

part of eex group



# ECC Risk Management Services

Manual

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## Disclaimer

The functionality of Trading Limits and other processes at the ECC Partner Exchanges is summarized herein for information purposes only. ECC does not accept any liability for the completeness or correctness of the summarized information. Responsibility for Trading Limits and the Emergency Member Stop remains exclusively with the ECC Partner Exchanges and ECC does not assume any liability with regard to the external rules of ECC Partner Exchanges. For further details regarding Trading Limits please refer to the respective Market Rules and technical documentation provided by the ECC Partner Exchanges.

# 1. Definition of Terms

The following table provides an overview of the most relevant terms and abbreviations used throughout this document. For terms defined in the ECC Clearing Conditions, please refer to [1].

Accounting Cut-Off	Please refer to ECC Clearing Conditions
Available Limit	<p>The difference between the value of the Initial Limit, set by the Clearing Member and the amount of the limit having been consumed, e.g. through Orders entered or Trades concluded.</p> <p>The exact definition of “Available Limit” varies between the trading systems offering Trading Limits; hence the respective Market Rules are applicable.</p>
Booking Cut	see: <i>Accounting Cut-Off</i>
Broker	Entity facilitating the matching of a Trade outside of a Partner Exchange. Upon request by their clients, such transactions may be registered at the respective Partner Exchange by means of Trade Registration; thereby the Trade is novated into an exchange Trade.
Business Hours	<i>Please refer to ECC Clearing Conditions</i>
Business Day	<i>Please refer to ECC Clearing Conditions</i>
Cash Limit	Constitutes a maximum financial exposure up to which a Trading Participant can trade within a timeframe defined by the exchange, e.g. between two ECC Booking Cuts or on one exchange trading day.
Clearing Conditions	Rulebook of ECC, which clarifies, amongst other aspects, how Trading Limits can be managed via ECC. For the actual processing and application of Trading Limits, the Market Rules of the respective Partner Exchange are applicable.
Clearing Member	<i>Please refer to ECC Clearing Conditions</i>
CLTX	EEX Asia is a Market, on which Derivatives Market Transactions in freight and iron ore are concluded or registered.
Combined Financial Limit	A Combined Financial Limit constitutes a Financial Limit applied to a Trading Participant across several asset classes or trading segments.
Commodity Limit	see: <i>Quantity Limit</i>
Contract	<i>Please refer to ECC Clearing Conditions</i>
Derivatives Market	<i>Please refer to ECC Clearing Conditions</i>
Derivatives Market Transaction	<i>Please refer to ECC Clearing Conditions</i>
EEX	European Energy Exchange AG is a Market, on which Spot and Derivatives Market Transaction in various commodities are concluded or registered.

Emergency Member Stop	<i>Please refer to ECC Clearing Conditions</i>
EPEX SPOT	EPEX SPOT SE is a Market, on which Spot Market Transactions in power are concluded or registered.
Eurex	Refers to ECC's Clearing System for Derivatives Market Transactions.
Eurex Stop Button	Technical stop functionality within the Eurex Clearing system to request an Emergency Member Stop.
Financial Limit	see: <i>Cash Limit</i>
HUDEX	HUDEX Ltd. is a Market, on which Derivatives Market Transactions in power are concluded.
HUPX	HUPX Zrt. is a Market, on which Spot Market Transactions in power are concluded.
Initial Limit	Maximum financial amount or quantity respectively, a Trading Participant is permitted to Trade on a specific Market, in a specific Product and timeframe.
Market	<i>Please refer to ECC Clearing Conditions</i>
Market Rules	Respective rulebook of the ECC Partner Exchange, stipulating, inter alia, how Trading Limits are applied in the Trading Process.
Non-Clearing Member	<i>Please refer to ECC Clearing Conditions</i>
NOREXECO	NOREXECO ASA is a Market, on which Derivatives Market Transactions in pulp and recovered fiber are concluded or registered.
Partner Exchange	An entity operating a Market that ECC provides Clearing & Settlement services for.
Position	<i>Please refer to ECC Clearing Conditions</i>
Pre-Clearing Limit	A Trading Limit taking effect on Trade transfer from the Partner Exchange to ECC. Non-conforming Trades are rejected by ECC; hence do not lead to an increase of the client's risk position at ECC.
Pre-Trading Limit	A Trading Limit taking effect before Trade conclusion. Non-conforming orders are rejected by the Partner Exchange; hence do not lead to an increase of the risk position of the client at the Partner Exchange.
Product	<i>Please refer to ECC Clearing Conditions</i>
PXE	Power Exchange Central Europe, Prague, is a Market, on which Spot Market Transactions in power are traded or registered.

Quantity Limit	A Quantity Limit constitutes a maximum amount of commodity units or contracts a Trading Participant can trade per Trading Session, Trading Day or per Trade (see: <i>Order Quantity Limit</i> and <i>Transaction Size Limit</i> ).
Reactivation Request	Is a technical message sent by ECC to Partner Exchanges to inform them about the legal request to reactivate a Non-Clearing Member for trading.
SEEPEX	South-East European Power Exchange, is a Market, on which Spot Market Transactions in power are concluded or registered.
SEMOpX	Market operator for the day-ahead and intraday markets for Ireland and Northern Ireland. For avoidance of doubt, SEMOpX is a joint venture between EirGrid and SONI.
SMSS	Spot Market Settlement System; among other functionalities, SMSS serves as ECC's Clearing System for Spot Market Transactions and will provide the self-service Trading Limit Management services.
Spot Market	<i>Please refer to ECC Clearing Conditions</i>
Spot Market Transaction	<i>Please refer to ECC Clearing Conditions</i>
Stop Button	<i>Please refer to ECC Clearing Conditions</i>
Stop Limit	<i>Please refer to ECC Clearing Conditions</i>
Stop Request	A technical message sent by ECC to Partner Exchanges to inform them about the legal request to suspend a Non-Clearing Member from trading immediately.
Straight-Through Processing (STP)	For some of its Partner Exchanges, ECC operates an STP solution, allowing the fully electronic routing and booking of OTC Derivatives Market Transactions from Brokers, by means of Trade Registration according to the Market Rules of the respective exchange.
Trade	<i>Please refer to ECC Clearing Conditions</i>
Trading Limit	<i>Please refer to ECC Clearing Conditions</i> Throughout this document, the term "Trading Limit" refers to a Pre-Trading Limit, unless stated otherwise.
Trading Day	<i>Please refer to ECC Clearing Conditions</i>
Trading Participant	<i>Please refer to ECC Clearing Conditions</i> Depending on whether the Trading Participant is a Clearing Member or Non-Clearing Member of ECC, it is identified by its Clearing Member ID or Non-Clearing Member ID, e.g. "ABCEX".

## 2. Introduction

The Risk Management Services summarized in this document, consist of several capabilities in the pre-trading and post-trading phase, as well as emergency actions offered by ECC and/or its Partner Exchanges.

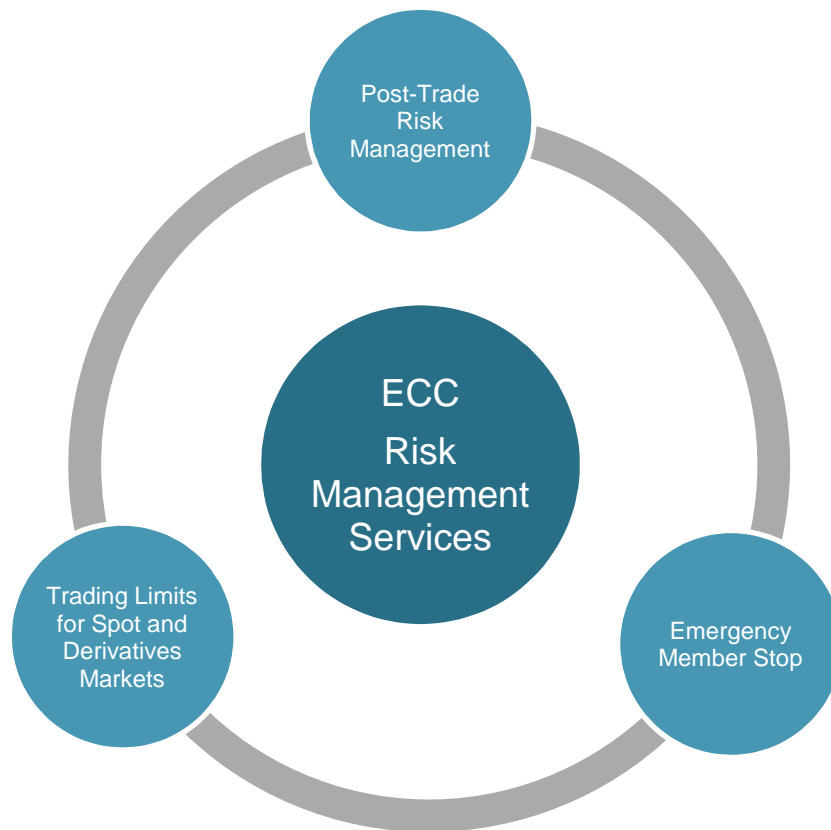


Figure 1: ECC Risk Management Services

### Trading Limit Services for Spot and Derivatives Markets

Chapters 3 and 4 of this document elaborate on how ECC Clearing Members can directly or indirectly access the Trading Limit capacities of ECC’s Partner Exchanges’ trading systems in order to manage the level of exposure resulting from their own or their Non-Clearing Members’ trading activities on these Markets.

In this context, ECC assumes the role of an intermediary between its Clearing Members and Partner Exchanges, by implementing limit setting/modification (“Limit Maintenance”) procedures between the involved parties, i.e. Partner Exchange, ECC and Clearing Member and offering these as an integrated service to its Clearing Members and Trading Participants respectively. For details on the commercial terms for this service, please see the ECC Price List [1].



ECC offers a fully self-serviced “One-Stop-Shop”-solution for the management and reporting of Trading Limits within its Member Area (SMSS). Please refer to the section “Maintenance Process” within the respective Trading Limit or the Trading Limit Fact Sheet in chapter 7 to see whether it is on-boarded to the Member Area yet.

Due to ECC facilitating the limit setting process between Clearing Member and respective Partner Exchange only, ECC will not assume liability for the correct and timely processing and application of the requested limits by the respective Partner Exchange. ECC relies on and will only forward to the Clearing Member a confirmation statement of the exchange. The Clearing Members are obliged to verify the correct processing of the requested Trading Limits and request correction in case of any errors. For further information, please refer to section 3.1.2 (2) of ECC’s Clearing Conditions, as well as section 13 of ECC’s Technical Regulations [1].

### **Post-Trade Risk Management**

Additionally, Clearing Members can obtain direct access to the Eurex risk control functionalities within the Eurex clearing system, of which the workings are stipulated in chapter 5. These risk control functionalities include the Trade Confirmation Broadcast, the Margin Reporting and the Advanced Risk Protection functionality – the latter can be linked to the ECC Emergency Member Suspension (Stop Button).

### **Emergency Member Stop**

In chapter 6, the functionalities of the Emergency Member Stop are described. Alternatively, a regular suspension of a Non-Clearing Member at the respective Partner Exchanges, as specified in ECC’s Clearing Conditions [1], can be requested, as well.

In the following, ECC aims to provide its members with a comprehensive exposition on the risk management functionalities offered directly or indirectly by ECC. While the scope of the present document covers the required information for all risk management instruments supported by ECC, further and technical information in particular, may be found in the accompanying release documentation of the respective trading and/or clearing system. Also, please refer to the applicable rules and regulations of ECC and its Partner Exchanges. The relevant links can be found in Annex A – References.

**Further Risk Management functionality not in scope of this document**

In addition to the risk management services offered by ECC and its Partner Exchanges Clearing Members may apply additional risk management functionalities within the trading front-ends or execution platforms used by their clients. Since these risk measures are typically applied before order submission to the respective exchange trading system, only orders compliant with the risk levels defined by the Clearing Member will be submitted to the Partner Exchange or Broker Trading System.

**Changes to the Risk Management functionalities and this Document**

Changes in the Risk Management functionalities and amendments to this document shall enter into force and be applicable as of the Business day after they have been published on ECC's website.

## 3. Trading Limits for Spot Markets

### 3.1. Overview

Trading Limits for ECC Spot Markets are pre-trading limits, i.e. implemented by ECC's Partner Exchanges in their respective trading systems. Therefore, the Trading Limits for ECC Spot Markets fully rely on the available functionalities of the trading systems respectively the relevant rules and regulations governing the trading processes.

The following table provides an overview of limit implementation on ECC-cleared Spot Markets.

Exchange	Market	Limit Type
	Natural Gas Spot Trading	Financial Limit
	Emissions Primary Market Auction Trading	Total Purchase Quantity Limit
	Emissions Secondary Market Continuous Trading	-
	Guarantees of Origin Auction Trading operated by EEX AG on behalf of the French State	Financial Limit
	Power Spot Auction Trading for continental and GB market areas	Financial Limit <sup>1</sup>
	Power Spot Continuous Trading	Financial Limit
	Power Spot Continuous Trading GB	Financial Limit
	Spot Auction Trading Capacity Guarantees	Financial Limit Technical Quantity Limit
	Power Spot Hourly Auction Trading	Financial Limit
	Power Spot Continuous Trading	Financial Limit
	Power Auction Trading	Financial Limit
	Power Spot Hourly Auction Trading	Financial Limit
	Power Spot Auction Trading	Financial Limit <sup>1</sup>
	Power Spot Continuous Trading	Combined Financial Limit with EPEX SPOT

Figure 2 - Trading Limits for Spot Markets at the time of writing

New Trading Limits and changes to existing limits can currently only be submitted by authorized persons. To authorize persons the form T10 “Setup User SMSS” is to be used.

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<sup>1</sup> The limit value can be set in EUR or in GBP

### 3.2. EEX Emissions Primary Market Auction Trading – Total Purchase Quantity Limit

#### Functionality Description

The Total Purchase Quantity Limit for the Primary Market Emissions Auction Trading at the European Energy Exchange (EEX) represents the maximum purchase volume of emissions certificates by a Trading Participant per auction. The limit can be set up upon request of the respective Clearing Member, for its own or an associated Non-Clearing Member's trading activity and has to be specified on Product level (e.g. EUA 3rd compliance period, EUAA, etc.). Please note that in case several auctions for the same Product take place on a particular trading day, each auction will have a separate limit. The auction limit naturally translates into a price dependent and thus, variable financial exposure.

Please refer to the relevant Market Rules for detailed information [2].

#### Maintenance Process

The specification of the auction limits is undertaken by the Clearing Member at Trading Participant level via ECC. Modifications communicated to ECC via free-format email to [limits@ecc.de](mailto:limits@ecc.de) until 15:00 CET, are forwarded to EEX on the same day. ECC forwards the requested Total Purchase Quantity Limit to EEX and subsequently obtains a confirmation about its successful implementation in the trading system. ECC confirms the implementation to the Clearing Member and subsequently stores the specified limit internally to provide Clearing Members with this information upon request.

The Trading Participant can view its currently set limit (Initial Limit) in the trading system. If an auction bid exceeds the limit, a failure message is shown on the trading screen of the Trading Participant, containing the Initial Limit and the current limit utilization.

### 3.3. EEX Natural Gas Continuous Trading – Cash Limit

#### Functionality Description

The Cash Limit for natural gas Spot trading on EEX represents the maximum payment amount resulting from Spot Trades between two ECC Booking Cuts (currently 16:00 CET on ECC Business Days)<sup>3</sup>. Therefore the limit needs to be sufficiently large to cover three (regular weekends), respectively four or five days (weekend + TARGET II holidays) of trading. The Trading Limit can be requested by the Clearing Member for the own trading activity or the trading activity of a connected Non-Clearing Member. The limit is defined in Euros; financial exposure in any other currency is converted into Euros.

The limit check is performed by EEX on each Buy<sup>4</sup> order entry, i.e. orders breaching the respective limit, will not be accepted by the EEX trading platform. A new or updated order is allowed to enter the order book only, if the resulting financial exposure of this order is lower than the Available Limit.

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<sup>3</sup> Please note that Trade cancellations, according to the Trade cancellation policy of the Exchange, may result in a payment amount exceeding the Initial Limit.

<sup>4</sup> Buy orders at a negative price (e.g. trading a spread with negative price) are handled like regular Sell orders, and Sell orders at a negative price are handled like regular Buy orders.

The Available Limit is defined as the difference between the Initial Limit value set by the Clearing Member and the total exposure of all orders, plus the net payment from all Trades executed since ECC's last Booking Cut. The net payment amount is floored at zero, i.e. the Available Limit can never exceed the value of the Initial Limit.

$$\text{Available Limit} = \text{Initial Limit} - (\text{Exposure of Orders} + \text{Max}(\text{Net Payment Amount of Trades}; 0))$$

The exposure of an order is defined as the net payment amount, due by the client from the order's potential execution. For orders that may result in a payment to the client, the exposure is defined as zero. By using the net payment amount, i.e. Buy and Sell transactions concluded in the same time frame are offset against each other; greater limit efficiency for clients is achieved.

Following table summarizes the most relevant business events and their effects on the Available Limit:

Event	Available Limit	Remarks
Buy order <sup>5</sup> is entered	<b>Decreased</b>	Only allowed, if Available Limit remains > 0
Sell order <sup>5</sup> is entered	<b>Unchanged</b>	Always permitted
Buy order is deleted	<b>Increased</b>	Always permitted
Sell order is deleted	<b>Unchanged</b>	Always permitted
Buy order is executed	<b>Unchanged</b>	Allocation already done in the order
Sell trade is executed	<b>Increased</b>	Offsetting only against Buy transactions
Buy trade is cancelled	<b>Increased</b>	As per trade cancellation policies
Sell trade is cancelled	<b>Decreased</b>	As per trade cancellation policies
Initial Limit is increased	<b>Increased</b>	Upon request by Clearing Member
Initial Limit is decreased	<b>Decreased</b>	Upon request by Clearing Member
Reset at ECC Booking Cut	<b>Increased</b> <b>Unchanged</b>	Increased, if net payment to ECC Unchanged, if net payment to client

Figure 3 - Details on Cash Limit for EEX Spot

Orders, once accepted, will remain valid until either matched, manually removed by the trader, or removed by EEX Market Operations. Limit changes only have an effect on orders entered thereafter;

<sup>5</sup> Buy orders at a negative price (e.g. trading a spread with negative price) are handled like regular Sell orders, and Sell orders at a negative price are handled like regular Buy orders.

hence, Clearing Members may need to liaise with the affected Trading Participant to bring already existing exposure in line.

In case of a technical problem preventing EEX from checking the compliance of orders with Trading Limits, EEX will communicate this issue as soon as possible; EEX Trading Participants will nevertheless still be legally required to comply with their Trading Limit.

Also, EEX has the right to cancel a transaction automatically, if it is not within the Trading Limit of one or all involved Trading Participants.

Trading Participants for delivery area CEGH have to take care that the Trading Limit has to be sufficient in order to allow order entry by the MGM ("Marktgebietsmanagement") in case of imbalances in the schedule management. Consequences of the inability for the entry of such orders are described in the respective market rules of the MGM.

Please refer to the relevant Market Rules for detailed information **Fehler! Verweisquelle konnte nicht gefunden werden..**

### Maintenance Process

The specification of Cash Limits is undertaken by the Clearing Member at Trading Participant level via ECC or by the Settlement Member itself.

The Trading Limit can be managed by authorized users of ECC Clearing Members and Settlement Members in the ECC Member Area. For further details, please refer to Chapter 3.16, respectively the Member Area User Guide [12].

Limit Definition: PEGAS\_SPOT\_EUR

Limit editable by: Clearing Member, Settlement Member

Field Name	Editable by	Description
Settlement Member *	CM, SM	Affected Member (ECC Member ID)
Limit Value *	CM, SM	Limit Value (in respective Unit of Measurement)
Limit Begin *	CM, SM	Earliest Date, when Limit comes into effect
Limit End	CM, SM	Last Date on which the Limit shall be valid

\* Mandatory field

All maintained Trading Limits are synchronized between ECC and EEX Monday to Friday at 16:00 CET. Limit modifications are sent every 10 minutes as ad-hoc Partial Updates from ECC to EEX each calendar day.

EEX will process Trading Limits received from ECC immediately within the following times:

EEX Business Days:

09:00 – 18:00 CET

### 3.4. Guarantees of Origin Auction Trading operated by EEX AG – Cash Limit

## Functionality Description

The Cash Limit for Guarantees of Origin Auction Trading operated by EEX AG on behalf of the French State represents the maximum possible payment amount per auction. Therefore the limit needs to be sufficiently large to cover all production months auctioned per auction, as it will be possible to trade several production months at the same time in the event where the French State wants to reactivate unsold quantities from past auctions. The Trading Limit can be requested by the Clearing Member for the own trading activity or the trading activity of a connected Non-Clearing Member. The limit is defined in Euros.

A Trading Participant can only participate at the auction if a Trading Limit higher than zero is set in the trading system.

At the submission of a buy order during the order period, it is checked that the maximum financial exposure of all orders (incl. the new order) is covered by the current value of the limit. An order not compliant with the current value of the limit is automatically rejected by the trading system.

If the financial limit is decreased and the available orders are not consistent with the new trading limit, then orders are rejected automatically following LIFO-principle.

In case of a technical problem preventing EEX AG from checking the compliance of orders with Trading Limits, EEX AG will communicate this issue as soon as possible; EEX AG Trading Participants will nevertheless still be legally required to comply with their Trading Limit.

Also, EEX AG has the right to cancel a transaction automatically, if it is not within the Trading Limit of one or all involved Trading Participants.

Please note that the Trading Limit is used for the calculation of a pre-auction margin. The margin will be calculated two day prior to the auction EOD and again one day prior to the auction EOD. The margin will be calculated per Trading Participant and will equal the Trading Limit. The margin will be released on the auction day. This should be taken into account when setting the Trading Limit.

Please refer to the relevant Market Rules for detailed information [4].

## Maintenance Process

The Trading Limit can be managed by authorized users of ECC Clearing Members in the ECC Member Area. For further details, please refer to Chapter 3.16, respectively the Member Area User Guide [12].

Limit Definition: PWX\_GOFR\_EUR

Limit editable by: Clearing Member

Field Name	Editable by	Description
Settlement Member *	CM	Affected Member (ECC Member ID)
Limit Value *	CM	Limit Value (in respective Unit of Measurement)
Limit Begin *	CM	Earliest Date, when Limit comes into effect
Limit End	CM	Last Date on which the Limit shall be valid

\* Mandatory field



All maintained Trading Limits are synchronized between ECC and EEX AG Monday to Friday at 16:00 CET. Limit modifications are sent every 10 minutes as ad-hoc Partial Updates from ECC to EEX AG each calendar day.

The Trading Limits can be modified until one EEX AG Business Day prior to the auction 16:00 CET. Apart from that, EEX AG will process Trading Limits received from ECC immediately within the following times:

EEX AG Business Days:

09:00 – 18:00 CET

### 3.5. EPEX SPOT Power Auction Trading – Cash Limit

#### **Functionality Description**

The Cash Limit for auction trading at the European Power Exchange (EPEX SPOT) represents an overall Financial Limit per Trading Participant per auction trading day from 16:00 CET to next auction trading day 16:00 CET across all delivery areas and portfolios for continental and GB market areas.

Additionally, it is possible to define sub-limits covering one single delivery area and/or trading portfolio only, as well as combining the above overall limit with dedicated sub-limits.

Due to orders at EPEX SPOT auctions consisting of a series of (price, quantity)-couples, the exposure per order is calculated as the maximum value of (price\*quantity) for the complete order. Only orders with a positive exposure are applied against the limit. Orders for physical fulfillment of Derivatives contracts are however excluded from the calculation of the relevant limit's utilization. For orders, which have been submitted without limit price, the maximum price of the respective market area will be applied, unless the Clearing Member or Settlement Member has specified a Realistic Price Range (see below).

The Trading Limits cover hourly day-ahead as well as any intraday auctions and the limit check is performed by EPEX SPOT on each order entry. It is also possible to define the Trading Limit only for hourly auctions (Instrument=HOUR), half hour auctions (Instrument=30MIN) or 15 minutes auctions (Instrument=15MIN).

Thus, once a specific auction has taken place and the participant's orders result in allocated transactions, the corresponding exposure from orders is released from the limit and the respective exposure from trades is debited against the Available Limit amount simultaneously. Any residual limit amount remains available for the next auction of the same trading day. If the limit is however exceeded, remaining unexecuted orders are rejected by the EPEX SPOT trading system (ETS). Orders submitted last, are deleted first.

In case of a limit reduction leading to a breach of the Initial Limit, the Trading system will delete orders until the limit is no longer exceeded. Orders submitted last, are deleted first.

Also, apart from the limit value, its start and end date, as well as the delivery area (Optional Field: TSO Areas) and portfolio (Optional Field: Portfolios), can be defined.

Optionally, Min./Max Order Price can be set by the Settlement Member for his own limit. If these values are set, the Settlement Member cannot enter orders outside the defined price boundaries. In case of usage, both values have to be set and must fulfill the condition  $\text{Min. Order Price} < \text{Max. Order Price}$ .

The Realistic Price Range (Optional Fields: Min. Realistic Price, Max. Realistic Price) allows the Clearing Member and the Settlement Member to specify a lower and an upper boundary for the strict exposure calculation for auctions at EPEX SPOT. Thus, when entering a Sell order with a negative price lower than the minimum realistic price, the exposure is only calculated up to and including the minimum realistic price. Likewise, when entering a Buy order with a possible positive price higher than maximum realistic price, the exposure is only calculated up to and including the maximum realistic price. This allows Trading Participants to also bid at extreme prices that are unlikely to occur. The residual risk is hereby accepted by the Clearing Member. In case of usage, both values have to be set and must fulfill the condition  $\text{Min. Realistic Price} < \text{Max. Realistic Price}$ .

In case of a technical problem preventing EPEX SPOT from checking the compliance of orders with Trading Limits, EPEX SPOT will communicate this issue as soon as possible; Trading Participants will nevertheless still be legally required to comply with their Trading Limit.

Trading Limit cannot be set for Trading Participants, setup for technical reasons only, representing an exchange involved in the market coupling process. Requests to setup a financial Trading Limit will be rejected by the exchange.

Please refer to the relevant Market Rules for detailed information [3].

### Maintenance Process

The specification of Cash Limits is undertaken by the Clearing Member at Trading Participant level via ECC or by the Settlement Member itself.

The Trading Limit can be managed by authorized users of ECC Clearing Members and Settlement Members in the ECC Member Area. For further details, please refer to Chapter 3.16, respectively the Member Area User Guide [12].

Limit Definition: EPEX\_AUCTION\_EUR or EPEX\_AUCTION\_GBP<sup>6</sup>

Limit editable by: Clearing Member, Settlement Member

Field Name	Editable by	Description
Settlement Member *	CM, SM	Affected Member (ECC Member ID)
Limit Value *	CM, SM	Limit Value (in respective Unit of Measurement)
Limit Begin *	CM, SM	Earliest Date, when Limit comes into effect
Limit End	CM, SM	Last Date on which the Limit shall be valid
Min Realistic Price (EUR or GBP)	CM	Bids with prices lower than this value are not reserved against the limit with their full exposure, but with a reduced exposure
Max Realistic Price (EUR or GBP)	CM	Bids with prices higher than this value are not reserved against the limit with their full exposure, but with a reduced exposure
Min Order Price (EUR or GBP)	SM	The Settlement Member cannot enter sell orders with a lower price. Leave blank, if no restriction should apply (default)
Max Order Price (EUR or GBP)	SM	The Settlement Member cannot enter buy orders with a higher price. Leave blank, if no restriction should apply (default)
TSO Areas (EPEX)	CM, SM	Restrict applicability of this limit to a specific TSO Area traded on EPEX. Leave blank, if the limit shall apply across all TSO Areas the participant is admitted to in ETS (default)
Portfolios	CM, SM	Restrict applicability of this limit to a specific Trading Portfolio. Leave blank, if the limit shall apply across all Trading Portfolios of this participant in ETS (default)

<sup>6</sup> Both limits cover the same trading exposure with the only difference that the limit value is denoted in EUR (for EPEX\_AUCTION\_EUR) or GBP (for EPEX\_AUCTION\_GBP). Therefore either EPEX\_AUCTION\_EUR or EPEX\_AUCTION\_GBP should be set, but not both in parallel. An FX conversion will be done within the trading exposure calculations of the Trading System where required.

Field Name	Editable by	Description
Instrument: (empty/HOUR/ 30MIN/15MIN)	CM, SM	Restrict applicability of this limit to a specific trading instrument. Leave blank, if the limit shall apply for every instrument, the participant is admitted for in ETS (default).

\* Mandatory field

All maintained Trading Limits are synchronized between ECC and EPEX SPOT Monday to Friday at 09:30 CET. Limit modifications are sent every 10 minutes as ad-hoc Partial Updates from ECC to EPEX SPOT each calendar day.

EPEX SPOT will process Trading Limits received from ECC immediately within the following times:

Each calendar day:

08:30 – 08:45, 09:30 – 10:45, 11:35 – 11:45, 13:40 – 13:50, 16:00 – 16:15, 17:45 – 18:15 and 19:50 – 21:00 CET

EPEX SPOT allows the setup of up to 3 intersecting limits in terms of NCM, TSO Area, Trading Portfolio and time (Start Date, End Date). In case too many limits are set per Trading Participant, EPEX SPOT will reject limit modifications or new limits.

### 3.6. EPEX SPOT Power Continuous Trading – EUR Cash Limit

#### Functionality Description

The Cash Limit for Intraday continuous trading in the trading system M7 represents a single Financial Limit, covering all delivery areas tradable in the trading system M7, except the GB market. The trading limit covers the combined exposures of the exchanges EPEX SPOT and SEMOpX. The limit is denoted in EUR and affects both order book trading and trade registration (OTC). It is therefore equivalent to the maximum financial amount across delivery areas, up to which the Trading Participant can trade during two consecutive ECC Booking Cuts (currently at 16:00 CET on ECC Business Days). The Trading Participant's net financial position from intraday trading in M7 is thus capped by the Cash Limit<sup>7</sup>. Therefore the limit needs to be sufficiently large to cover three (regular weekends), respectively four or five days (weekend + TARGET II holidays) of trading. Orders are checked for compliance with the current Trading Limit on entry and are only accepted, if sufficient limit is available. Orders that may result in a payment to the client (Sell at positive price/Buy at negative price), are considered risk-free and are always permitted.

When an Order is traded, the overall financial volume of the Trade, calculated as the product of the transaction's volume and price, is added to or subtracted from the Cash Limit, meaning that the current value of the limit reflects the member's remaining Intraday trading capacity. The limit allocation of the Order (if applicable) is simultaneously removed.

<sup>7</sup> Please note that Trade cancellations, according to the Trade cancellation policy of the Exchange, may result in a payment amount exceeding the Initial Limit.

Should the value of the Cash Limit reach zero, the Trading Participant will be unable to enter any Buy (Sell) orders at positive (negative) prices until the next ECC Booking Cut; unless any trading activity to increase the current Cash Limit is undertaken.

Please refer to the relevant Market Rules for detailed information [3].

### **Maintenance Process**

Cash Limits are specified by the Clearing Member at Trading Participant level via ECC. It is important to note that it is mandatory for Clearing Members to set values for the M7 continuous trading Cash Limits for their associated Non-Clearing Members and their own trading activities respectively.

Cash Limits can be modified until 14:00 CET on every ECC Business Day and, once confirmed by ECC, become effective at 16:00 CET. Modifications are currently communicated to ECC by free-format email to [limits@ecc.de](mailto:limits@ecc.de). ECC forwards the requested Cash Limit to EPEX SPOT and subsequently obtains a confirmation of its successful implementation in the trading system. ECC confirms the implementation to the Clearing Member and subsequently stores the specified limit internally to provide the Clearing Member with this information upon request. The current value of the Available Limit can be inquired in the trading system front-end by the Trading Participant, but is not available in any other trading front-end.

### **3.7. EPEX SPOT Power Continuous Trading – GBP Cash Limit**

The financial Trading Limit for Power Continuous Market of GB market is identical to the limit for continuous trading in EUR at EPEX SPOT. With the only differences that the limit is denoted in GBP and also sell orders (at positive prices) or buy orders (at negative prices) can have a limit decreasing effect due to delivery risk ECC faces in this particular market. The current parameters that do apply can be found on ECC's website [6]. The Limit reset will still take place on ECC Business Days.

Hence, for a description of functionality and maintenance process of the respective Financial Trading Limit, please refer to Chapter 3.6.

Please refer to the relevant Market Rules for detailed information [3].

### **3.8. EPEX SPOT Auction Trading Capacity Guarantees – Cash Limit**

#### **Functionality Description**

The financial limit is based on an amount in Euro which is set by the Clearing Member per auction. All orders entered in the order period (e.g. 7 days before the auction day) are covered by the trading limit.

At the submission of a buy order during the order period, it is checked that the maximum financial exposure of all orders (incl. the new order) is covered by the current value of the limit. An order not compliant with the current value of the limit is automatically rejected by the trading system.

If the financial limit is decreased and the available orders are not consistent with the new trading limit, then orders are rejected automatically following LIFO-principle.

If no limit is provided for a trading participant, then all buy orders will be automatically accepted, i.e. the member could technically trade in an unlimited fashion.

EPEX SPOT only allows to setup one trading limit per settlement member. If more than one limit is entered, then the additional limit is rejected by the exchange.

### Maintenance Process

The Trading Limit can be managed by authorized users of ECC Clearing Members in the ECC Member Area. For further details, please refer to Chapter 3.16, respectively the Member Area User Guide [12].

Limit Definition: EPEX\_CPCTY\_EUR

Limit editable by: Clearing Member

Field Name	Editable by	Description
Settlement Member *	CM	Affected Member (ECC Member ID)
Limit Value *	CM	Limit Value (in respective Unit of Measurement)
Limit Begin *	CM	Earliest Date, when Limit comes into effect
Limit End	CM	Last Date on which the Limit shall be valid

\* Mandatory field

All maintained Trading Limits are synchronized between ECC and EPEX SPOT Monday to Friday at 09:00 CET. Limit modifications are sent every 10 minutes as ad-hoc Partial Updates from ECC to EPEX SPOT each calendar day. EPEX SPOT is integrating the Cash Trading Limits for Capacity Auction Trading starting 9 Days before the auction date until 1 day before the auction takes place between 09:30 and 18:00 CET.

### 3.9. EPEX SPOT Auction Trading Capacity Guarantees – Quantity Limit

#### Functionality Description

The quantity limit set by ECC consists of the number of capacity guarantee certificates (Unit: CG) which are deposited by a seller in the registry account at ECC before the auction day at EPEX SPOT. At the submission of a sell order in the EPEX SPOT Trading System for CGs, it is checked that the entered quantity is covered by the current value of the limit, i.e. short-selling is prohibited. An order not compliant with the current value of the limit is automatically rejected by the trading system. If no limit is provided for a trading participant, then all sell orders will be rejected.

#### Maintenance Process

The Trading Limit is managed by ECC. Non-Clearing Members can view the Trading Limits in ECC Member Area Limit Maintenance. Clearing Members cannot see the limits.

Limit Definition: EPEX\_CPCTY\_SELL\_QTY

Limit editable by: -

Field Name	Editable by	Description
Settlement Member *	-	Affected Member (ECC Member ID)
Limit Value *	-	Limit Value (in respective Unit of Measurement)
Limit Begin *	-	Earliest Date, when Limit comes into effect
Limit End	-	Last Date on which the Limit shall be valid
Instrument (CG)	-	Depicts e.g. the applicable year of capacity certificates that the sell quantity limit relates to.

\* Mandatory field

ECC is synchronizing Trading Limits on each ECC Business Day at 16:00 CET. EPEX SPOT is integrating the Trading Limits for Capacity Auction Trading starting 9 Days before the auction date until 1 day before the auction takes place between 09:30 and 18:00 CET.

### 3.10. HUPX Power Auction Trading – Cash Limit

#### Functionality Description

The Power Day-Ahead Market of HUPX is operated within the Auction Trading System ETS developed by EPEX SPOT. Hence, for a description of functionality of the respective Financial Trading Limit, please refer to Chapter 3.3.

Please refer to the relevant Market Rules for detailed information [5].

#### Maintenance Process

The specification of Cash Limits is undertaken by the Clearing Member at Trading Participant level via ECC or by the Settlement Member itself.

The Trading Limit can be managed by authorized users of ECC Clearing Members and Settlement Members in the ECC Member Area. For further details, please refer to Chapter 3.16, respectively the Member Area User Guide [12].

Limit Definition: HUPX\_AUCTION\_EUR

Limit editable by: Clearing Member, Settlement Member

Field Name	Editable by	Description
Settlement Member *	CM, SM	Affected Member (ECC Member ID)
Limit Value *	CM, SM	Limit Value (in respective Unit of Measurement)
Limit Begin *	CM, SM	Earliest Date, when Limit comes into effect
Limit End	CM, SM	Last Date on which the Limit shall be valid
Min Realistic Price	CM	Bids with prices lower than this value are not reserved against the limit with their full exposure, but with a reduced exposure

Field Name	Editable by	Description
Max Realistic Price	CM	Bids with prices higher than this value are not reserved against the limit with their full exposure, but with a reduced exposure
Min Order Price	SM	The Settlement Member cannot enter sell orders with a lower price. Leave blank, if no restriction should apply (default)
Max Order Price	SM	The Settlement Member cannot enter buy orders with a higher price. Leave blank, if no restriction should apply (default)
TSO Areas (HUPX)	CM, SM	Restrict applicability of this limit to a specific TSO Area traded on HUPX. Leave blank, if the limit shall apply across all TSO Areas the participant is admitted to in ETS (default)
Portfolios	CM, SM	Restrict applicability of this limit to a specific Trading Portfolio. Leave blank, if the limit shall apply across all Trading Portfolios of this participant in ETS (default)
Instrument: (empty/HOUR/15MIN)	CM, SM	Restrict applicability of this limit to a specific trading instrument. Leave blank, if the limit shall apply for every instrument, the participant is admitted for in ETS (default).

\* Mandatory field

All maintained Trading Limits are synchronized between ECC and HUPX Monday to Friday at 09:00 CET. Limit modifications are sent every 10 minutes as ad-hoc Partial Updates from ECC to HUPX each calendar day.

HUPX will process Trading Limits received from ECC immediately within the following times:

HUPX business days:

08:30 – 10:45, 11:45 – 18:00 CET

HUPX non-business days:

08:30 – 10:45, 11:45 – 14:00 CET

HUPX allows the setup of up to 3 intersecting limits in terms of NCM, TSO Area, Trading Portfolio and time (Start Date, End Date). In case too many limits are set per Trading Participant, HUPX will reject limit modifications or new limits.

### 3.11. HUPX Power Continuous Trading – Cash Limit

The financial Trading Limit for Power Continuous Market of HUPX is identical to the limit for continuous trading at EPEX SPOT. Hence, for a description of functionality and maintenance process of the respective Financial Trading Limit, please refer to Chapter 3.6.



Please refer to the relevant Market Rules for detailed information [5].

### 3.12. PXE/OTE Power Auction Trading – Cash Limit

#### **Functionality Description**

The Trading Limit for orders on the common day-ahead platform of OTE/PXE, routed via PXE, constitutes a Financial Limit. It is thus equivalent to the maximum financial amount up to which the Trading Participant can trade regular Spot orders per individual trading day. Market orders entered for the physical fulfillment of financial power futures, are however excluded from the calculation of the relevant limit's utilization. Yet, Market orders can only be generated up to the volume of the respective futures position. The overall financial volume of any regular Spot order, given by the product of volume and price, is calculated for Buy (Sell) orders with positive (negative) price and compared to the limit. The PXE system verifies that the financial volume of the entered order does not exceed the Trading Participant's financial order capacity and rejects any order entry immediately in the event of a breach. It should however be noted that orders for auctions beyond the next auction day are calculated against the limit for the current day.

Please refer to the relevant Market Rules for detailed information [4].

**Maintenance Process**

The Trading Limits are specified by the Clearing Member at Trading Participant level via ECC. It is important to note that for technical reasons Clearing Members have to set a value for the limit for their own trading activity and their associated Non-Clearing Members respectively. Limit changes requested before 15:00 CET, are forwarded to PXE on the same Business Day. Modifications confirmed by PXE become effective for the following day-ahead auction. Modifications are communicated to ECC via free-format email to [limits@ecc.de](mailto:limits@ecc.de). ECC forwards the requested Trading Limit and subsequently obtains confirmation of its successful implementation. ECC confirms the implementation to the Clearing Member and subsequently stores the specified limit internally to provide Clearing Members with this information upon request.

**3.13. SEEPEX Power Auction Trading – Cash Limit**

**Functionality Description**

The Power Day-Ahead Market of SEEPEX is operated within the Auction Trading System ETS developed by EPEX SPOT. Hence, for a description of functionality of the respective Financial Trading Limit, please refer to Chapter 3.3.

**Maintenance Process**

The specification of Cash Limits is undertaken by the Clearing Member at Trading Participant level via ECC or by the Settlement Member itself.

The Trading Limit can be managed by authorized users of ECC Clearing Members and Settlement Members in the ECC Member Area. For further details, please refer to Chapter 3.16, respectively the Member Area User Guide [12].

Limit Definition: SEEPEX\_AUCTION\_EUR

Limit editable by: Clearing Member, Settlement Member

Field Name	Editable by	Description
Settlement Member *	CM, SM	Affected Member (ECC Member ID)
Limit Value *	CM, SM	Limit Value (in respective Unit of Measurement)
Limit Begin *	CM, SM	Earliest Date, when Limit comes into effect
Limit End	CM, SM	Last Date on which the Limit shall be valid
Min Realistic Price	CM	Bids with prices lower than this value are not reserved against the limit with their full exposure, but with a reduced exposure
Max Realistic Price	CM	Bids with prices higher than this value are not reserved against the limit with their full exposure, but with a reduced exposure

Field Name	Editable by	Description
Min Order Price	SM	The Settlement Member cannot enter sell orders with a lower price. Leave blank, if no restriction should apply (default)
Max Order Price	SM	The Settlement Member cannot enter buy orders with a higher price. Leave blank, if no restriction should apply (default)
TSO Areas (SEEPEX)	CM, SM	Restrict applicability of this limit to a specific TSO Area traded on SEEPEX. Leave blank, if the limit shall apply across all TSO Areas the participant is admitted to in ETS (default)
Portfolios	CM, SM	Restrict applicability of this limit to a specific Trading Portfolio. Leave blank, if the limit shall apply across all Trading Portfolios of this participant in ETS (default)
Instrument: (empty/HOUR/15MIN)	CM, SM	Restrict applicability of this limit to a specific trading instrument. Leave blank, if the limit shall apply for every instrument, the participant is admitted for in ETS (default).

\* Mandatory field

All maintained Trading Limits are synchronized between ECC and SEEPEX Monday to Friday at 09:00 CET. Limit modifications are sent every 10 minutes as ad-hoc Partial Updates from ECC to SEEPEX each calendar day.

SEEPEX will process Trading Limits received from ECC immediately within the following times:

SEEPEX business days:

08:30 – 10:00, 10:30 – 18:00 CET

SEEPEX non-business days:

08:30 – 10:00, 10:30 – 11:45 CET

SEEPEX allows the setup of up to 3 intersecting limits in terms of NCM, TSO Area, Trading Portfolio and time (Start Date, End Date). In case too many limits are set per Trading Participant, SEEPEX will reject limit modifications or new limits.

### 3.14. SEMOpx Power Auction Trading – Cash Limit – EUR / GBP

#### Functionality Description

The Cash Limit for auction trading at SEMOpx represents an overall Financial Limit per Trading Participant per delivery day across all delivery areas and portfolios.

Trading limits can be defined either in EUR or GBP. Combined trading exposures from both trading currencies are allocated against the available trading limits. Any trading exposure in a trading currency

which is different to the limit currency will be converted to limit currency with an applicable FX rate defined by SEMOpX.

The Power Day-Ahead Market of SEMOpX is operated within the Auction Trading System ETS developed by EPEX SPOT. Hence, for a description of functionality of the respective Financial Trading Limit, please refer to Chapter 3.3.

Please refer to the relevant Market Rules for detailed information [10].

**Maintenance Process**

The specification of Cash Limits is undertaken by the Clearing Member at Trading Participant level via ECC or by the Settlement Member itself.

The Trading Limit can be managed by authorized users of ECC Clearing Members and Settlement Members in the ECC Member Area. For further details, please refer to Chapter 3.16, respectively the Member Area User Guide [12].

For the available trading limit in EUR, the following setup is available:

Limit Definition: SEMOPX\_AUCTION\_EUR or SEMOPX\_AUCTION\_GBP<sup>8</sup>

Limit editable by: Clearing Member, Settlement Member

Field Name	Editable by	Description
Settlement Member *	CM, SM	Affected Member (ECC Member ID)
Limit Value *	CM, SM	Limit Value (in respective Unit of Measurement)
Limit Begin *	CM, SM	Earliest Date, when Limit comes into effect
Limit End	CM, SM	Last Date on which the Limit shall be valid
Min Realistic Price (EUR or GBP)	CM	Bids with prices lower than this value are not reserved against the limit with their full exposure, but with a reduced exposure
Max Realistic Price (EUR or GBP)	CM	Bids with prices higher than this value are not reserved against the limit with their full exposure, but with a reduced exposure
Min Order Price (EUR or GBP)	SM	The Settlement Member cannot enter sell orders with a lower price. Leave blank, if no restriction should apply (default)

<sup>8</sup> Both limits cover the same trading exposure with the only difference that the limit value is denoted in EUR (for SEMOPX\_AUCTION\_EUR) or GBP (for SEMOPX\_AUCTION\_GBP). Therefore either SEMOPX\_AUCTION\_EUR or SEMOPX\_AUCTION\_GBP should be set, but not both in parallel. An FX conversion will be done within the trading exposure calculations of the Trading System where required.

Field Name	Editable by	Description
Max Order Price (EUR or GBP)	SM	The Settlement Member cannot enter buy orders with a higher price. Leave blank, if no restriction should apply (default)
TSO Areas (SEMOPX)	CM, SM	Restrict applicability of this limit to a specific TSO Area traded on SEMOpX. Leave blank, if the limit shall apply across all TSO Areas the participant is admitted to in ETS (default)
Portfolios	CM, SM	Restrict applicability of this limit to a specific Trading Portfolio. Leave blank, if the limit shall apply across all Trading Portfolios of this participant in ETS (default)
Instrument: (empty/HOUR/ 30MIN/15MIN)	CM, SM	Restrict applicability of this limit to a specific trading instrument. Leave blank, if the limit shall apply for every instrument, the participant is admitted for in ETS (default).

\* Mandatory field

All maintained Trading Limits are synchronized between ECC and SEMOpX Monday to Friday at 08:00 CET. Limit modifications are sent every 10 minutes as ad-hoc Partial Updates from ECC to SEMOpX each calendar day.

SEMOpX will process Trading Limits received from ECC immediately within the following times:

Each calendar day:

08:30 – 08:45, 09:30 – 11:45, 14:30 – 14:45, 16:00 – 18:15 and 19:50 – 21:00 CET

SEMOpX allows the setup of up to 3 intersecting limits in terms of NCM, TSO Area, Trading Portfolio and time (Start Date, End Date). In case too many limits are set per Trading Participant, SEMOpX will reject limit modifications or new limits.

### 3.15. SEMOpX Power Continuous Trading – Cash Limit

The financial Trading Limit for Power Continuous Market of SEMOpX is a combined trading limit together with the continuous trading at EPEX SPOT. Hence, for a description of functionality and maintenance process of the respective Financial Trading Limit, please refer to Chapter 3.6.

Please refer to the relevant Market Rules for detailed information [3] and [10].

### 3.16. ECC Central Limit Management System – Overview

ECC offers a self-service Limit Management System embedded in its customer portal, the ECC Member Area (<https://smss.ecc.de>). Through this system, users can view, create, update or delete Trading Limits in a completely automated process, and also generate reports on the currently maintained Trading Limits.

## Access and Usage Fees

Clearing Members of ECC can request read-write access to this system allowing them to modify trading limits for their associated Trading Participants. A usage-based fee is applicable for this type of access. Please refer to ECC Price List for the currently applicable fees. Additionally a read-only access is offered for Clearing Members, which is free of charge.

Trading Participants of ECC can request read-only access to this system for viewing all Trading Limits that concern their trading activity. This type of access is free of charge.

Some of the connected Trading Systems allow Trading Participants to set more restrictive for themselves; therefore a read-write access can be requested, for which a usage-based fee is applicable, too. If this option is applicable, please refer to the individual descriptions of the maintenance of limits within this document or the ECC Trading Limits Factsheet in chapter 0.

## Step-by-Step Instructions

Please refer to the ECC Member Area User Guide [12] for step-by-step instructions.

## 4. Trading Limits for Derivatives Markets

### 4.1. Overview

Trading Limits for ECC Derivatives Markets are either Pre-Trading or Pre-Clearing Limits, i.e. the limits are implemented either by ECC’s Partner Exchanges in their trading systems or in the clearing system of ECC. Therefore, Trading Limits for ECC Derivatives Markets rely partly on the available Pre-Trading Limit functionalities of ECC’s Partner Exchanges’ trading systems and partly on Pre-Clearing Limits, both as per the relevant rules and regulations governing ECC’s Partner Exchanges’ trading processes.

ECC does not provide specific limit implementations for Derivative Clearing. Some exchanges offer the possibility to setup Pre-Trade Limits within the Trading Systems which are described in the rules and regulations by the Partner Exchanges, see Annex A.

Exchange	Market	Limit Type
 cltx	Derivatives Trade Registration	-
 eex	Derivatives Trading and Trade Registration	-
 hudex HUNGARIAN DERIVATIVE ENERGY EXCHANGE	Power Derivatives Trading	-
 NOREXECO	Pulp and Recovered Paper Derivatives Trading	-
 powernext  pegas	Natural Gas Derivatives Trading	-

Figure 4 - Trading Limits for Derivatives Markets at the time of writing

## 5. Post-Trade Risk Management

### 5.1. Overview

ECC Post-Trade Risk Management allows Clearing Members to oversee the risk position related to their own trading activity respectively the trading activity of connected Non-Clearing Members through functionalities available in ECC's Clearing Systems SMSS and Eurex.

### 5.2. Trade Confirmation (Spot Markets)

All spot transactions are booked in the ECC Clearing System SMSS.

The ECC Member Area allows Clearing and Non-Clearing Members to view all current transactions. In addition, it is possible there to subscribe to reports that are currently provided on a daily or monthly basis.

For further details please refer to: <http://www.ecc.de> > Member Section > **ECC Member Area**.

### 5.3. Trade Confirmation (Derivatives Markets)

All derivatives transactions are booked in the ECC Clearing System Eurex.

A dedicated information broadcast stream from the Eurex infrastructure notifies the recipient(s) of each new transaction entered into the Clearing System or position change on a near-to-real-time basis.

For further details, please refer to: <http://www.eurexclearing.com> > Risk Management > System-based Risk Controls > Post-Trade Risk Control > **Trade Confirmation Broadcast**.

### 5.4. Margin Reporting

Throughout the Business Day, ECC recalculates the margin requirements related to the clients' risk position from spot and derivatives trading. Please note that there typically is a delay between the booking of a new transaction and the recalculation of the affected margin requirement. For the margining methodology, please refer to the ECC Margining documentation [6].

A dedicated information broadcast stream from the Eurex infrastructure can be used to stay informed on the margin requirements booked.

For further details please refer to: <http://www.eurexclearing.com> > Risk Management > System-based Risk Controls > Post-Trade Risk Control > **Enhanced Risk Interface**.

### 5.5. Advanced Risk Protection Functionality

#### Functionality Description

ECC Clearing Members have access to all available risk limits of the Eurex Advanced Risk Protection functionality, enabling the configuration of pre-defined risk limits with corresponding and automatically triggered action levels following the violation of any such limit.

There are four pre-defined types of risk measures available, with each corresponding to an alternative aggregation of various risk metrics, including margin requirements and cash flows, in part computed by the Eurex near real-time calculation ability.



Risk Measure	Explanation	Calculation Basis
TMR	Total Margin Requirement	Initial Margins + Current Exposure Spot Margin + Special Margins (incl. IVM2) + Premium Margin
CULI	Current Liquidating Value of the Position	Premium Margin + Variation Margin + Option Premium
CASH	Cash Flow Due Next Morning	Variation Margin + Option Premium
NDM	Potential Future Risk of the Position	Initial Margins + Current Exposure Spot Margin + Special Margin

Figure 5 - Advanced Risk Protection Limits at ECC

For each type of risk measure, three action levels can be defined, which, upon breach, automatically restrict the affected member’s trading activity. For each action level, the value of the risk measure triggering the action (i.e. the “limit”) has to be specified, along with additional options as per the following table.

Action Level	Name	Action	Additional Options
1	Alert Only	An alert message is broadcast to the affected and the maintenance member, if they should differ.	<ul style="list-style-type: none"> <li>⌋ Open order/quote deletion</li> <li>⌋ Persistent orders only</li> </ul>
2	Slow Down	The system slows down the affected member’s trading activity according to the configured parameters.	<ul style="list-style-type: none"> <li>⌋ up to 5.000 milliseconds delay to enter orders</li> <li>⌋ Open order/quote deletion</li> <li>⌋ Persistent orders only</li> </ul>
3	Full Stop	The affected member’s trading activity is set to “HALT” and the stop button procedure is applied and open orders/quotes are deleted immediately.	<i>none</i>

Figure 6 - Action Levels for Advanced Risk Protection Limits

**Effectiveness of Eurex Advanced Risk Protection for ECC’s Partner Exchanges**

Actions and Additional Options on Level 1 and 2, i.e. the deletion of all open orders/quotes and the throttling of members are currently only functional for EEX Market operated on the trading system T7.

Hence, ECC recommends using these levels only as an indicator to detect inappropriate trading behavior on any other Market.

Regarding the effectiveness of the automated “HALT”, issued by the Eurex Advanced Risk Protection Level 3, please refer to Chapter 6 Emergency Member Stop.

### **Maintenance Process**

The member specifying a particular limit is referred to as the maintenance participant, while the member to which the limit applies, is referred to as the affected participant. Thus, Clearing Members can be maintenance participants for themselves and their Non-Clearing Members, and a Non-Clearing Member can be a maintenance participant for itself. In case of both, the Clearing and Non-Clearing Member, maintaining risk limits, the more restrictive specification will be applied.

Clearing Member and Non-Clearing Member cannot maintain a Eurex Advanced Risk Protection Limit Level 3 for themselves. Such limit can only be setup by ECC on-behalf.

Risk limits and the associated action levels can be maintained in the C7 ARP GUI. In contrast to the maximum quantities on Product level, risk limits are maintained on member level.

## 6. Emergency Member Stop

### 6.1. Overview

ECC offers its Clearing Members the Emergency Member Stop functionality to technically support them in the event one or more of their respective Non-Clearing Members need to be temporarily excluded from trading as quickly as possible. With this automated process implemented at ECC, ECC is able to reduce the cycle time from initiating the Emergency Member Stop by the respective Clearing Member until forwarding the Stop Request(s) to the respective Partner Exchange(s) to two minutes on average. The Partner Exchanges' reaction times to exclude the Non-Clearing Member(s) concerned from trading and from accessing their trading system, the respective Partner Exchanges have committed to, can be found below in section 6.6 of this document.

Furthermore ECC offers an interface within ECC's Member Area with a 24/7 accessibility to request, monitor and deactivate the Emergency Member Stop of the Non-Clearing Member(s) concerned.

The process aims to automate and improve the communication between ECC, the Clearing Members and the respective Partner Exchanges through an automated information transfer of the Stop Request. The Emergency Member Stop functionality is composed of two technical interfaces – the Eurex Clearing System (Stop Button) and the ECC Member Area section ECC Self-Service Limit Maintenance (Stop Limit).

In addition to this Emergency Member Stop functionality, the possibility to request the suspension of a Non-Clearing Member in writing remains available. A Member Readiness driven suspension process will follow such request of the Clearing Member to suspend the admission of a Non-Clearing Member.

### 6.2. Principles

The following principles apply:

- J The Clearing Member can technically request to suspend a Non-Clearing Member entirely through the Eurex Stop Button or partially through single Stop Requests (entry of a Stop Request technically implemented by a Limit Message of the type "STOP") in the ECC Self-Service Limit Maintenance (partial stop is not possible when using the Stop Button in Eurex Clearing System)
- J ECC will forward individual, exchange specific Stop Requests to all ECC Partner Exchanges on which the Non-Clearing Member is approved after the Eurex Stop Button has been activated or will forward single Stop Requests upon entry of the respective Stop Request by the Clearing Member within the ECC Self-Service Limit Maintenance.
- J Next to this technical request the Clearing Member shall call ECC (+49 341 24680-444) and confirm the technically initiated Emergency Member Stop.
- J The Non-Clearing Member is temporarily excluded from trading as soon as the respective Partner Exchange has deactivated the Non-Clearing Member in its trading system.
- J The respective trading exclusion is confirmed by the respective Partner Exchange electronically towards ECC. With this confirmation the respective Partner Exchange states that the suspension was performed within the trading system according to the exchange's rules and regulations.

- ) The Clearing Member shall monitor the suspension status and confirmations of the Partner Exchanges within the ECC Member Area section ECC Self-Service Limit Maintenance.
- ) The technical suspension remains active until further notice by the Clearing Member. However, after five days the suspension shall be confirmed by a formal suspension according to the respective market rules and ECC’s Clearing Conditions.
- ) The request for reactivation of the Non-Clearing Member for trading should be performed by the Clearing Member that initiated the Emergency Member Stop.

### 6.3. Roles and Responsibilities

The involved parties own the following roles and responsibilities:

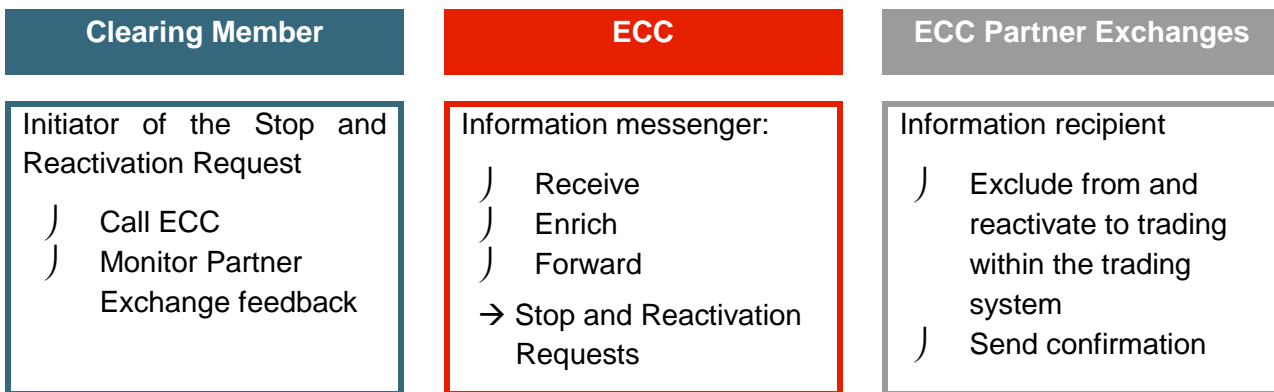


Figure 7: Roles and Responsibilities for Activating the Emergency Member Stop

### 6.4. Process Description

#### 6.4.1. General Process and prerequisite

If a Clearing Member wants to temporarily stop its Non-Clearing Member it shall activate the Eurex Stop Button in the Eurex Clearing system. The information regarding the activation of the Eurex Stop Button (Stop Request) will be automatically transferred to all ECC’s Partner Exchanges.

Outside business hours and for spot-only members not setup in the Eurex Clearing system the ECC Self-Service Limit Maintenance in the ECC Member Area shall be used by the Clearing Member to request the stop of the Non-Clearing Member. The Clearing Member can enter exchange specific “STOP-Limits” for each market the Non-Clearing Member is active on.

Prerequisite according to ECC’s Clearing Conditions is a corresponding bilateral agreement between the Clearing Member and its Non-Clearing Member allowing the Clearing Member to use the Emergency Member Stop Procedure. To create, modify or cancel the respective Stop Requests in the ECC Self-Service Limit Maintenance (ECC Member Area) two users need to be authorized for each Clearing Member at ECC. The SMSS user setup is identical to the user setup for trading limits and can be ordered using the T10 User Setup form.

## 6.4.2. Initiation of the Stop Request

### During ECC Business Hours (Standard Procedure)

On each business day during business hours Clearing Members have the possibility to stop a Trading Participant from trading by using the stop functionality in the Eurex Clearing system (see Figure 8). This will automatically trigger the rejection of all orders and quotes and will block any transaction or position adjustments on EEX market operated in the trading system T7. In addition, ECC will no longer accept derivatives market transactions from any broker transaction processed via the Straight-Through Processing (STP) solution. For NOREXECO, the first transaction rejected by ECC due to an Emergency Member Stop will be accepted but further trades will be revoked on exchange.



Figure 8 - Emergency Member Stop in Eurex Clearing system

For all other markets, ECC will forward Stop Requests to the respective Partner Exchanges. The suspension of the Non-Clearing Member will then be performed by the respective Partner Exchange of ECC during the reaction times defined below in section 6.6 and according to their respective rules and regulations. The receipt of the respective confirmation shall be monitored by the Clearing Member via the ECC Self-Service Limit Maintenance and is based on the information sent by the respective Partner Exchange.

### Outside ECC Business Hours

Outside business hours the Eurex Clearing system will not be available. Clearing Members may then use the ECC Self-Service Limit Maintenance in the ECC Member Area by entering single Stop Request (exchange specific Stop Request technically implemented by a Stop Limit of the type "STOP\_exchange"). Such a Stop Request needs to be setup for each Partner Exchange the Non-Clearing Member should be deactivated on. For an entire stop of the Non-Clearing Member the Clearing Member has to enter Stop Requests for all the Partner Exchanges the Non-Clearing Member is admitted on.

For transactions concluded outside of ECC operational hours queued on CLTX systems applies the following: should a member have been stopped via Eurex Stop Button before the opening of ECC, all queued transactions will be rejected upon opening of ECC.



definitions of the type “STOP” for each exchange the Non-Clearing Member is active on and to monitor the required feedback sent by the exchange.

Regardless of the way the Clearing Member technically requests the stop of a Non-Clearing Member, the receipt of the confirmation of the Partner Exchanges may be monitored by the Clearing Member via the ECC Self-Service Limit:

**ECC Member Area**

Limit Maintenance

Pre-defined Filters:  
[All current Limits - New/Updated Limits pending approval](#)  
[Deleted Limits pending approval - Limits rejected by Exchange](#)

Custom Filters:

Definition: %STOP%  
 Clearing Member:   
 Settlement Member:   
 Limit End:   
 Id:

Functional Status: Any  
 Approval State: Pending  
 Export Status: Any

Search

Id	V	LimitDefinition	Clearing Member	Settlm. Member	Limit Begin	Limit End	Value	Export	Action
1117	0	STOP_APX	ZZZXECC	DDDEX	2015-11-16		1.00		
1119	0	STOP_PXE	ZZZXECC	DDDEX	2015-11-16		1.00		
1121	0	STOP_HUPX	ZZZXECC	DDDEX	2015-11-16		1.00		
1123	0	STOP_CEGH	ZZZXECC	DDDEX	2015-11-16		1.00		

Found 4 limits.

Create New    Export XML

Back

Search function

The first user creates the Stop and the second user needs to confirm it.

The current export status is shown:

? = Limit export pending  
 ✓ = Processed  
 ⚠ = Rejected

Figure 10: Monitoring of Member Suspension by Partner Exchanges in the ECC Limit Self-Service Solution

For each “STOP-Limit” setup the specific export status can be monitored by the Clearing Member. As soon as the respective Partner Exchange confirms the successful suspension of the Non-Clearing Member the export status will be “Processed”. If the respective Partner Exchange rejects the request to stop the Non-Clearing Member the export status will be “Rejected”.

For an interim period of time the confirmation file sent by the exchange will only be manually uploaded during business hours. A delay of publication of these confirmations might therefore be possible; hence ECC will coordinate the current Non-Clearing Member suspension status with the respective Clearing Member directly.

## 6.6. Partner Exchange Reaction Time

### 6.6.1. Overview

The time represents the intended maximum time period within which the respective Non-Clearing Member can be stopped in the concerned trading systems after the Stop Request from ECC has been received by the respective Partner Exchange.

The Partner Exchange’s confirmation sent to ECC will be created after the operational steps are performed within the respective trading system and are not included within the reaction time.

Nevertheless the actual suspension time (time when the stop has been completed within the trading system) is contained within the confirmation file and can be used for documentation and reporting purposes of the respective Clearing Member.

The reaction time for the deactivation of the Emergency Member Stop is not defined within that document as this process is not expected to be that time critical.

ECC has been negotiating bilaterally with its connected Partner Exchanges the respective reaction time to perform a member stop within their respective trading system(s). The following table shows for each Partner Exchange the time it has committed itself or – where the negotiations have not yet been finalized so far – it has indicated to commit itself to exclude the Non-Clearing Member from trading after it has received a corresponding Stop Request. The negotiations are ongoing and in the process to being finalized for Partner Exchanges that are asterisked (“\*”).

### 6.6.2. During Exchange Business Hours

Exchange	Intraday/ Within-day	Day-Ahead	Derivatives
CLTX*			15 min
EEX*		Auction: 10 min, latest until 1 min before auction, best effort	EUREX stop: Immediately; ECC Member Area stop: 10 min
	Gas: Normally 15 min, best effort (indicative)		
EPEX SPOT*	15 min, best effort		
HUPX*	15 min	15 min, best effort	
HUDEX*			15 min
NOREXECO			10 min
PXE*		10 min	
SEEPEX		15 min, best effort	
SEMOpX*	15 min, best effort		

Figure 11: Reaction Time for Member Suspension after Activation of Emergency Member Stop during exchange business hours



### 6.6.3. Outside Exchange Business Hours

Exchange	Intraday/ Within-day	Day-Ahead	Derivatives
CLTX*			Next CLTX business day before the market opens
EEX*		Next EEX business day latest until 9.00am	Next EEX business day latest until 8.30am
Gas: Normally 30 min, best effort (indicative)			
EPEX SPOT*	30 min, best effort	Next business day in the morning without undue delay	
HUPX*	30 min	Next day latest until 8.45am, best effort	Next HUPX business day latest until 8.30am
NOREXECO			Next NXE business day latest until 12.00am
PXE*		Next PXE business day latest until 8.00am	
SEEPEX		Next business day in the morning without undue delay	
SEMOpX*	30 min, best effort	Next business day in the morning without undue delay	

Figure 12: Reaction Time for Member Suspension after Activation of Emergency Member Stop outside exchange business hours

\* Herein stated reaction times represent the envisaged status after negotiations with ECC's Partner Exchanges are finished. Thus these times cannot be guaranteed yet. Please note, negotiations with respective Partner Exchanges to define firm reaction times are still ongoing. However, Clearing Members are encouraged to check proactively with ECC on the status of the Emergency Member Stop after the stated envisaged reaction times are up.

### 6.7. Duration and Deactivation of the Emergency Member Stop

The technical suspension remains active until further notice by the Clearing Member. However, after 5 days the suspension shall be confirmed by a formal suspension according to the respective market rules and ECC's Clearing Conditions or the Emergency Member stop of the Non-Clearing Member concerned shall be deactivated. Generally the Clearing Member may use the same interfaces that were used to enter the Stop Request.

In particular the Clearing Member may deactivate the Eurex Stop Button. This will automatically trigger the reactivation of the Non-Clearing Member on EEX market operated in T7 and STP trade registration. Furthermore it will lead to Reactivation Requests sent to the Partner Exchanges concerned. The Partner Exchanges will re-activate the Non-Clearing Member for trading and confirm this to ECC. This can be monitored by the Clearing Member within the ECC Member Area in the section ECC Self-Service Limit Maintenance.

If the Stop Requests were setup using the ECC Self-Service Limit Maintenance the specific Stop-Limits shall be deactivated by the Clearing Member concerned by cancelling the respective limit entries. This will lead to corresponding Reactivation Requests sent to the Partner Exchanges. The respective Partner Exchange(s) will re-activate the Non-Clearing Member for trading and confirm this to ECC.

Please note, that the deactivation of an Emergency Member Stop shall be performed during business hours only as this process is not as time critical as the activation of the Emergency Member Stop.

## 7. ECC Trading Limits Factsheets

### 7.1. Spot Markets

Market / Limit	Definition	Maintenance	Submission	Cut-Off
<b>EEX – Emissions – Spot Auction</b>				
<b>Total Purchase Quantity</b>	The Quantity Limit constitutes a maximum quantity of contracts to be bought in the auctions. The limit is applicable for every single auction during the day.	The Limit setup is optional.	Free-format email to <a href="mailto:limits@ecc.de">limits@ecc.de</a> from authorized email-address	Limit data sent by 15:00 CET on ECC Business Days will be forwarded to EEX on the same day.
<b>EEX – Emissions – Spot Continuous</b>				
N/A	N/A			
<b>EEX – Natural Gas – Spot Continuous</b>				
<b>Cash</b>	The Cash Limit for natural gas Spot trading constitutes the maximum payment amount resulting from Spot Trades between two ECC Booking cuts (16:00 CET on ECC Business Days).	ECC Member Area – Limit Maintenance (PEGAS_SPOT_EUR)	Authorized users of Clearing Members and Settlement Members in ECC Member Area	Full synchronization by ECC Monday to Friday at 16:00 CET. Partial Ad-hoc updates sent every 10 minutes by ECC each calendar day.  Immediate processing in EEX:  EEX business days: 09:00 – 18:00 CET

Market / Limit	Definition	Maintenance	Submission	Cut-Off
<b>Guarantees of Origin – Auction operated by EEX AG on behalf of the French State</b>				
<b>Cash</b>	The Cash Limit for Guarantees of Origin Auction Trading operated by EEX AG represents the maximum payment amount per auction.	ECC Member Area – Limit Maintenance (PWX_GOFR_EUR)	Authorized users of Clearing Members in ECC Member Area	<p>Full synchronization by ECC Monday to Friday at 16:00 CET. Partial Ad-hoc updates sent every 10 minutes by ECC each calendar day.</p> <p>Immediate processing in EEX AG:</p> <p>EEX AG business days:</p> <p>09:00 – 18:00 CET</p> <p>The Trading Limits can be modified until one EEX AG Business Day prior to the auction 16:00 CET.</p>
<b>EPEX SPOT– Power – Spot Auction</b>				
<b>Cash</b>	The auction limit at EPEX SPOT constitutes an overall Financial Limit per Trade Participant per auction trading day from 16:00 CET to next auction trading day 16:00 CET across all delivery areas and portfolios for continental and GB market areas.	ECC Member Area – Limit Maintenance (EPEX_AUCTION_EUR or EPEX_AUCTION_GBP)	Authorized users of Clearing Members and Settlement Members in ECC Member Area	<p>Full synchronization by ECC Monday to Friday at 09:30 CET. Partial Ad-hoc updates sent every 10 minutes by ECC each calendar day.</p> <p>Immediate processing by EPEX SPOT:</p> <p>Each calendar day:</p> <p>08:30 – 08:45 CET, 09:30 - 10:45 CET, 11:35 – 11:45 CET, 13:40 – 13:50 CET, 16:00 – 16:15 CET, 17:45 – 18:15 CET, 19:50 – 21:00 CET</p>

Market / Limit	Definition	Maintenance	Submission	Cut-Off
<b>EPEX SPOT – Power – Spot Continuous</b>				
<b>Cash EUR</b>	The Cash Limit constitutes a single financial limit denoted in EUR and covering all delivery areas tradable at EPEX SPOT and SEMOpX, <b>excluding</b> GB market. It is equivalent to the maximum financial amount across delivery areas up to which the Trading Participant can trade during two consecutive ECC Booking cuts (currently 16:00 CET on ECC Business Days).	It is important to note that it is mandatory for Clearing Members to maintain continuous trading Cash Limits for their own trading activity and their associated Non-Clearing Members. If no limit is provided, orders causing a positive exposure will be rejected.	Free-format email to <a href="mailto:limits@ecc.de">limits@ecc.de</a> from authorized email-address	Cash Limits can be modified until 14:00 CET on every ECC Business Day and become effective after 16:00 CET
<b>Cash GBP</b>	The Cash Limit constitutes a single financial limit denoted in GBP and covering EPEX SPOT GB market. It is equivalent to the maximum financial amount across delivery areas up to which the Trading Participant can trade during two consecutive ECC Booking cuts (currently 16:00 CET on ECC Business Days).	It is important to note that it is mandatory for Clearing Members to maintain continuous trading Cash Limits for their own trading activity and their associated Non-Clearing Members. If no limit is provided, orders causing a positive exposure will be rejected.	Free-format email to <a href="mailto:limits@ecc.de">limits@ecc.de</a> from authorized email-address	Cash Limits can be modified until 14:00 CET on every ECC Business Day and become effective after 16:00 CET

Market / Limit	Definition	Maintenance	Submission	Cut-Off
<b>EPEX SPOT – Capacity Guarantees - Auction Trading – Cash Limit</b>				
<b>Cash</b>	The financial auction limit at EPEX SPOT for Capacity Guarantees constitutes an overall Financial Limit per Trading Participant per auction	ECC Member Area – Limit Maintenance (EPEX_CPCTY_EUR)	Authorized users of Clearing Members in ECC Member Area	Full synchronization by ECC Monday to Friday at 09:00 CET. Partial Ad-hoc updates sent every 10 minutes by ECC each calendar day.  Immediate processing by EPEX SPOT:  EPEX SPOT business days:  09:30 – 18:00 CET
<b>EPEX SPOT – Capacity Guarantees - Auction Trading – Quantity Limit</b>				
<b>Quantity</b>	The quantity limit for Capacity Guarantees consists of the number of capacity guarantee certificates (Unit: CG) which are deposited by a seller in the registry account at ECC	ECC Member Area – Limit Maintenance (EPEX_CPCTY_SELL_QTY)	Entry by ECC	Full synchronization by ECC Monday to Friday at 16:00 CET.  Immediate processing by EPEX SPOT:  EPEX SPOT business days:  09:30 – 18:00 CET

Market / Limit	Definition	Maintenance	Submission	Cut-Off
<b>HUPX – Power – Spot Auction</b>				
<b>Cash</b>	The auction limit at HUPX constitutes an overall Financial Limit per Trade Participant per auction trading day from 16:00 CET to next auction trading day 16:00 CET across all delivery areas and portfolios.	ECC Member Area – Limit Maintenance (HUPX_AUCTION_EUR)	Authorized users of Clearing Members and Settlement Members in ECC Member Area	<p>Full synchronization by ECC Monday to Friday at 09:00 CET. Partial Ad-hoc updates sent every 10 minutes by ECC each calendar day.</p> <p>Immediate processing in ETS:</p> <p>HUPX business days: 08:30 – 10:45 CET, 11:45 – 18:00 CET</p> <p>Non-Bus. Days: 08:30 – 10:45 CET 11:45 – 14:00 CET</p>
<b>HUPX – Power – Spot Continuous</b>				
<b>Cash</b>	The HUPX Cash Limit constitutes a single financial limit. It is equivalent to the maximum financial amount to which the Trading Participant can trade during two consecutive ECC Booking cuts (currently 16:00 CET on ECC Business Days).	It is important to note that it is mandatory for Clearing Members to maintain continuous trading Cash Limits for their own trading activity and their associated Non-Clearing Members. If no limit is provided, orders causing a positive exposure will be rejected.	Free-format email to <a href="mailto:limits@ecc.de">limits@ecc.de</a> from authorized email-address	Cash Limits can be modified until 14:00 CET on every ECC Business Day and become effective after 16:00 CET

Market / Limit	Definition	Maintenance	Submission	Cut-Off
<b>EEX – Natural Gas – Spot Continuous</b>				
<b>Cash</b>	The Cash Limit for natural gas Spot trading constitutes the maximum payment amount resulting from Spot Trades between two ECC Booking cuts (16:00 CET on ECC Business Days).	ECC Member Area – Limit Maintenance (PEGAS_SPOT_EUR)	Authorized users of Clearing Members and Settlement Members in ECC Member Area	<p>Full synchronization by ECC Monday to Friday at 16:00 CET. Partial Ad-hoc updates sent every 10 minutes by ECC each calendar day.</p> <p>Immediate processing in EEX: EEX business days: 09:00 – 18:00 CET</p>
<b>EEX AG – Guarantees of Origin - Auction</b>				
<b>Cash</b>	The Cash Limit for EEX Guarantees of Origin Auction Trading represents the maximum payment amount per auction.	ECC Member Area – Limit Maintenance (PWX_GOFR_EUR)	Authorized users of Clearing Members in ECC Member Area	<p>Full synchronization by ECC Monday to Friday at 16:00 CET. Partial Ad-hoc updates sent every 10 minutes by ECC each calendar day.</p> <p>Immediate processing in EEX: EEX business days: 09:00 – 18:00 CET</p> <p>The Trading Limits can be modified until one EEX Business Day prior to the auction 16:00 CET.</p>



Market / Limit	Definition	Maintenance	Submission	Cut-Off
<b>PXE – Power – Spot Auction</b>				
<b>Cash</b>	The Trading Limit for orders on the common day-ahead platform of OTE/PXE routed via PXE constitutes the maximum financial amount up to which the Trading Participant can Trade regular Spot orders.	It is important to note that it is mandatory for Clearing Members to maintain PXE limits for own trading activity and their associated Non-Clearing Members.	Free-format email to <a href="mailto:limits@ecc.de">limits@ecc.de</a> from authorized email-address	Limit data sent by 15:00 CET on ECC Business Days will be forwarded to PXE on the same day.
<b>SEEPEX – Power – Spot Auction</b>				
<b>Cash</b>	The auction limit at SEEPEX constitutes an overall Financial Limit per Trading Participant per auction trading day from 16:00 CET to next auction trading day 16:00 CET across all delivery areas and portfolios.	ECC Member Area – Limit Maintenance (SEEPEX_AUCTION_EUR)	Authorized users of Clearing Members and Settlement Members in ECC Member Area	<p>Full synchronization by ECC Monday to Friday at 09:00 CET. Partial Ad-hoc updates sent every 10 minutes by ECC each calendar day.</p> <p>Immediate processing in ETS:</p> <p>SEEPEX business days:</p> <p>08:30 – 10:00 CET, 10:30 – 18:00 CET</p> <p>Non-Bus. Days:</p> <p>08:30 – 10:00 CET, 10:30 – 11:45 CET</p>

Market / Limit	Definition	Maintenance	Submission	Cut-Off
<b>SEMOpX Power Auction Trading – Cash Limit – EUR / GBP</b>				
<b>Cash</b>	<p>The auction limit at SEMOpX constitutes an overall Financial Limit per TradingParticipant per auction trading day from 16:00 CET to next auction trading day 16:00 CET across all delivery areas and portfolios.</p> <p>The trading limit can be defined in EUR and/or GBP.</p>	ECC Member Area – Limit Maintenance (SEMOPX_AUCTION_EUR and SEMOPX_AUCTION_GBP)	Authorized users of Clearing Members and Settlement Members in ECC Member Area	<p>Full synchronization by ECC Monday to Friday at 08:00 CET. Partial Ad-hoc updates sent every 10 minutes by ECC each calendar day.</p> <p>Immediate processing in ETS:</p> <p>Each calendar day:</p> <p>08:00 – 08:45 CET, 09:30 – 11:45 CET, 14:30 – 14:45 CET, 16:00 – 18:15 CET, 19:50 – 21:00 CET</p>
<b>SEMOpX Power Continuous Trading – Cash Limit</b>				
<b>Cash</b>	The Cash Limit constitutes a single financial limit, covering all delivery areas tradable at EPEX SPOT and SEMOpX. It is equivalent to the maximum financial amount across delivery areas up to which the Trading Participant can trade during two consecutive ECC Booking cuts (currently 16:00 CET on ECC Business Days).	It is important to note that it is mandatory for Clearing Members to maintain continuous trading Cash Limits for their own trading activity and their associated Non-Clearing Members. If no limit is provided, buy orders causing a positive exposure will be rejected.	Free-format email to <a href="mailto:limits@ecc.de">limits@ecc.de</a> from authorized email-address.	Cash Limits can be modified until 14:00 CET on every ECC Business Day and become effective after 16:00 CET.

For brevity, this table provides only a summary of Chapter 3.

## 7.2. Derivatives Markets

Market / Limit	Definition	Maintenance
<b>CLTX – Freight and Iron Ore – Derivatives</b>		
N/A	N/A	N/A
<b>EEX – Various Commodities – Derivatives</b>		
N/A	N/A	N/A
<b>HUDEX – Power – Derivatives</b>		
N/A	N/A	N/A
<b>NOREXECO – Pulp and Recovered Paper – Derivatives</b>		
N/A	N/A	N/A

*For brevity, this table only provides a summary of Chapter 4.*

### 7.3. Advanced Risk Protection

Market / Limit	Definition	Maintenance
<b>All Partner Exchanges of ECC</b>		
<b>Risk Limit</b>	<p>Limits, which enable members to manage risk post trading. The Advanced Risk Protection functionality enables the configuration of pre-defined Risk Limits with corresponding and automatically triggered action levels, following the violation of any such limit. Four pre-defined types of limits are available; each corresponding to an alternative aggregation of various risk metrics, including margin requirements and cash flows. Should the intraday risk calculation show a violation of any specified Limit, pre-defined action levels will be automatically activated, which will result in the restriction of the affected member's trading activity.</p> <p><b>Breach of level 1 limit</b> = Alert message is broadcast to the affected and the maintenance member respectively.</p> <p><b>Breach of level 2 limit</b> = System slows down the affected member's trading activity according to the configured parameters.</p> <p><b>Breach of level 3 limit</b> = The affected member's trading activity is set to "HALT" and the Emergency Member Stop procedure is applied.</p>	Risk Limits and the associated action levels can be maintained in C7 ARP GUI. Additional options such as the deletion of all open order/quotes and the restriction to persistent orders only are available for level 1 and 2 risk limits.
<b>HUDEX – Power – Derivatives</b>		
<b>Risk Limit</b>	As above for EEX, but can only be used for automation of the Stop Button (see "Breach of Level 3 limit")	As above for EEX
<b>NOREXECO – Pulp and Recovered Paper – Derivatives</b>		
<b>Risk Limit</b>	As above for EEX, but can only be used for automation of the Stop Button (see "Breach of Level 3 limit")	As above for EEX

*For brevity, this table only provides a summary of Chapter 5 and 7.*

## Annex A – References

- [1] ECC Rules and Regulations  
<http://www.ecc.de/ecc-en/about-ecc/rules>
- [2] EEX Rules and Regulations  
<http://www.eex.com/de/handel/verordnungen-und-regelwerke>
- [3] EPEX SPOT Rules and Regulations  
<http://www.epexspot.com/en/extras/download-center>
- [4] PXE Rules and Regulations  
<http://www.pxe.cz/dokument.aspx?k=Legislativa-PXE&language=english>
- [5] HUPX Rules and Regulations  
<https://www.hupx.hu/en/Trading%20at%20HUPX/Download%20center/Pages/Szab%c3%a1lyzatok.aspx>
- [6] ECC Margining and ECC Risk Parameter File  
<http://www.ecc.de/ecc-en/risk-management/margining>
- [7] ECC Price List  
<http://www.ecc.de/ecc-en/about-ecc/rules/price-list>
- [8] SEEPEX Rules and Regulations  
<http://seepex-spot.rs/en/rules-and-docs>
- [9] NOREXECO Rules and Regulations  
<http://www.norexeco.com/rulebook>
- [10] SEMOpx Rules and Regulations  
<http://www.sem-o.com/ISEM/Pages/SEMOpXRULESANDPROCEDURES.aspx>
- [11] EEX Asia Rules and Regulations  
<https://www.eexasia.com/rulebook>
- [12] ECC Member Area User Guide  
<http://www.ecc.de/ecc-en/member-section/user-guides-manuals>