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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	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.  The exact definition of "Available Limit" varies between the trading systems offering		
	Trading Limits; hence the respective Market Rules are applicable.		
Booking Cut	see: Accounting Cut-Off		
Broker  Entity facilitating the matching of a Trade outside of a Partner Exchange. request by their clients, such transactions may be registered at the respe Partner Exchange by means of Trade Registration; thereby the Trade is reinto an exchange Trade.			
Business Hours	Please refer to ECC Clearing Conditions		
Business Day	Please refer to ECC Clearing Conditions		
Cash Limit  Cash Limit  Cash Limit  Cash Limit  Constitutes a maximum financial exposure up to which a Trading Paltrade within a timeframe defined by the exchange, e.g. between two Cuts or on one exchange trading day.			
Rulebook of ECC, which clarifies, amongst other aspects, how Trading Limber Department of the Market Rules of the respective Partner Exchange are applicable.			
Clearing Member	Please refer to ECC Clearing Conditions		
CLTX (EEX Asia)	EEX Asia is a Market, on which Derivatives Market Transactions in freight and iron ore are concluded or registered.		
Combined Financial A Combined Financial Limit constitutes a Financial Limit applied to a Track Limit Participant across several asset classes or trading segments.			
Commodity Limit see: Quantity Limit			
Contract Please refer to ECC Clearing Conditions			
Derivatives Market	Please refer to ECC Clearing Conditions		
Derivatives Market Transaction  Please refer to ECC Clearing Conditions			
EEX European Energy Exchange AG is a Market, on which Spot and Derivative Transaction in various commodities are concluded or registered.			

Emergency Member Stop	Please refer to ECC Clearing Conditions	
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: Cash Limit	
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	Please refer to ECC Clearing Conditions	
Market Rules	Respective rulebook of the ECC Partner Exchange, stipulating, inter alia, how Trading Limits are applied in the Trading Process.	
Non-Clearing Member	Please refer to ECC Clearing Conditions	
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	Please refer to ECC Clearing Conditions	
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	Please refer to ECC Clearing Conditions	
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: Order Quantity Limit and Transaction Size Limit).	
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	Please refer to ECC Clearing Conditions		
Spot Market Transaction	Please refer to ECC Clearing Conditions		
Stop Button	Please refer to ECC Clearing Conditions		
Stop Limit	Please refer to ECC Clearing Conditions		
Stop Request  A technical message sent by ECC to Partner Exchanges to inform them about 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, allowed fully electronic routing and booking of OTC Derivatives Market Transaction Brokers, by means of Trade Registration according to the Market Rules respective exchange.			
Trade	Please refer to ECC Clearing Conditions		
Please refer to ECC Clearing Conditions  Trading Limit Throughout this document, the term "Trading Limit" refers to a Pre-Trading unless stated otherwise.			
Trading Day	Please refer to ECC Clearing Conditions		
Trading Participant	Please refer to ECC Clearing Conditions  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.

The allocation of product groups to Spot Trading Limits are provided in the ECC Clearing Specification Data file [13].

Exchange	Market	Limit Type
	Natural Gas Spot Trading	Financial Limit
	Emissions Primary Market Auction Trading	Financial Limit
<b>&gt;</b> eex	Emissions Secondary Market Continuous Trading	-
	National Emissions Trading	Financial Limit
	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>
N on oven of	Power Spot Continuous Trading	Financial Limit
> epexspot	Power Spot Continuous Trading GB	Financial Limit
	Spot Auction Trading Capacity Guarantees	Financial Limit
	Spot Auditor Trading Capacity Guarantees	Technical Quantity Limit
coop (×) h u p x	Power Spot Hourly Auction Trading	Financial Limit
MOTOR C M NUMBER EXCHANGE	Power Spot Continuous Trading	Financial Limit
>pxe Power Auction Trading		Financial Limit
CEEDEN	Power Spot Hourly Auction Trading	Financial Limit
SEEPEX	Power Spot Continuous Trading	Financial Limit
semon	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

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

New Trading Limits and changes to existing limits can currently only be submitted by authorized persons. To authorize persons the form T10s "Setup User for ECC Risk Management Services in the ECC Member Area" is to be used.

## 3.2. EEX Emissions Primary Market Auction Trading – Cash Limit

#### **Functionality Description**

The Cash Limit for the Primary Market Emissions Auction Trading at the European Energy Exchange (EEX) represents an overall Financial Limit per Trading Participant per business day. Therefore the limit needs to be sufficiently large to cover all auctions per day. The limit is defined in Euros.

The Available Limit is defined as the difference between the Initial Limit value and the total exposure of all orders. The exposure of an order is defined as the payment amount, due by the client from the order's potential execution.

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.

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 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 3.17, respectively the Member Area User Guide [12].

Limit Definition: EEX\_EM\_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

<sup>\*</sup> Mandatory field

The Trading Limits are synchronized between ECC and EEX at 15:00 CET on every ECC Business Day. EEX will integrate the limits into their system and provide a feedback until 17:00 CET.

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 National Emissions Trading System – Cash Limit

## **Functionality Description**

The Cash Limit for the national Emissions Trading System (nEHS) Primary Market at the nEHS platform of EEX represents an overall Financial Limit per Trading Participant per sell-off. Therefore the limit needs to be sufficiently large to cover all bids per sell-off. The limit is defined in Euros.

The Available Limit is defined as the difference between the Initial Limit value and the total exposure of all bids. The exposure of a bid is defined as the payment amount, due by the client from the bid's potential execution.

At the submission of a bid during the sell-off, it is checked that the maximum financial exposure of all bids (incl. the new bid) is covered by the current value of the limit. A bid not compliant with the current value of the limit is automatically rejected by the EHS platform.

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.

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 3.17, respectively the Member Area User Guide [12].

Limit Definition: EEX\_NEHS\_EUR
Limit editable by: Clearing Member

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

<sup>\*</sup> Mandatory field

All maintained Trading Limits are synchronized between ECC and nEHS platform Monday to Friday at 8:30 CET. Limit modifications are sent each hour at 00, 10, 20, 29, 46 minutes as ad-hoc Partial Updates from ECC to nEHS platform each calendar day.

<sup>\*\*</sup> Limit Begin on a future date is not supported. Only Trading Limits entered with Start Date ≤ current date will be processed and effective immediately after approval at the nEHS platform. The Trading Limit with the Limit Begin on a future date will be rejected. The rejected Trading Limit will be synchronized as soon as the Limit Begin = current date at 8:30 CET.

The nEHS platform will process Trading Limits received from ECC immediately. In case the limit was decreased to the level when a member's bids exceed the limit, all bids will be cancelled, the member will be informed by the platform and will have to reenter the bids under the restrictions of the new limit.

The Trading Participant can view its currently set limit (Initial Limit) in the trading system. If a 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

## 3.4. 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.

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.

Available Limit = Initial Limit - (Exposure of Orders + Max(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:

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<sup>&</sup>lt;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>&</sup>lt;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.

Event	Available Limit	Remarks
Buy Order <sup>5</sup> is entered	Decreased	Only allowed, if Available Limit remains ≥ 0
Sell order <sup>5</sup> is entered	Unchanged	Always permitted
Buy order is deleted	Increased	Always permitted
Sell order is deleted	Unchanged	Always permitted
Buy order is executed	Unchanged	Allocation already done in the order
Sell trade is executed	Increased	Offsetting only against Buy transactions
Buy trade is cancelled	Increased	As per trade cancellation policies
Sell trade is cancelled	Decreased	As per trade cancellation policies
Initial Limit is increased	Increased	Upon request by Clearing Member
Initial Limit is decreased	Decreased	Upon request by Clearing Member
Reset at ECC Booking Cut	Increased Unchanged	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; 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 [2].

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<sup>&</sup>lt;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.

#### **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 3.19, respectively the Member Area User Guide [12].

Limit Definition: EEX\_GAS\_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

<sup>\*</sup> Mandatory field

All maintained Trading Limits are synchronized between ECC and EEX Monday to Friday at 16:00 CET. Limit modifications are sent every 5 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

## 3.5. 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 reauction 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 during the end-of-day processing two day prior to the auction and again during the end-of-day processing one day prior to the auction. The margin will be calculated per Trading Participant and will equal the Trading Limit. The margin will be set to zero on the auction day during the end-of-day processing.

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 3.19, respectively the Member Area User Guide [12].

Limit Definition: EEX\_GOFR\_EUR Limit editable by: Clearing Member

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

<sup>\*</sup> 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 from 10:00 until 16:00 CET.

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

# 3.6. Pan-European Guarantees of Origin Auction Trading operated by EPEX SPOT – Cash Limit

## **Functionality Description**

The Cash Limit for pan-European Guarantees of Origin Auction Trading operated by EPEX SPOT represents the maximum possible payment amount per auction authorized for a Member. 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. 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 firm order during the orderbook opening 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 can't be firmed in the trading system.

Sell orders are not checked against the cash limit and cannot offset other buy orders. Sell orders can only be entered if sufficient Guarantees of Origins have been deposit.

If the financial limit is decreased and the available orders are not consistent with the new trading limit, then the status of all orders are switch back to draft, and the auction participant will have to firm them again subject to the level of its new trading limit.

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; EPEX SPOT Trading Participants will nevertheless still be legally required to comply with their Trading Limit.

Also, EPEX SPOT 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 during the end-of-day processing two days prior to the auction and again during the end-of-day processing one day prior to the auction. The margin will be calculated per Trading Participant and will equal the Trading Limit. The margin will be set to zero on the auction day during the end-of-day processing.

#### **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 3.19, respectively the Member Area User Guide [12].

Limit Definition: EPEX\_GOEU\_EUR
Limit editable by: Clearing Member

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

<sup>\*</sup> Mandatory field

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

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

**Business Days:** 

09:00 - 18:00 CET

## 3.7. 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). Please note that for GBP also sell orders and trades 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 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 Min. Order Price < Max. Order Price.

The Realistic Price Range (Optional Fields: Min. Realistic Price, Max. Realistic Price) allows the Clearing 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 Min. Realistic Price < 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 3.19, respectively the Member Area User Guide [12].

Limit Definition: EPEX\_AUCTION\_EUR or EPEX\_AUCTION\_GBP6

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)	СМ	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)	СМ	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>&</sup>lt;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
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)
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).

<sup>\*</sup> 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 5 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 (in CET):

08:30 - 08:40

09:30 - 10:00

10:45 - 10:50

11:35 – 11:40

14:20 – 14:40

16:00 – 16:10

17:55 – 18:15

19:05 - 20:55

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.

## 3.8. 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

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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.

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.

By default, if no trading limit is set, it is treated as zero, hence no exposure can be created. In case a trading participants requires to enter buy (sell) orders at positive (negative) price, a trading limit need to be set.

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

#### **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 3.17, respectively the Member Area User Guide [12].

Limit Definition: EPEX\_CONTINUOUS\_EUR

Limit editable by: Clearing Member

Field Name	Editable by	Description
Settlement Member *	СМ	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

<sup>\*</sup> Mandatory field

All maintained Trading Limits are synchronized between ECC and EPEX SPOT Monday to Friday at 16:08 CET. Limit modifications are sent every 5 minutes as ad-hoc Partial Updates from ECC to EPEX SPOT each calendar day.

<sup>&</sup>lt;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.

EPEX SPOT will process Trading Limits received from ECC immediately, except from 15:00 – 16:00 CET.

In case a limit change shall be effective on a future date, the Self-Service Limit Maintenance allows the definition of a Start Date. In this case, the trading limit will be effective at 16:00 on Start Date. Only trading limits entered with Start Date ≤ today will be effective immediately after approval at the exchange trading system.

Please note when there is a clearing member change the limit of the old clearing member will be valid until 16:00 CET on the business day after the change is effective unless the new clearing member sets a new limit.

## 3.9. 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 and trades 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.

Limit Definition: EPEX\_CONTINUOUS\_GBP

For a description of functionality and maintenance process, please refer to Chapter 3.8.

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

## 3.10. 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 3.19, respectively the Member Area User Guide [12].

Limit Definition: EPEX CPCTY EUR

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Limit editable by: Clearing Member

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

<sup>\*</sup> 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.

## 3.11. 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.

<sup>\*</sup> 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.

## 3.12. 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 3.7.

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 3.19, 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	СМ	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	СМ	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)

Field Name	Editable by	Description
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).

<sup>\*</sup> Mandatory field

All maintained Trading Limits are synchronized between ECC and HUPX Monday to Friday at 09:00 CET. Limit modifications are sent every 5 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:

Each calendar day:

08:30 - 11:40 and 14:20 - 20:55 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.

## 3.13. HUPX Power Continuous Trading – Cash Limit

#### **Functionality Description**

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 of the respective Financial Trading Limit, please refer to Chapter 3.8.

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

#### **Maintenance Process**

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 3.17, respectively the Member Area User Guide [12].

Limit Definition: HUPX\_CONTINUOUS\_EUR

Limit editable by: Clearing Member

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

<sup>\*</sup> Mandatory field

All maintained Trading Limits are synchronized between ECC and HUPX Monday to Friday at 16:07 CET. Limit modifications are sent every 5 minutes as ad-hoc Partial Updates from ECC to HUPX each calendar day.

HUPX will process Trading Limits received from ECC immediately, except from 15:00 – 16:00 CET.

In case a limit change shall be effective on a future date, the Self-Service Limit Maintenance allows the definition of a Start Date. In this case, the trading limit will be effective at 16:00 on Start Date. Only trading limits entered with Start Date  $\leq$  today will be effective immediately after approval at the exchange trading system.

Please note when there is a clearing member change at day d the limit of the old clearing member will be valid until 16:00 CET on the business day after the change is effective unless the new clearing member sets a new limit.

## 3.14. 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 freeformat email to 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.

## 3.15. 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 3.7.

#### **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 3.19, 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	СМ	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	СМ	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)

Field Name	Editable by	Description
TSO Area (SEEPEX)	S 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).

<sup>\*</sup> Mandatory field

All maintained Trading Limits are synchronized between ECC and SEEPEX Monday to Friday at 09:00 CET. Limit modifications are sent every 5 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:

Each calendar day:

08:30 - 10:40 and 11:15 - 17:55 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.

## 3.16. SEEPEX Power Continuous Trading – Cash Limit

#### **Functionality Description**

The financial Trading Limit for Power Continuous Market of SEEPEX is identical to the limit for continuous trading at EPEX SPOT. Hence, for a description of functionality of the respective Financial Trading Limit, please refer to Chapter 3.8.

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

#### **Maintenance Process**

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 3.17, respectively the Member Area User Guide [12].

Limit Definition: SEEPEX\_CONT\_EUR

Limit editable by: Clearing Member

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

<sup>\*</sup> Mandatory field

All maintained Trading Limits are synchronized between ECC and SEEPEX Monday to Friday at 16:06 CET. Limit modifications are sent every 5 minutes as ad-hoc Partial Updates from ECC to SEEPEX each calendar day.

SEEPEX will process Trading Limits received from ECC immediately.

In case a limit change shall be effective on a future date, the Self-Service Limit Maintenance allows the definition of a Start Date. In this case, the trading limit will be effective at 16:00 CET on Start Date. Only trading limits entered with Start Date  $\leq$  today will be effective immediately after approval at the exchange trading system.

Please note when there is a clearing member change at day d the limit of the old clearing member will be valid until 16:00 CET on the business day after the change is effective unless the new clearing member sets a new limit.

## 3.17. 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 3.7.

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 3.19, respectively the Member Area User Guide [12].

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

Limit Definition: SEMOPX\_AUCTION\_EUR or SEMOPX\_AUCTION\_GBP8

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)	СМ	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)	СМ	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 (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).

<sup>\*</sup> Mandatory field

<sup>&</sup>lt;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.

All maintained Trading Limits are synchronized between ECC and SEMOpx Monday to Friday at 08:00 CET. Limit modifications are sent every 5 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 - 08:40, 09:30 - 11:40, 14:30 - 14:40, 16:00 - 18:10 and 19:05 - 20:55 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.

## 3.18. 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 3.8.

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

## 3.19. 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 7.

#### 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	-
<b>&gt;</b> eex	Derivatives Trading and Trade Registration	-
hungarian derivative	Power Derivatives Trading	-
NOREXECO	Pulp and Recovered Paper 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 > Services > 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 > Services > Risk management > System-based risk controls > Post-trade risk control > Report information.

## 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
NDM	Potential Future Risk of the Position	Initial Margins + Current Exposure Spot Margin + Special Margin
CULI	Current Liquidating Value of the Position	Premium Margin + Variation Margin + Option Premium
CASH	Cash Flow Due Next Morning	Variation Margin + Option Premium

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 in the C7 GUI, if they should differ.	• none
2	Slow Down	The system slows down the affected member's trading activity according to the configured parameters.	up to 5.000 milliseconds delay to enter orders
3	Full Stop	The affected member's trading activity is set to "HALT" and the stop button procedure is applied.	Deletion of open orders/quotes

Figure 6 - Action Levels for Advanced Risk Protection Limits

#### Effectiveness of Eurex Advanced Risk Protection for ECC's Partner Exchanges

Actions on Level 2, i.e. 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.

The effectiveness of the automated "HALT", issued by the Eurex Advanced Risk Protection Level 3, triggers a temporary Member Stop that is only effective for all derivative markets. In addition, the "HALT" also affects EEX Emission Spot Secondary Trading (Continuous Trading) operated in T7 trading system. No stop request will be sent to spot markets that are not trading on T7 trading system operated by EEX. As soon as ARP level 3 is breached, clearing activities in C7 clearing system are not allowed anymore as well.

For details of the Emergency Member Stop Button please refer to Chapter 6 Emergency Member Stop.

For Level 3, the maintenance participant can configure an optional deletion of orders/quotes for orderbook trades. Please take note, that this feature is only available for markets operated in T7 trading system. For all other derivative markets, a breach of a Level 3 limit, always triggers the deletion of orders/quotes or unmatched trades. Default value for this parameter is "FALSE".

In case the "Delete Orders/Quotes flag" is set to TRUE, open orders and quotes will be deleted in T7 trading system as well as pending trades for trade registration within the T7 TES functionality. In case the "Delete Orders/Quotes flag" is set to FALSE, open orders and quotes remain active, hence a trade could result from existing orders / quotes.

#### **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 for the markets which support this feature. 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:

- 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 C7 Clearing System).
- Following the activation of the Stop Button, ECC will inform all affected markets of this fact forthwith. ECC will forward automatic Stop Requests to all ECC Partner Exchanges which support the automated Stop Request feature and 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. ECC will inform all other markets currently not supporting the automated Stop Request as well as monitor the suspension status of the Non-Clearing Member.
- Next to this technical request the Clearing Member shall call ECC (+49 341 24680-444) and confirm the technically initiated Emergency Member Stop.
- 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.

- The respective trading exclusion is confirmed by the respective Partner Exchange 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. Following the executed exclusion from trading on all supported markets, ECC will send a written (e-mail) confirmation regarding the exclusion of the Non-Clearing Member from trading to the Clearing Member.
- 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:

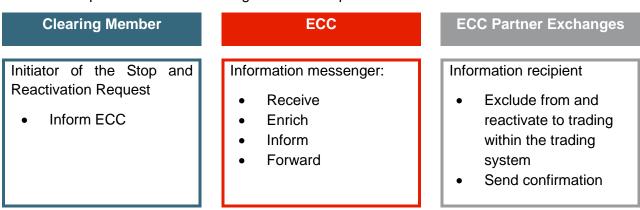


Figure 7: Roles and Responsibilities for Activating the Emergency Member Stop

## 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 which support the automated Stop Request feature. The ECC will inform all other markets currently not supporting the automated Stop Request as well as monitor the suspension status of the Non-Clearing Member.

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

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Clearing Member at ECC. The SMSS user setup is identical to the user setup for trading limits and can be ordered using the form T10s "Setup User for ECC Risk Management Services in the ECC Member Area".

#### 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 T79. 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.

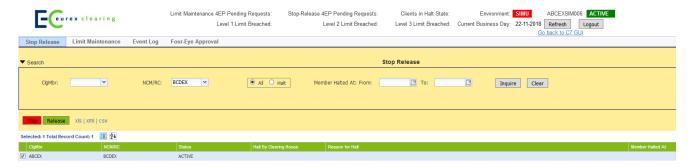


Figure 8 - Emergency Member Stop in Eurex Clearing system

Following the activation of the Stop Button, ECC will inform all affected markets of this fact forthwith. ECC will forward automated Stop Requests to all ECC Partner Exchanges which support the automated Stop Request feature and on which the Non-Clearing Member is approved. The ECC will inform all other markets currently not supporting the automated Stop Request as well as monitor the suspension status of the Non-Clearing Member. Following the executed exclusion from trading on all supported markets, the ECC will send a written (e-mail) confirmation regarding the exclusion of the Non-Clearing Member from trading to the Clearing Member. 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.

### **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

<sup>&</sup>lt;sup>9</sup> Valid, unless the process is triggered via ARP Level 3 limit, where "Delete Orders/Quotes flag" is set to FALSE. For details, refer to chapter 5.5

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 EEX Asia 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.

#### Current list of Stop Limits:

- STOP CLTX (EEX Asia)
- STOP\_EEX\_EM\_AUCTION
- STOP\_EEX\_GAS\_SPOT (EEX Natural Gas Spot and Guarantees of Origin Auction)
- STOP\_EEX\_T7
- STOP\_EPEX (Auction Market)
- STOP\_EPEX\_CONTINUOUS (EPEX SPOT and SEMOpx Continuous Market)
- STOP HUDEX
- STOP\_HUPX (Auction Market)
- STOP\_HUPX\_CONTINUOUS (Continuous Market)
- STOP\_NEHS
- STOP\_NXE (NOREXECO)
- STOP\_PXE
- STOP\_SEEPEX (Auction Market)
- STOP\_SEEPEX\_CONT (Continuous Market)
- STOP\_SEMOPX (Auction Market)





Figure 9: Emergency Member Stop in ECC Limit Self-Service Solution

To setup the respective limits two users need to be authorized for each Clearing Member at ECC. The first user creates the limit in the ECC Self-Service Limit Maintenance, the second user needs to confirm it. ECC will forward the Stop Request(s) to the respective Partner Exchange(s) which will perform the suspension of the Non-Clearing Member.

On the following business day at 7:00 CET am the Clearing Member also needs to activate the Eurex Stop Button for the respective Non-Clearing Member within the Eurex Clearing System.

Only if the Eurex Stop Button is activated, the Non-Clearing Member is suspended immediately for EEX market for which trading takes place in T7 and Straight-Through Processing.

## **Spot-only Non-Clearing Members**

Non-Clearing Members admitted only for spot markets are not included in the Eurex Clearing system. Hence, Clearing Members may use the ECC Self-Service Limit Maintenance for entering Stop Reguests as described above.

ECC will inform the respective Partner Exchanges which will perform the suspension of the Trading Participant according to their respective market rules. Following the executed exclusion from trading ECC Risk Management Services

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on all supported markets, the ECC will send a written (e-mail) confirmation regarding the exclusion of the Non-Clearing Member from trading to the Clearing Member.

## 6.5. Monitoring of the Member Stop by the Clearing Member

ECC offers an interface within ECC's Member Area with a 24/7 accessibility to request, monitor and deactivate the stop of a Non-Clearing Member. The ECC Self-Service Limit Maintenance provides limit definitions of the type "STOP" for each exchange the Non-Clearing Member is active on. The Clearing Member can monitor the confirmation of the Partner Exchanges which support the automated Stop Request feature via the ECC Self-Service Limit Maintenance. Currently the monitoring of the exchange confirmation is only possible for the automated stop limits: STOP\_HUPX\_CONTINUOUS, STOP\_EPEX\_CONTINUOUS, STOP\_SEEPEX\_CONT and STOP\_NEHS. ECC will inform all other markets currently not supporting the automated stop limit setup as well as monitor the suspension status of the Non-Clearing Member.

For the automated "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 STOP\_EPEX\_CONTINUOUS, the automatic confirmation is generally deemed effective within 15 min following the notification of suspension in the interface depending on latency.

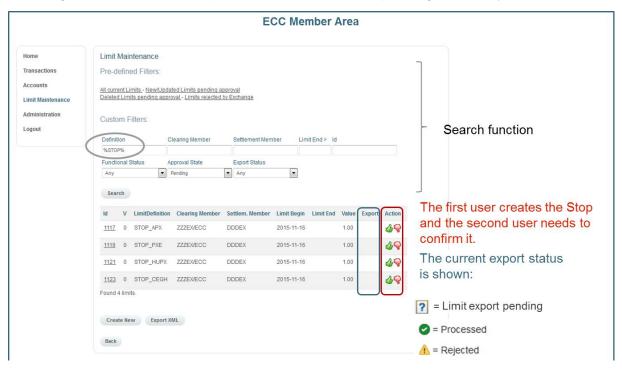


Figure 10: Monitoring of Member Suspension by Partner Exchanges in the ECC Limit Self-Service Solution

The confirmation file will only be sent by the exchanges which support the automated stop request and is generally deemed effective within 15 min following its receipt. ECC will coordinate the current Non-Clearing Member suspension status with the respective Clearing Member directly for the non-automated exchanges.

## 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.

After the operational steps are performed within the respective trading system ECC will send a final written (e-mail) confirmation regarding the exclusion of the Non-Clearing Member from trading to the Clearing Member. The final written confirmation corresponds to the actual suspension time (time when the stop has been processed within the trading system) 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
EEX Asia*			15 min
EEX*	nEHS platform: 15 min, best effort	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	15 min, best effort	
HUPX*	15 min, best effort	15 min, best effort	
HUDEX*			15 min
NOREXECO			10 min
PXE*		10 min	
SEEPEX	15 min, best effort	15 min, best effort	
SEMOpx*	15 min, best effort	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	
EEX Asia*			Next EEX Asia business day before the market opens	
EEX*	nEHS platform: 15 min, best effort	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*	15 min, best effort	Next business day in the morning without undue delay		
HUPX*	15 min, best effort	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	15 min, best effort	Next business day in the morning without undue delay		
SEMOpx*	15 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 theses 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. ECC will request the reactivation for trading at the Partner Exchanges. The respective Partner Exchange(s)

will reactivate the Non-Clearing Member for trading and confirm this to ECC. ECC will send a written (email) confirmation regarding the reactivation of the Non-Clearing Member to the Clearing Member.

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

Limit	EEX – Emissions – Spot Auction	EEX nEHS Platform – Emissions – Sell- Off
Limit Definition	EEX_EM_AUCTION_EUR	EEX_NEHS_EUR
Limit Description	The Cash Limit represents an overall Financial Limit per Trading Participant per business day.	The Cash Limit represents an overall Financial Limit per Trading Participant per sell-off.
Limit Exposure Definition	Sum of financial exposure of orders and trades between Limit Resets	Sum of financial exposure of bids between Limit Resets
Default Limit	Unlimited	Unlimited
Trading Type	Auction Trading	Sell-Off
Maintenance	CM and NCM	СМ
Visibility at ECC	CM and NCM (ECC Member Area)	CM and NCM (ECC Member Area)
Limit Synchronization	The Trading Limits are synchronized between ECC and EEX at 15:00 CET on every ECC Business Day.  EEX will integrate the limits into their system and provide feedback until 17:00 CET on every ECC Business Day.	Full synchronization by ECC Monday to Friday at 08:30 CET. Partial Ad-hoc updates sent each hour at 00, 10, 20, 29, 46 minutes by ECC each calendar day.  Immediate processing by nEHS platform:  Each calendar day
Limit Reset	Within the trading system on each ECC business day	Within the trading system after each sell-off
SMSS Member Area Self-Service	Yes	Yes

Limit	EEX - Natural Gas - Spot Continuous	Guarantees of Origin – Auction operated by EEX AG on behalf of the French State
Limit Definition	EEX_GAS_SPOT_EUR	EEX_GOFR_EUR
Limit Description	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).	The Cash Limit for Guarantees of Origin Auction Trading operated by EEX AG represents the maximum payment amount per auction.
Limit Exposure Definition	Sum of financial exposure of orders and trades between Limit Resets	Sum of financial exposure of orders and trades between Limit Resets
Default Limit	Unlimited	0
Trading Type	Spot Continuous Trading	Auction Trading
Maintenance	CM and NCM	СМ
Visibility at ECC	CM and NCM (ECC Member Area)	CM and NCM (ECC Member Area)
Limit Synchronization	Full synchronization by ECC Monday to Friday at 16:00 CET. Partial Ad-hoc updates sent every 5 minutes by ECC each calendar day.  Immediate processing by EEX:  EEX business days: 09:00 – 18:00 CET	Full synchronization by ECC Monday to Friday at 16:00 CET. Partial Ad-hoc updates sent every 10 minutes by ECC each calendar day from 10:00 until 16:00 CET.  Immediate processing by EEX:  EEX AG business days: 09:00 – 18:00 CET  The Trading Limits can be modified until one EEX AG Business Day prior to the auction 16:00 CET.
Limit Reset	Within the trading system on each ECC business day 16:00 CET	Within the trading system after each auction
SMSS Member Area Self-Service	Yes	Yes

Limit	Pan-European Guarantees of Origin – Auction operated by EPEX SPOT	EPEX SPOT – Power – Spot Auction EUR / GBP
Limit Definition	EPEX_GOEU_EUR	EPEX_AUCTION_EUR / EPEX_AUCTION_GBP
Limit Description	The Cash Limit for pan-European Guarantees of Origin Auction Trading operated by EEX AG represents the maximum payment amount per auction.	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.  The trading limit can be defined in EUR or GBP.
Limit Exposure Definition	Sum of financial exposure of orders and trades between Limit Resets	Sum of financial exposure of orders and trades between Limit Resets
Default Limit	0	Unlimited
Trading Type	Auction Trading	Day-Ahead and Intraday Auction Trading
Maintenance	СМ	CM and NCM
Visibility at ECC	CM and NCM (ECC Member Area)	CM and NCM (ECC Member Area)
Limit Synchronization	Full synchronization by ECC Monday to Friday at 16:00 CET. Partial Ad-hoc updates sent every 10 minutes by ECC each calendar day from 10:00 until 16:00 CET.  Immediate processing by EPEX SPOT:  Business days: 09:00 – 18:00 CET  The Trading Limits can be modified until one Business Day prior to the auction 16:00 CET.	Full synchronization by ECC Monday to Friday at 09:30 CET. Partial Ad-hoc updates sent every 5 minutes by ECC each calendar day.  Immediate processing by EPEX SPOT:  Each calendar day: 08:30 – 08:40 CET, 09:30 - 10:00 CET, 10:45 – 10:50 CET, 11:35 – 11:40 CET, 14:20 – 14:40 CET, 16:00 – 16:10 CET, 17:55 – 18:15 CET, 19:05 – 20:55 CET
Limit Reset	Within the trading system after each auction	Within the trading system on each auction day 16:00 CET
SMSS Member Area Self-Service	Yes	Yes

Limit	EPEX / SEMOPX SPOT – Power – EUR – Spot Continuous	EPEX SPOT – Power – GBP – Spot Continuous
Limit Definition	EPEX_CONTINUOUS_EUR	EPEX_CONTINUOUS_GBP
Limit Description	The Cash Limit constitutes a single financial limit denoted in EUR and covering all delivery areas tradable at EPEX SPOT and SEMOpx, excluding 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).	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).
Limit Exposure Definition	Sum of financial exposure of orders and trades between Limit Resets	Sum of financial exposure of orders and trades between Limit Resets
Default Limit	0	0
Trading Type	Spot Continuous Trading	Spot Continuous Trading
Maintenance	СМ	СМ
Visibility at ECC	CM and NCM (ECC Member Area)	CM and NCM (ECC Member Area)
Limit Synchronization	Full synchronization by ECC Monday to Friday at 16:08 CET. Partial Ad-hoc updates sent every 5 minutes by ECC each calendar day.  Immediate processing by EPEX SPOT:	Full synchronization by ECC Monday to Friday at 16:08 CET. Partial Ad-hoc updates sent every 5 minutes by ECC each calendar day.  Immediate processing by EPEX SPOT:
	Each calendar day except from 15:00 – 16:00 CET.	Each calendar day except from 15:00 – 16:00 CET.
Limit Reset	Within the trading system on each ECC business day 16:00 CET	Within the trading system on each ECC business day 16:00 CET
SMSS Member Area Self-Service	Yes	Yes

Limit	EPEX SPOT – Capacity Guarantees – Auction Trading – Cash Limit	EPEX SPOT – Capacity Guarantees – Auction Trading – Quantity Limit
Limit Definition	EPEX_CPCTY_EUR	EPEX_CPCTY_SELL_QTY
Limit Description	The financial auction limit at EPEX SPOT for Capacity Guarantees constitutes an overall Financial Limit per Trading Participant per auction	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
Limit Exposure Definition	Sum of financial exposure of orders per auction	The maximum quantity for sell-orders
Default Limit	Unlimited	0 (Short-selling is prohibited)
Trading Type	Auction Trading	Auction Trading
Maintenance	СМ	ECC
Visibility at ECC	CM and NCM	NCM
	(ECC Member Area)	(ECC Member Area)
Limit Synchronization	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: Starting 9 days before the auction takes place until 1 day before the auction takes place: 09:30 – 18:00 CET	Full synchronization by ECC at 16:00 CET.  Immediate processing by EPEX SPOT: Starting 9 days before the auction takes place until 1 day before the auction takes place: 09:30 – 18:00 CET
Limit Reset	Within the trading system after each auction	Within the trading system after each auction
SMSS Member Area Self-Service	Yes	No

Limit	HUPX – Power – Spot Auction	HUPX – Power – Spot Continuous
Limit Definition	HUPX_AUCTION_EUR	HUPX_CONTINUOUS_EUR
Limit Description	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.	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).
Limit Exposure Definition	Sum of financial exposure of orders and trades between Limit Resets	Sum of financial exposure of orders and trades between Limit Resets
Default Limit	Unlimited	0
Trading Type	Auction Trading	Spot Continuous Trading
Maintenance	CM and NCM	СМ
Visibility at ECC	CM and NCM (ECC Member Area)	CM and NCM (ECC Member Area)
Limit Synchronization	Full synchronization by ECC Monday to Friday at 09:00 CET. Partial Ad-hoc updates sent every 5 minutes by ECC each calendar day.  Immediate processing by HUPX:  Each calender day: 08:30 – 11:40 CET, 14:20 – 20:55 CET	Full synchronization by ECC Monday to Friday at 16:07 CET. Partial Ad-hoc updates sent every 5 minutes by ECC each calendar day.  Immediate processing by HUPX:  Each calendar day except from 15:00 – 16:00 CET.
Limit Reset	Within the trading system on each auction day 16:00 CET	Within the trading system on each ECC business day 16:00 CET
SMSS Member Area Self-Service	Yes	Yes

Limit	PXE – Power – Spot Auction	
Limit Definition	J.	
Limit Description	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.	
Limit Exposure Definition	Sum of financial exposure of orders and trades between Limit Resets	
Default Limit	Unlimited	
Trading Type	AuctionTrading	
Maintenance	CM (via e-mail to limits@ecc.de from authorized users)	
Visibility at ECC	On request to limits@ecc.de by authorized users	
Limit Synchronization	Limit data sent by 15:00 CET on ECC Business Days will be forwarded to PXE on the same day. Modifications confirmed by PXE become effective for the following day-ahead auction.	
Limit Reset	Within the trading system after each auction	
SMSS Member Area Self-Service	No	

Limit	SEEPEX – Power – Spot Auction	SEEPEX – Power – Spot Continuous
Limit Definition	SEEPEX_AUCTION_EUR	SEEPEX_CONT_EUR
Limit Description	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.	The SEEPEX 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).
Limit Exposure	Sum of financial exposure of orders and	Sum of financial exposure of orders and
Definition	trades between Limit Resets	trades between Limit Resets
Default Limit	Unlimited	0
Trading Type	Day-Ahead and Intraday Auction Trading	Spot Continuous Trading
Maintenance	CM and NCM	СМ
Visibility at ECC	CM and NCM (ECC Member Area)	CM and NCM (ECC Member Area)
Limit Synchronization	Full synchronization by ECC Monday to Friday at 09:00 CET. Partial Ad-hoc updates sent every 5 minutes by ECC each calendar day.  Immediate processing in ETS:	Full synchronization by ECC Monday to Friday at 16:06 CET. Partial Ad-hoc updates sent every 5 minutes by ECC each calendar day.  Immediate processing by SEEPEX:
	Each calendar day: 08:30 – 10:40 CET, 11:15 – 17:55 CET	Each calendar day
Limit Reset	Within the trading system on each auction day 16:00 CET	Within the trading system on each ECC business day 16:00 CET
SMSS Member Area Self-Service	Yes	Yes

Limit	SEMOpx – Power – Spot Auction – EUR / GBP	SEMOpx – Power – Spot Continuous
Limit Definition	SEMOPX_AUCTION_EUR / SEMOPX_AUCTION_GBP	EPEX_CONTINUOUS_EUR
Limit Description	The auction limit at SEMOpx 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.  The trading limit can be defined in EUR and/or GBP.	See above EPEX SPOT Power Spot Continuous.
Limit Exposure Definition	Sum of financial exposure of orders and trades between Limit Resets	
Default Limit	Unlimited	
Trading Type	Day-Ahead and Intraday Auction Trading	
Maintenance	CM and NCM	
Visibility at ECC	CM and NCM (ECC Member Area)	
Limit Synchronization	Full synchronization by ECC Monday to Friday at 08:00 CET. Partial Ad-hoc updates sent every 5 minutes by ECC each calendar day.  Immediate processing in ETS:  Each calendar day: 08:30 – 08:40 CET, 09:30 – 11:40 CET, 14:30 – 14:40 CET, 16:00 – 18:10 CET, 19:05 – 20:55 CET	
Limit Reset	Within the trading system on each auction day 16:00 CET	
SMSS Member Area Self-Service	Yes	

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

## 7.2. Derivatives Markets

Market / Limit	Definition	Maintenance
EEX Asia – Freight and Iron Ore – Derivatives		
N/A	N/A	N/A
EEX - Various Commodities - Derivatives		
N/A	N/A	N/A
HUDEX - Power - Derivatives		
N/A	N/A	N/A
NOREXECO – Pulp and Recovered Paper – Derivatives		
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		
All Partner Exchanges of ECC				
Risk Limit	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.	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>Breach of level 1 limit</b> = Alert message is broadcast to the affected and the maintenance member respectively.			
	<b>Breach of level 2 limit</b> = System slows down the affected member's trading activity according to the configured parameters.			
	<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.			
HUDEX – Power – Derivatives				
Risk Limit	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		
NOREXECO – Pulp and Recovered Paper – Derivatives				
Risk Limit	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 6.

## 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://hupx.hu/en/trading/regulations/market-rules
- [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 https://www.norexeco.com/rules
- [10] SEMOpx Rules and Regulations https://www.semopx.com/rules-and-monitoring/market-rules
- [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
- [13] ECC Clearing Specification Data https://www.ecc.de/en/member-section/product-specification-files