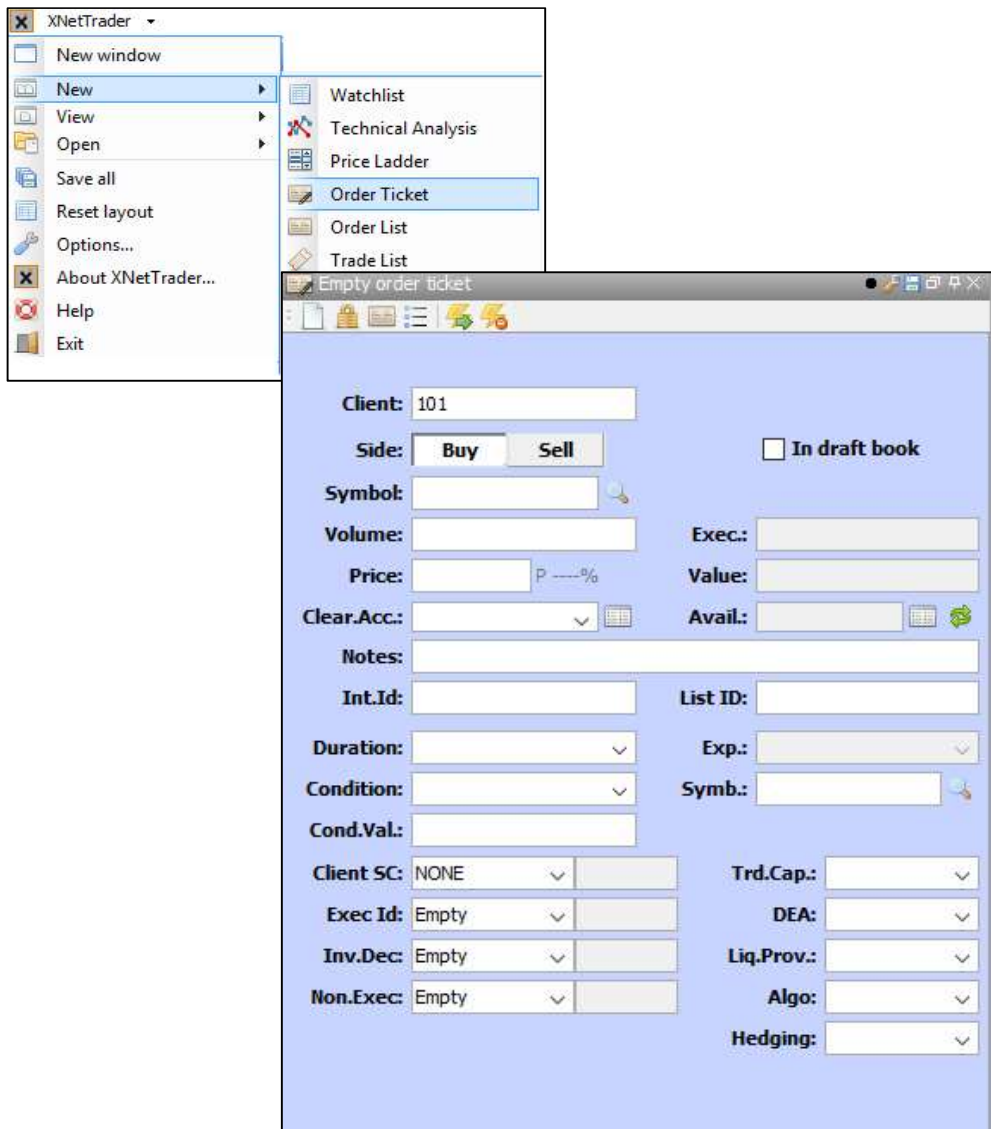
- The duration of the pre-call phase of the Method is set to two (2) minutes.
- The Random Time Period (RTP) is set to one (1) minute, specified in subsection 4.4.3.4 of the Rulebook.

AVIM may be activated at any time during Continuous Trading (Method 1). Following the conduct of Method 2, as a consequence of the activation of the AVIM, the relevant Contract return to trading under Method 1 (Continuous Trading).

5. Trading Scenarios

5.1. Order entry using XNet Trader

The orders can be entered to the trading system using the order ticket window in the XNet Trader application.



The order details are briefly explained in the following tables:

Order field	Description
Client	The client code
Side	Sell or Buy
Symbol	The specific Contract name

Volume	Only integer numbers
Price	2-decimal numbers
Value	The nominal value of the contract
Clear.Acc.	The clearing account
Avail.	The available margin allocated by the clearing member
Notes	Any comment for member's needs
Duration	The order duration, e.g. GTC (the default is daily – DAY, in case of leaving the field empty)
Exp.	The expiration date in case of selecting GTD on the Duration field
Condition	The order condition, e.g. FOK (optional)
Symb.	The STOP symbol in case
Cond.Val.	The STOP price
Internal ID	Not applicable
List ID	Not applicable
Client SC	Not applicable
Trd.Cap.	Not applicable
Exec Id	Not applicable
DEA	Not applicable
Inv.Dec	Not applicable
Liq.Prov.	Not applicable
Non.Exec	Not applicable
Algo	Not applicable
Hedging	Not applicable

5.2. Available order types

The order types for the Natural Gas Trading Platform are summarized in the following table:

	Order Types	Abbreviation
Price	Limit	LMT
	Market	MKT
Condition	Fill Or Kill	FOK
	Immediate Or Cancel	IOC
Duration	Day	DAY
	Good Till Date	GTD
	Good Till Cancel	GTC

5.2.1. Combinations of available order types

In the table below there is a set of scenarios with orders which you may follow:

Price	Condition	Duration	Result
Limit	No condition	Daily	Order entry
		Good till date (GTD)	Order entry
		Good till cancel (GTC)	Order entry
	Fill or Kill (FOK)	Daily	Order entry
		Good till date (GTD)	Inactive field
		Good till cancel (GTC)	Inactive field
	Immediate or Cancel (IOC)	Daily	Order entry
		Good till date (GTD)	Inactive field
		Good till cancel (GTC)	Inactive field
	STOP	Daily	Order entry
		Good till date (GTD)	Order entry
		Good till cancel (GTC)	Order entry
Market*	No condition	Daily	Order entry
		Good till date (GTD)	Order entry
		Good till cancel (GTC)	Order entry
	Fill or Kill (FOK)	Daily	Order entry
		Good till date (GTD)	Inactive field
		Good till cancel (GTC)	Inactive field
	Immediate or Cancel (IOC)	Daily	Order entry
		Good till date (GTD)	Inactive field
		Good till cancel (GTC)	Inactive field
	STOP	Daily	Order entry
		Good till date (GTD)	Order entry
		Good till cancel (GTC)	Order entry
* In a Market Order the abbreviation "MKT" is filled-in in the field "Price" of the order entry window (Order Ticket).			

5.3. Order entry scenarios

In the table below there is a set of scenarios and the corresponding error messages that appear in the order entry window:

Action	Result
Order entry with invalid tick size	“Order price is not on a valid tick price. Order not transmitted”
Order Entry above maximum allowed volume of contracts (8001 contracts)	“Order volume too big” Reject threshold
Please enter sufficient number of orders and price variations	Creation of different Best Bid Offer levels

Modify the above orders, execute trades and confirm the correct functionality. Please note that the transactions are transferred to the Clearing System automatically.

5.3.1. Call Auctions

Call auctions will be triggered by DESFA during the normal and the extended trading sessions. At least one call auction in normal or/and extended trading sessions will be executed every GAS Day for the testing purposes. HEnEx will trigger call auction following the relevant request from DESFA in order to simulate realistic market conditions. The participants will be informed half an hour before the execution of the Call Auction by email. Standard daily call auction will be executed every day between 11:00 and 11:30 EET.

Action	Result
Please enter orders in call Auctions. at the default daily auctions in each Contract at 11:00 -11:30 EET)	Confirmation of successful entry of orders
Please enter orders in call Auctions triggered by the DESFA, whenever applicable	Confirmation of successful entry of orders

5.3.2. Limit Order

HEnEx Users will be assigned as mock trading members in the Natural Gas Trading Platform to simulate real market conditions by increasing the liquidity of the market with quotes entry.
Buy order entry: **e.g.** 5 contracts GRGD211110 @ 61.00 €/MWh without condition

Duration	Result
Daily	Successful order entry and execution at a price equal or better than 61.00€/MWh. The order will stay in the order book until it is executed at 61.00€/MWh. After the end of the day, the order is deleted.
Good Till Date	Successful order entry and execution at a price equal or better than 61.00€/MWh. The order will stay in the order book until it is executed at 61.00€/MWh. The order remains active for its unexecuted part until the date specified as long as the price ranges within the acceptable price limits.
Good Till Cancel (GTC)	Successful order entry and execution at a price equal or better than 61.00€/MWh. The order will stay in the order book until it is executed at 61.00€/MWh
Limit Order change to MKT Order	Successful change of the type of order.

Buy order entry: e.g. 5 contracts GRGD211110 @ 61.00 €/MWh with Fill or Kill condition (FOK).

Duration	Result
Daily	Successful order entry and execution at a price equal or better than 61.00€. In case no sellers can cover in total the 5 contracts, the order is deleted.
Good Till Date (GTD)	Try to enter a FOK order and confirm that the order is cancelled.
Good Till Cancel (GTC)	Try to enter a FOK order and confirm that the order is cancelled.

Buy order entry: e.g. 5 contracts GRGD211110 @ 61.00 €/MWh with Immediate or Cancel condition (IOC).

Duration	Result
Daily	Successful order entry and execution at a price equal or better than 61.00€/MWh. In case no sellers can cover in total the 5 contracts, the unexecuted part of the order is deleted.
Good Till Date (GTD)	Try to enter an IOC order and confirm that the order is cancelled.
Good Till Cancel (GTC)	Try to enter an IOC order and confirm that the order is cancelled.

Buy order entry: e.g. 5 contracts GRGD211110 with Stop condition (STOP) @61.00 €/MWh and order released price @65.00 €/MWh Limit

Duration	Result
Daily	Successful order entry subject to last price and best bid are above 61.00€/MWh. Disclosure to the Orderbook is pending and STOP is triggered @61.00€/MWh if the last price is above or equal to 61.00 €/MWh. Buy Order will be released @65.00€/MWh Limit.
Good Till Date (GTD)	Check the STOP order will be active until the date defined by the user.
Good Till Cancel (GTC)	Check the STOP order will be active until is cancelled

5.3.3. Market Order

Buy order entry: e.g. 5 contracts GRGD211110@ MKT, without condition.

Duration	Result
Daily	Successful order entry and execution as long as there are buyers. The unexecuted part becomes a limit order with a price equal to the last trade price of the MKT order and enters the order book. At the end of the day the order is deleted. If there are no sellers the order is deleted.

Good Till Date T+3, where T the test date	Successful order entry and execution as long as there are buyers. The unexecuted part becomes a Limit order with a price equal to the last trade price of the MKT order and enters the order book. At the end of the T + 3 test day the order is deleted.
Good Till Cancel (GTC)	Successful order entry and execution as long as there are buyers. The unexecuted part becomes a Limit order with a price equal to the last trade price of the MKT order and enters the order book.

Buy order entry: **e.g.** 5 contracts GRGD211110 @ MKT, with FOK condition.

Duration	Result
Daily	Successful order entry and execution as long as there are buyers. In case no sellers can cover in total the 5 contracts, the order is deleted.
Good Till Date (GTD)	Try to enter a MKT, FOK order and confirm that the order is cancelled.
Good Till Cancel (GTC)	Try to enter a MKT, FOK order and confirm that the order is cancelled.

Buy order entry: **e.g.** 5 contracts GRGD211110 @ MKT, with Stop condition (IOC).

Duration	Result
Daily	Successful order entry and execution. In case no sellers can cover in total the 5 contracts, the unexecuted part of the order is deleted.
Good Till Date (GTD)	Try to enter an IOC order and confirm that the order is cancelled.
Good Till Cancel (GTC)	Try to enter an IOC order and confirm that the order is cancelled.

Buy order entry: **e.g.** 5 contracts GRGD211110 with Stop condition (STOP) @61.00 €/MWh and order released price @MKT €/MWh

Duration	Result
Daily	Successful order entry subject to last price and best bid are above 61.00 €/MWh. Stop is triggered @61.00 €/MWh if last price is above or equal to 61.00€/MWh. Trade price will be @MKT Price
Good Till Date (GTD)	Check the STOP order will be active until the date defined by the user.
Good Till Cancel (GTC)	Check the STOP order will be active until is cancelled

5.3.4. Triggering the Automatic Volatility Interruption Mechanism (AVIM) and shifting to Trading Method 2 (Call Auction)



Trading Participants may enter an order that will trigger AVIM. This intends to simulate a scenario that a Participant enters an order with an erroneous price (deviating significantly from the reference or the last price).

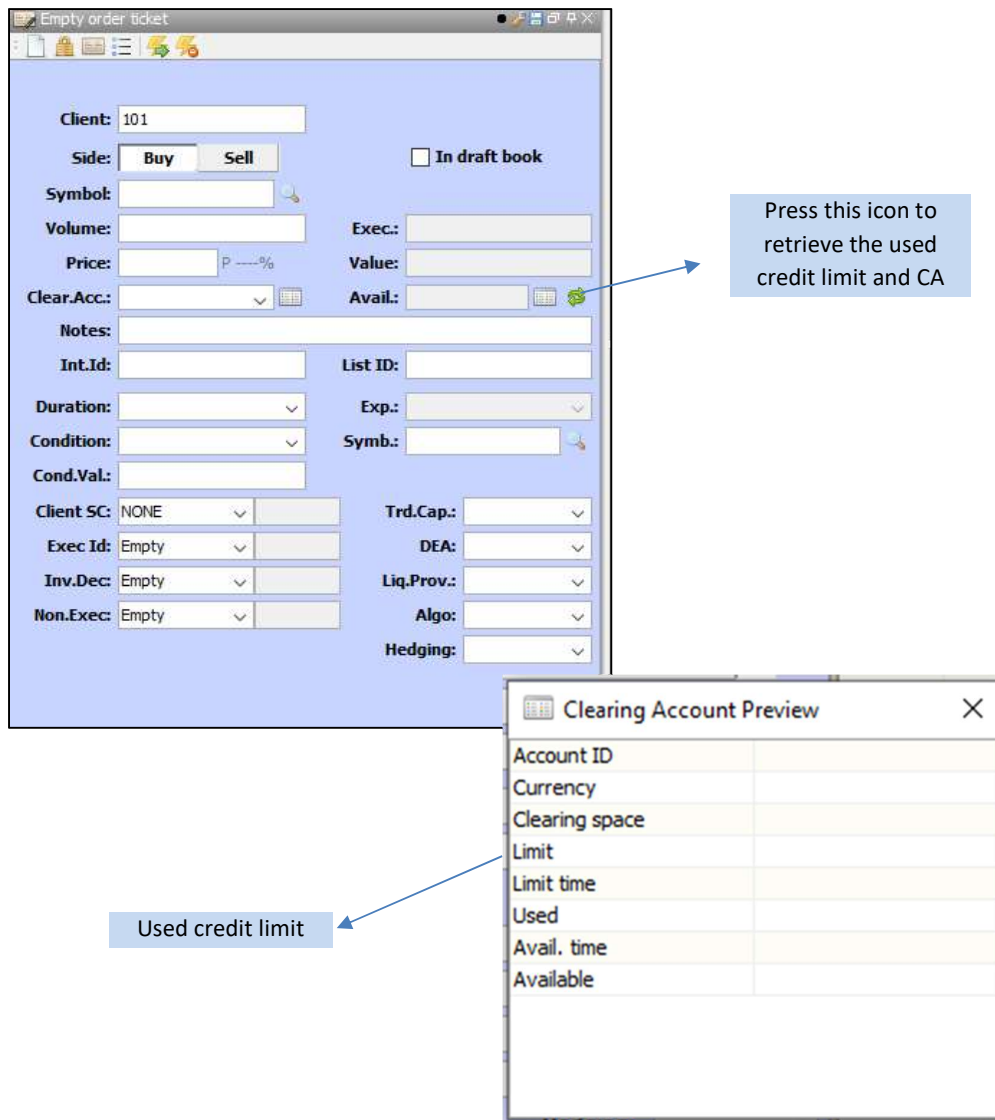
Within the order collection phase of AVIM, the Participant may cancel or modify the order.

5.4. Credit Limits

The **monitoring** of the credit limit of each Participant is performed by the Trading System:

- ✓ **Before** the start of each trading session, the Credit Limits are registered in the Trading System
- ✓ Clearing Members are able to **modify** Credit Limits during the trading session
- ✓ Participant orders that resulting in excess of its Credit Limit are automatically **rejected** by the System.

The user should check the consumption of Credit Limit by the Order Ticket window of the **XNet Trader** application, by pressing the icon  and the refresh button  as shown in the following image:



Press this icon to retrieve the used credit limit and CA

Used credit limit

Clearing Account Preview	
Account ID	
Currency	
Clearing space	
Limit	
Limit time	
Used	
Avail. time	
Available	

5.5. Trading Support

5.5.1. On Behalf Of Trader (OBOT) procedure

The participants' responsible persons may request to enter/edit/cancel an order through the duly authorized bodies of HEnEx.

Note that in actual operation, charges are applied to the Participant requesting this service for cause not due to technical malfunction of HEnEx Systems.

For the purposes of the Mock Sessions the following tests shall be performed:

HEnEx **will randomly select a Participant** to perform an order action (entry/edit/cancel) during the trading session. In return, the responsible person of the Participant shall call the Markets Monitoring Dpt of HEnEx at tel. +30 210 336 6861, requesting the specific action. This intends to simulate a scenario of using alternative trading procedures in case a participant is experiencing technical malfunctions or some other emergency.

5.5.2. Consensual cancellation of trades

The normal procedure for the consensual cancellation of trades is as follows:

- 1) An **authorized Trader** of the Participant requesting a trade cancellation contacts HEnEx Market Support Dpt.
- 2) HEnEx Market Support Dpt contacts the **counterparty's Trader** and ask whether its client agrees to cancel the trade:
 - In case of **agreement** the trade is cancelled in both trading and clearing systems.
 - In case of **disagreement** the trade remains as concluded in the system.
- 3) HEnEx Market Support Dpt informs **all Participants participating in the trade**, about the acceptance or rejection of cancellation.

Note that in actual operation, charges are applied to the Participant requesting the trade cancellation.

For the purposes of the mock sessions, HEnEx will randomly select the counterparties of a trade in order to simulate a scenario of consensual cancellation of an erroneous trade.

5.6. Obtaining Transaction Files

Every 15 minutes given that there are available trades, the transaction files of the Participants shall be available at the HEnEx website members-area using the link:

<http://dev-www-enex.enexgroup.gr:8080/web/guest/members-files>

Access of HEnEx website member's area requires proper sign-in authentication.

6. Contact Details

For any further information or clarification, you can contact with EnEx Market Support Department:

E-mail: EnEx-Member-Support@enexgroup.gr

Tel : (+30) 210 33 66 845, (+30) 210 33 66 952

Fax: (+30) 210 33 66 951

7. Problems report

During the Testing period, Participants may report any problem to the EnEx Market Support Department EnEx-Member-Support@enexgroup.gr, using the following subject “[Natural Gas Trading Platform mock session’s problems report]”

If no problem is reported, this will be considered as lack of problems.