

Energy Markets Clearing System (EMCS)

Guidelines for Mock Sessions

Athens, October 2021



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1. Introduction

The Energy Markets Clearing System (EMCS) has been developed by **EnEx Clearing House S.A**. («EnExClear»), to support the Clearing, Risk Management and Cash Settlement for all transactions concluded on new HEnEx's Natural Gas Trading Platform.

The purpose of that mock session is:

- a. to verify the proper functionality of the IT systems supporting the new market and the relevant procedures by simulating normal trading and clearing procedures, and
- b. to let the users become familiar with the new procedures and functionalities.

In this document EnExClear's Clearing Members can find guidelines and a set of mock scenarios that will support users during mock period and become familiar with EMCS Client application, indicatively:

- General Guidelines concerning the connectivity procedure to EnExClear's Test System.
- Mock Scenarios that recommended to Clearing Members

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



2. General Guidelines

2.1 EMCS TEST Data

The EMCS Test System database, has been parameterized according to Participants' and Clearing Members' declarations of membership type in HEnEx and EnExClear and the submission of the relevant forms. More specifically the following parameterization was made by EnExClear:

- 1) For Direct Clearing Members (DCM):
 - Creation of **OWN Clearing Account**, that consists of two (2) latin characters & one (1) numeric digit (e.x PC0)
 - Creation of **OWN Clearing Subaccount** that consists of two (2) latin characters & two (2) numeric digits (e.x PC00). This subaccount is used by Trading Participant in Trading System for credit limit management.
- 2) For General Clearing Members (GCM):
 - Creation of **CLIENT(S)** Clearing Accounts, that consists of two (2) latin characters & one (1) numeric digit (e.x EB1, EB2...)
 - Creation of **CLIENT(S)** Clearing Subaccounts that consists of two (2) latin characters & two (2) numeric digits (e.x EB11, EB21...). These subaccounts are used by Trading Participants, who assigned the clearing procedure to a GCM, in Trading System for credit limit management.

Moreover, according to the submitted EMCS User's Application Form(s) by the Clearing Members, EMCS users have been created for DCMs & GCMs by EnExClear.

The Users' credentials (Username & Password) provided by EnExClear have been sent via e-mail to Applicants. Note that these Credentials will be valid <u>only</u> during the mock sessions phase. However, the Client Authentication Certificate (where needed) will be valid for both mock sessions and production phase.

In this mock period the actual Cash Settlement procedures in TARGET2 will not be tested, since Settlement Banks will not participate to the mock session.



2.2 Access to the Energy Market Clearing System

Clearing Members' Users have the following connectivity options to get access on EMCS Client interface:

- Through Internet
- Through Intranet (only for General Clearing Members already connected to ATHEXNET)
- Through ATHEXNET (only for General Clearing Members already connected to ATHEXNET)

Regardless of the users' connection options, the EMCS Client interface is supported by means of a Java applet, which is accessible using the Forms Standalone Application Launcher (FSAL)¹ a utility provided by Oracle. Prerequisites for supporting the application can be summarized in the following table:

| | | | | Prerequisites Supporting EMCS Client | | | |
|---------------------------|--|--|--------------------------------|--------------------------------------|-----------------------------------|---|--|
| | Connection Type | Executable Files | Java Runtime Environment | Adobe PDF Reader | Certificates (server- code) | Certificates Client Authentication | |
| Installation Program | Through internet | Web_Emcs_Mock- 12.2.1.4.0.exe (32bit) Web_Emcs_Mock_64Bit- 12.2.1.4.0.exe (64bit) | Already Installed | Installation Required | Already installed | Configuration required for keystore and password in the application's configuration file Certificates Client Authentication, issued by <u>ATHEX - Digital</u> <u>Certificates Services</u> (<u>PKI-CA</u>) | |
| | -Through En Intranet 12 -Through En ATHEXNET 12 | Emcs_Mock- 12.2.1.4.0.exe (32bit) Emcs_Mock_64Bit- 12.2.1.4.0.exe (64bit) | Already Installed | Installation Required | Already installed | Not required | |
| Installation instructions | EMCS - Guidelines for client workstation setup.pdf | | | | | | |

1. After the installation process users will have access to the EMCS application, by entering their **user credentials**, as provided by EnExClear.



¹ <u>https://www.oracle.com/technetwork/developer-tools/forms/documentation/fsal-security-4438382.pdf</u>



2. Users who have access to EMCS through internet or intranet are required to submit a second level code the **One Time Access Code (OTAC)**, which is send via e-mail or SMS on user's mobile phone and it is valid for 2 minutes:

| Database Connection | |
|---------------------|---------------|
| second level co | de is |
| required. Please | type the code |
| | |
| | |
| | |
| Connect | Cancel |



2.3. EMCS Clearing Procedure Time Schedule

The EMCS test environment will be available on scheduled mock period, from 09:00 am to 18:00 pm. (EET).

The time Schedule for Clearing and Risk Management Procedures held by EnExClear and/or Clearing Members is presented in the following table (in EET):

| Start | Finish | Actions | Scenario(s) Reference |
|---------|---------|--|--|
| 09:00 | 09:15 | Clearing Members check Clearing Structure | 3.2.1 Check of the CM Reference Data – Clearing Accounts & Subaccounts. |
| 09:00 | 15:00 | Collaterals Pledge/Unpledge by the Clearing Members | 3.4.2 Cash Collaterals Pledge/Un-pledge |
| All Day | All Day | Clearing Members monitor the credit limit consumption through Clearing System | 3.4.1 Check of the Available Credit Limit of the Clearing Account/Subaccount |
| | | EnExClear receives the trading results and trades from the Trading System | |
| 15:00 | 15:00 | For each Clearing Day, in clearing process, will be included the trades executed on HEnEx's Natural Gas Trading Platform: | |
| | | from 15:00 in previous Clearing Day until 15:00 in current Clearing Day | |
| 15:15 | 15:15 | Trades Finalization by EnExClear | 3.3.1 Display Trades conducted on Natural Gas Trading Platform in EMCS Client |
| 15:15 | 15:15 | EnExClear: Evaluates Clearing Members deposited guarantees Calculates Margins for every Clearing Account Calculates Credit Limits for every Clearing Account Calculates Settlement Amounts, Fees and VAT for every Clearing Account Calculates Fees (Trading & Clearing) Amounts for every Clearing Account | |



| | | Clearing Member checks: | |
|-------|-------|---|---|
| 15:30 | 15:30 | Evaluation of the deposited guarantees Calculated Margins New Credit Limits Calculated Settlement Amounts Calculated VAT Amounts Calculated Fees Amounts | 3.3.2 Clearing Members' Obligation/Claims arising from Trading Activity |



3. Mock Scenarios

In this section a set of mock scenarios are described in order that users become familiar with EMCS Client application and the relevant Clearing, Risk Management and Cash Settlement procedures.

3.1 Initial Setup

After successful installation of EMCS Client, start the EMCS Client Application by the shortcut that has been created on the user desktop, using the credentials (Username & Password) as provided by EnExClear.

Note that at the first login, EMCS Client User should **change its password** following the procedure as described in *paragraph 10.1* of EMCS Client User Guide.

| Date | EMCS Menu/Submenu | Scenario Description |
|-------------------------|----------------------|-----------------------|
| 1 st Mock | System → Change | First EMCS User Login |
| Day | Password | Change Password |

3.2 Reference Data

In this paragraph EMCS Client User could find guidelines to check the reference data as described in *paragraph 2.1*, according to clearing accounts and subaccounts.

3.2.1 Check of the CM Reference Data – Clearing Accounts & Subaccounts.

The database of EMCS TEST has been parameterized according to:

- Membership Type (DCM, GCM)
- Clearing Accounts/Subaccounts
- Relations of Trading Participants with the Clearing Members

EMCS users can view the above parameters through the Risk Management menu:

| Date | EMCS Menu/Submenu | Scenario Description |
|-------------------------|---|--|
| 1 st Mock | Risk Management →Functions → Clearing Member with Trading Members Relations | In this Screen: GCM can view their related Trading Member(s) DCM can view <u>only</u> itself as Trading Member |
| Day | Risk Management →Functions → Clearing Account - Trading Members Relation | In this Screen GCM can view the <u>relation</u> between their Client(s) Clearing Accounts /Subaccounts with Trading Members. DCM can view the <u>relation</u> between its OWN Clearing Account /Subaccount |



| Risk | In this Screen |
|-------------------|---|
| Management | GCM can view <u>details</u> regarding their Client (s) Clearing |
| →Functions → | Accounts /Subaccounts. DCM can view <u>details</u> regarding their OWN Clearing Account |
| Clearing Accounts | /Subaccount |

3.3 Clearing & Settlement

Every Clearing Date the Trading System sends to EMCS details, concerning the trades that concluded on HEnEx's Natural Gas Trading Platform in order the Clearing and Settlement Procedures to be performed by EnExClear and Clearing Members.

In this section mock scenarios based on Clearing and Settlement procedure will be provided.

3.3.1 Display Trades conducted on Natural Gas Trading Platform in EMCS Client

EMCS user can display and export the trades for a specific Clearing Day loaded to the EMCS from the Trading System

| Date | EMCS Menu/Submenu | Scenario Description |
|--------------|---|---|
| The us | er of the Clearing Me | nber performs the following actions to retrieve the trades for a specific |
| Clearin | g Date. This informat | on can be retrieved from EMCS Client through the following menu: |
| • Cle | earing & Settlement | |
| • Da | ita export | |
| | | A. Clearing & Settlement Menu: |
| | | 1. Fills in the mandatory field "Clearing System" and "Clearing |
| | | Date". Optionally, more criteria may be filled in for the specific |
| | Clearing & Settlement → Functions → Energy Trades→ Clearing System: CGAS | Clearing Date to view the details of the trades . |
| Every | | Selects the button "Execute Query" from toolbar or (F8) to |
| Day | | start searching: The trades are displayed, based on these criteria. |
| | | 3. Selects the button Save data to file" from the toolbar to |
| | | export data from this screen to a file (csv or excel). |
| | | Selects the Exit button to return to the initial EMCS Client Menu |
| _ | Data Export → CSV Files → | |
| Évery Day | Group: Clearing & | B. Data Export Menu: |
| - | кіsк Data -) Enerav Trades | |
| | | |



| Date | EMCS Menu/Submenu | Scenario Description |
|------|----------------------|--|
| | | Fills in the mandatory field "Clearing Date From – To" & selects |
| | | Clearing System CGAS in the following screen |
| | | ction Edit Move Query Help Window |
| | | CSV Files |
| | | Group : Clearing & Risk Data CSV Files : Energy Trades |
| | | Print Parameters |
| | | Parameter Value Parameter Value |
| | | Clearing Date From |
| | | |
| | | Trading Member |
| | | Clearing System |
| | | Functions Folder Name : File Type: CSV/FIXED * Run |

3.3.2 Clearing Members' Obligations/Claims arising from Trading Activity in NGasTP

EMCS user can display and export for a specific Clearing or Settlement Date from EMCS Client application information regarding:

- Cash Obligations & Claims
- Fees (trading & clearing)
- Taxes (VAT)

The EMCS Client provides this information, in CSV files and PDF reports.

3.3.2.1 Scenario Buy-Side

In the following scenario the Trading Participant **buys** (MWh) in NGasTP (eg 50MWh@100€).

| Date | EMCS Menu/Submenu | Scenario Description | | | |
|---|--|----------------------|--|--|--|
| The user of Clearing Member performs the following actions to retrieve the obligations arised from its activity as buyer on NGasTP. | | | | | |
| For Exa | For Example: | | | | |
| • or • or | on Clearing Date T: Buys 50MWh@100€. on Clearing Date T+1: Pays Settlement and the respective Fees and VAT amounts. | | | | |
| This in • Clo • Da | This information can been retrieved from EMCS Client through the following menu: Clearing & Settlement (display in screen or PDF report) Data export | | | | |



| Date | EMCS Menu/Submenu | Scenario Description |
|--------------|--|---|
| Every Day | Clearing & Settlement → Functions → Clearing & Settlement Information | A. Clearing & Settlement Menu- Screen: Fills in the field "Clearing System" and "Clearing Date" or the "Settlement Date" and selects the "Execute Query" button from toolbar or (F8). In Clearing Details Tab (3) rows will be displayed with the following main information regarding Clearing Members' obligations : Clearing Details/Type =Pwr.Settl Settl. Amount = 5.000€ Debit/Credit=Debit Settlement Date= T+1 Clearing Details/Type =Pwr.VAT VAT Amount = 5.000*6% = 300,00€ Depit/Credit=Debit Settlement Date= T+1 Clearing Details/Type =Pwr Clr.Fees Clearing Details/Type =Pwr Clr.Fees Clearing Details/Type =Pwr Tr.Fees Trading Fees + VAT Amount = 50*0.015 +(50*0.015)*24%=€ Debit/Credit=Debit Settlement Date= T+1 Selects the button Image: "Save data to file", to extract data from this screen to a file. Selects the Dutton Image: Exit button to return to the initial EMCS Client Menu. |
| Every Day | Clearing & Settlement → Functions → Clearing & Settlement Information/Reports | B. Clearing & Settlement Menu – Reports: The following reports in PDF format are available that include the above information regarding Clearing Members' obligations as described in A.: Pending Cash Settlements (dynamic report based on Settlement date can be retrieved only for a single Settlement Date) Cash Settlements (static report based on Settlement Date can be retrieved for a range of Settlement Dates) Clearing Results (static report based on Clearing Date) Fees Analysis (static report based on Clearing Date) |
| Every Day | Data Export → CSV Files → Group: Clearing & Risk Data | C. Data Export Menu – CSVs/Excel |



| Date | EMCS Menu/Submenu | Scenario Description |
|------|--|---|
| | →Energy Market Cash Settlement or Fees Analysis | The following CSVs/EXCEL files can be retrieved from this Menu that include the above information regarding Clearing Members' obligations as described in A.: |
| | | Energy Market Cash Settlement (CSVs/Excel) for Clearing Space CGAS Fees Analysis (CSVs/Excel) for Clearing Space CGAS |

3.3.2.2 Scenario Sell-Side

In the following scenario the Trading Participant **sells** (MWh) in NGasTP (eg 50MWh@100€).

| Date | EMCS Menu/Submenu | Scenario Description | | |
|--------------------|---|---|--|--|
| The use from it | The user of Clearing Member performs the following actions to retrieve the obligations/claims arised from its activity as seller on NGasTP. | | | |
| For Exa | ample: | | | |
| • on | Clearing Date T: Sells 5 | 0MWh@100€. | | |
| • on | Clearing Date T+1: Pay | s Fees. | | |
| • on | Clearing Date T+2: Rec | eives the Settlement and the respective VAT amount. | | |
| This in | formation can be retriev | ved from EMCS Client through the following menu: | | |
| • Cle | earing & Settlement (dis | splay in screen or PDF report) | | |
| • Da | ita export | | | |
| Every Day | Clearing & Settlement → Functions → Clearing & Settlement Information | A. Clearing & Settlement Menu- Screen: Fills in the field "Clearing System" and "Clearing Date" or the "Settlement Date" and selects the "Execute Query" button from toolbar or (F8). In <u>Clearing Details Tab</u> (3) rows will be displayed with the following main information regarding Clearing Members' obligations/claims : <u>Clearing Details/Type =Pwr.Settl</u> - Settl. Amount = 5.000€ - Debit/Credit=Credit - Settlement Date= T+2 <u>Clearing Details/Type =Pwr.VAT</u> - VAT Amount = 5.000*6% = 300,00€ - Debit/Credit=Credit - Settlement Date= T+2 <u>Clearing Details/Type =Pwr Clr.Fees</u> - Clearing Fees + VAT Amount = 50*0.01 +(50*0.01)*6%=€ - Debit/Credit=Debit - Settlement Date= T+1 | | |



| Date | EMCS Menu/Submenu | Scenario Description | | |
|--------------|---|--|--|--|
| | | Clearing Details/Type =Pwr Tr.Fees - Trading Fees + VAT Amount = 50*0.015 +(50*0.015)*24%=€ - Debit/Credit=Debit - Settlement Date= T+1 | | |
| | | Selects the button "Save data to file", to extract data from this screen to a file. | | |
| | | Selects the Exit button to return to the initial EMCS Client Menu. | | |
| | B. Cl | B. Clearing & Settlement Menu – Reports: | | |
| | Clearing & Settlement → | The following reports in PDF format are available that inculdes the above information regarding Clearing Members' obligations as described in A.: | | |
| Every Day | Functions → Clearing & Sattlamant | • Pending Cash Settlements (dynamic report based on Settlement Date can be retrieved only for a single Settlement Date) | | |
| | Information/Reports | • Cash Settlements (static report based on Settlement Date can be retrieved for a range of Settlement Dates) | | |
| | | Clearing Results (static report based on Clearing Date) | | |
| | | • Fees Analysis (static report based on Clearing Date) | | |
| | Data Export → CSV | C. Data Export Menu – CSVs/Excel | | |
| Every Day | Files → Group: Clearing & Risk Data →Energy Market | The following CSVs/EXCEL files can be retrieved from this Menu that inculdes the above information regarding Clearing Members' obligations as described in A.: | | |
| | Cash Settlement or Fees AnalysisEnergy Market Cash Settlement (CSVs/Excel) for Clear CGAS | • Energy Market Cash Settlement (CSVs/Excel) for Clearing Space CGAS | | |
| | | Fees Analysis (CSVs/Excel) for Clearing Space CGAS | | |



3.4 Credit Limit Management

The Credit Limit mechanism is applied for the HEnEx's NGasTP. Credit Limit is calculated per Clearing Account according to its deposited collaterals and is assigned to the Participants by its Clearing Member through Clearing Subaccounts.

In this section EMCS Client User may find guidelines to check the available credit limit to the respective subaccount and the required actions to increase or decrease the credit limit.

3.4.1 Check of the Available Credit Limit of the Clearing Account/Subaccount

Participants' orders that resulting more than its credit limit are rejected by the Trading System. Through Risk Management menu users can check the available credit limit per Clearing Account/Subaccounts.

| Date | EMCS Menu/Submenu | Scenario Description |
|--------------|---|--|
| Every Day | Risk Management → Functions → Manage Trading Limits | Through this menu CMs checks the Available Credit Limit of the Clearing Account/Subaccounts Trading Limit/Current Trading Limit Used (Consumed) Trading Limit |
| Every Day | Risk Management → Functions → Informational e- mail | Through this menu CMs can define the e-mail addresses where the informative mail about consumed Credit Limits sent to. These informational emails are being sent whenever the consumed credit limit of Clearing Account/ Subaccount exceeds the limit of 50% , 70% and 85% . For Example: Trading Limit =1.000.000€ Current Trading Limit =1.000.000€. Used Trading Limit = 500.000€. The declared e-mail addresses will receive informational e-mails regarding: • Trading Limit =1.000.000€ • Used Trading Limit = 500.000€. • Ratio of consumed credit limit= 50% |



3.4.2 Cash Collaterals Pledge/Un-pledge

Every Clearing Date, Clearing Members could **increase or decrease** the respective clearing account's cash collaterals through *Risk Management menu* as described in *paragraph 8.5* of EMCS User Guide.

| Date | EMCS Menu/Submenu | Scenario Description | | | |
|---|--|--|--|--|--|
| Clearin order t • Ap • Ca • Ch • Ch (1! | Clearing members could increase or decrease the respective clearing accounts cash collaterals in order to increase or decrease their credit limit by <i>Cash Collateral Applications</i> functionality. Application of Cash Collateral NEW/RETURN Cancelation of a "Pending" Application of Cash Collateral Check that a "Completed" application of cash collateral cannot get "Cancelled". Check that a Pending "NEW" application for Cash Collateral get "Rejected" at the End Of Day (15:00). | | | | |
| | | Scenario1: Cash Collaterals Pledge | | | |
| | | A. Cash Collaterals Application <u>Pledge</u> | | | |
| | | Available Credit Limit = 5.000.000€ Application of Cash Collateral Pledge NEW = 100.000€ - status "Pending" Approval by EnExClear (after communication with the Clearing | | | |
| | | Member) - status "completed" New Available Credit Limit = 5.100.000€ | | | |
| | | B. Cash Collaterals Application Pledge in status "Pending" - <u>Cancel</u> | | | |
| | Pick | Available Credit Limit = 5.000.000€ Application of Cash Collateral Pledge NEW = 100.000€ - Status "Pending" | | | |
| Every Day | Management →Functions → Cash Collateral | Until 15:00 a cancelation request can be submitted by CM for a "Pending" NEW Application of Cash Collateral – status "Cancelled" Available Credit Limit = 5.000.000€ | | | |
| | Applications | C. Cash Collaterals Application Pledge in status "completed" - <u>Cancel</u> | | | |
| | | • Available Credit Limit = 5.000.000€ | | | |
| | | Application of Cash Collateral Pledge NEW = 100.000€ - status "Pending" | | | |
| | | Approval by EnExClear (after communication with the Clearing Member) | | | |
| | | • New Available Credit Limit = 5.100.000€ | | | |
| | | • EMCS user tries to cancel the above in already "Completed" status Application and receives <u>rejection</u> message by EMCS | | | |
| | | D. Cash Collaterals Application Pledge in status "Pending" - <u>Reject</u> | | | |
| | | • Available Credit Limit = 5.000.000€ | | | |



| | | • Application of Cash Collateral Pledge NEW = 100.000€ - status | | | |
|-------------|---------------------------------------|---|--|--|--|
| | | "Pending" | | | |
| | | No approval actions by EnExClear | | | |
| | | • New Available Credit Limit = 5.000.000€ | | | |
| | | • The status of this Application becomes rejected at EoD (15:00). | | | |
| | Scenario2: Cash Collaterals UnPledge | | | | |
| <u>Note</u> | that Return Applicat | tions are handled and settled by EnExClear on the 2 nd Day, following the Clearing date (only working days) | | | |
| | | A. Cash Collaterals Application UnPledge | | | |
| | | Available Credit Limit = 5.000.000€ | | | |
| | | • Application of Cash Collateral Pledge RETURN = 100.000€ - status "Pending" | | | |
| | | • Approval by EnExClear on the 2nd Clearing Date - status "completed" | | | |
| | Risk | Scenario2: Cash Collaterals UnPledge as are handled and settled by EnExClear on the 2 nd Day, following the Clearing date (only working days) Acash Collaterals Application UnPledge Available Credit Limit = 5.000.000€ Application of Cash Collateral Pledge RETURN = 100.000€ - status "Pending" Approval by EnExClear on the 2nd Clearing Date - status "completed" After EnExClear performs final risk Calculation for the current Clearing Date the new Available Credit Limit = 4.900.000€ on the 2 nd Clearing Date the required amount will be returned to the Clearing Member through its settlement bank in Target 2. Cash Collaterals Application Pledge in status "Pending" - Cancel Available Credit Limit = 5.000.000€ Application of Cash Collateral Pledge RETURN = 100.000€ - Status "Pending" - Cancel Available Credit Limit = 5.000.000€ Application of Cash Collateral Pledge RETURN = 100.000€ - Status | | | |
| Even | Management | | | | |
| Every | \rightarrow Functions \rightarrow | | | | |
| Day | Cash Collateral | the Clearing Member through its settlement bank in Target 2. | | | |
| | Applications | B. Cash Collaterals Application Pledge in status "Pending" - <u>Cancel</u> | | | |
| | | • Available Credit Limit = 5.000.000€ | | | |
| | | • Application of Cash Collateral Pledge RETURN = 100.000€ - Status | | | |
| | | "Pending" | | | |
| | | Until 15:00 a cancelation request can be submitted by CM for a "Pending" Return Application of Cash Collateral – status "Cancelled" | | | |
| | | • Available Credit Limit = 5.000.000€ | | | |



3.4.3 Percentage (%) change of allocated credit limit

EMCS users can modify the predefined percentage allocation of the available Clearing Account's credit limit. The initial submission is performed by EnExClear with the default value of «100», as described below:

| Date | EMCS Menu/Submenu | Scenario Description |
|--------------|--|--|
| Every Day | Risk Management → Environment → Clearing Account With Trading Member Relation | Changing the Percentage of the credit limit that will be posted for the trading member. Image: Clearing Account: Trading Member: Image: Clearing Account: Image: Automatic Activation Determine: Image: Clearing Subaccount: Image: Automatic Activation Determine: Image: Automatic Activation Determine: Image: Automatic Activation Determine: Image: Image: Automatic Activation Determine: Image: Image |
| | Risk Management → Functions → Manage Trading Limits | Through this menu user can view the new allocated trading limit as the result of the above action. |



3.4.4 Credit Limit Allocation for Trading Members (subaccounts)

Through the EMCS application screen *Manage Trading Limits* users can modify the Allocated Trading Limits.

| 🛃 Manage | Trading Limits | | | | | | | | | | ≚⊼≻ |
|----------|-------------------|--------------|---------------|---------------|------------|-------------|---|-------------|---------|---------|-----|
| E | | | | | | | | | 14/10/2 | 021 | |
| | Trading Date : | | | | | | | | | | |
| C | Clearing System : | Ŧ | | | | | | | | | |
| с | learing Member : | | n ∎n ľ | | | | | | | | |
| c | learing Account : | | | | | | | | | | |
| | Trading Limit : | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | Manage Tra | tina Limits | - | | | | |
| Trading | | | | Current | Jsed | Trading | | New Message | | | |
| Member | Sub-Ac | count | | Trading Limit | _imit | | | LimitStatus | Status | | |
| | ± | | L | | | | | | • | - | - |
| | Ŧ | | | | | | | | - | - | |
| | Ŧ | | | | | - Î | | | - | - | |
| | Ŧ | | | | | | | | - | | |
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| <u> </u> | | | | | | | | | | | _ |
| <u> </u> | ±. | | | | | | | | | | _ 💌 |
| | Trading Memb | er Name. : | | | | | | | | | |
| | Sub-Account De | scription. : | | | |] | | | | | |
| | Allocated Trac | ling Limit : | | | | | | | | | |
| | | | | | | | | | | | |

3.4.4.1 Credit Limit Reduction – Accepted Scenario

The Clearing Member would like to <u>reduce</u> the **Current Trading Limit** for a Clearing Subaccount and the new Current Trading Limit amount is **higher** than the Used Trading Limit.

| Date | EMCS Menu/Submenu | Scenario Description |
|-------|---|---|
| | | For example: |
| | Risk Management →Functions → | <i>Trading Limit</i> =1.000.000€ |
| Everv | | Current Trading Limit =1.000.000€ |
| Day | | Used Trading Limit = 450.000€. |
| | Manage Trading | The EMCS user through the field New Limit in this screen, tries to |
| | Limits | reduce the Current Trading Limit to 500.000€ . |
| | | User receives a confirmation message since: |
| | | New Limit =500.000€ > Used Trading Limit=450.000€ |



3.4.4.2 Credit Limit Reduction – Rejected Scenario

The Clearing Member would like to <u>reduce</u> the **Current Trading Limit** for a Clearing Subaccount and the new Current Trading Limit amount is **less** than the Used Trading Limit.

| Date | EMCS Menu/Submenu | Scenario Description |
|--------------|---|--|
| Every Day | Risk Management →Functions → Manage Trading Limits | For example: Trading Limit =1.000.000€ Current Trading Limit =1.000.000€ Used Trading Limit = 450.000€. The EMCS user through the field New Limit in this screen, tries to reduce the Current Trading Limit to 400.000€. User receives a rejection message since: New Limit =400.000€ < Used Trading Limit=450.000€ |

3.4.4.3 Credit Limit Increase – Accepted Scenario

The Clearing Member would like to <u>increase</u> the **Current Trading Limit** for a Clearing Subaccount and the <u>new Current Trading Limit</u> amount is **less** than the Trading Limit.

| Date | EMCS Menu/Submenu | Scenario Description | | | |
|--------------|---------------------------------------|---|--|--|--|
| | | For example: | | | |
| | Risk | <i>Trading Limit</i> =1.000.000€ | | | |
| _ | Management | Current Trading Limit =800.000€ | | | |
| Every Day | \rightarrow Functions \rightarrow | Used Trading Limit = 450.000€. | | | |
| | Manage Trading | The EMCS user through the field New Limit in this screen, tries to | | | |
| | Limits | increase the Current Trading Limit to 900.000€. | | | |
| | | User receives a confirmation message since: | | | |
| | | <i>New Limit</i> =900.000€ < <i>Trading Limit</i> =1.000.000€ | | | |

3.4.4.4 Credit Limit Increase – Rejected Scenario

The Clearing Member would like to <u>increase</u> the **Current Trading Limit** for a Clearing Subaccount and the <u>new Current Trading Limit</u> amount is **higher** than the Trading Limit.

| Date | EMCS Menu/Submenu | Scenario Description |
|--------------|---|---|
| Every Day | Risk Management →Functions → Manage Trading Limits | For example: Trading Limit =1.000.000€ Current Trading Limit =1.000.000€ Used Trading Limit = 450.000€. The EMCS user through the field New Limit in this screen, tries to increase the Current Trading Limit to 1.100.000€. User receives a rejection message since: New Limit =1 100.000€ > Trading Limit=1.000.000€ |
| | | New Limit =1.100.000€ > Trading Limit=1.000.000€ |



3.4.5 Credit Limit after EnExClears' EoD clearing procedures

At 15:15 EET every clearing day, EnExClear, performs the following EoD procedures:

- Evaluates Clearing Members deposited guarantees (cash and letter of guarantees)
- Calculates Margins for every Clearing Account. The calculation of Margin is carried out, based on the net position (obligation/claim) of the Clearing Account, arising from the finalized transactions, which have been notified to the Clearing System during the Clearing Date until 15:00 (EET). Specifically:
 - If an <u>obligation</u> arises for the Clearing Member to pay a cash amount, which has not been settled yet, this amount is set as Margin.
 - If a <u>claim</u> arises for the Clearing Member to receive a cash amount, then the Margin equals to zero.
- Calculates **Credit Limits** for every Clearing Account, according to the amounts calculated in the previous step. Please note that when <u>claims</u> arise from the Clearing Procedure of HEnEX's NGasTP for a Clearing Account, the amount of the claim <u>is not added</u> to the current calculated credit limit of the Clearing Account.
- Calculates Settlement Amounts, for every Clearing Account
- Calculates the Fees and Taxes
- Produces Reports & Files of Clearing Results

This information can be retrieved from EMCS Client through the following menu:

- Clearing & Settlement
- Data export

| Date | EMCS Menu/Submenu | Scenario Description | | |
|--|---|----------------------|--|--|
| The EMCS User can retrieve through EMCS Client menu all the information regarding the: | | | | |
| Evaluated deposited guarantees (cash and letter of guarantees) | | | | |
| Required Margins for every Clearing Account | | | | |
| Available Credit Limits for every Clearing Account | | | | |
| ٠ | Consumed Credit Limit (according to transactions) | | | |
| This information can be exported through the following menu: | | | | |
| Data Export: in CSV or Excel format | | | | |

• Risk Management: in PDF Report



| Date | EMCS Menu/Submenu | Scenario Description |
|--------------|--|--|
| Every Day | Data Export → CSV Files → Group: →Clearing & Risk Data → Spot Energy Market Risk Analysis →Clearing System: CGAS | A. Data Export Menu: Through Data Export menu, the file <i>Spot Energy Market Risk Analysis</i> in CSV or the certain and the produced, which displays all the above information. |
| Every Day | Data Export → CSV Files → Group: →Clearing & Risk Data → Credit Limits | Additionally, through Data Export menu, the file <i>Credit Limits</i> in CSV or Excel format can be produced, which provides information about the Allocated & Used trading (credit) limits per Clearing Account. CSV Files CSV Files CIearing & Risk Data CSV Files Credit Limits Print Parameter Value Clearing Date From Clearing Date From Clearing Date To Clearing Account Clearing Account Clearing Account Clearing System Clearing System Folder Name: File Type: EXCEL Tun |



| Date | EMCS Menu/Submenu | Scenario Description |
|--------------|--|--|
| Every Day | Risk Management → Reports → Clearing Members' Limits | B. Risk Management Menu: Through Risk Management menu, the below reports in PDF format can be produced: Clearing Members' Limits, which displays the credit limits allocated by Clearing Members to the Trading Member (Clearing Accounts). Setting Settement State Export Set Export Set Former Set Fo |
| | Risk Management → Reports → Consumed Trading Members' Limits | Consumed Trading Members' Limits to display during the day, the consumed credit limits of their Trading Members in Trading System |



4. Contact Details

For any inquiries and problem reporting you can contact with the EnEx Members Support Department:

E-mail:

Trading Issues: Sent e-Mail with subject starting [**Trading System** Mock Sessions] to EnEx-Member-Support@enexgroup.gr

Clearing Issues: Sent e-Mail with subject starting [EMCS Mock Sessions] to EnEx-Member-Support@enexgroup.gr

<u>Tel:</u>

Trading Issues: +30 210 33 66 845

Clearing Issues: +30 210 33 66 952