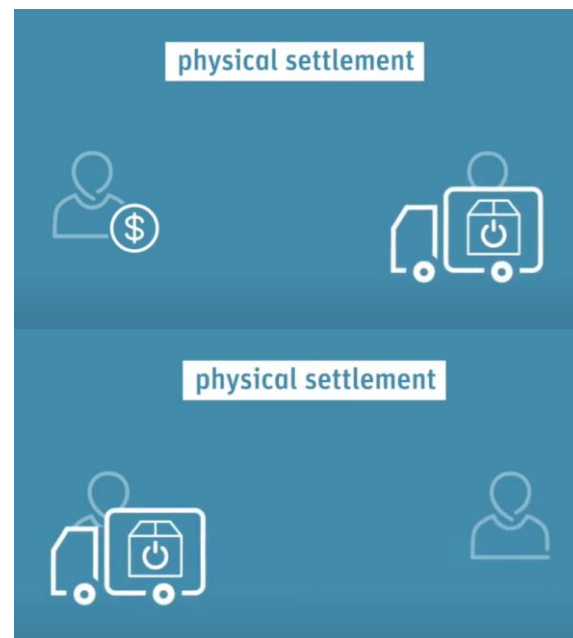
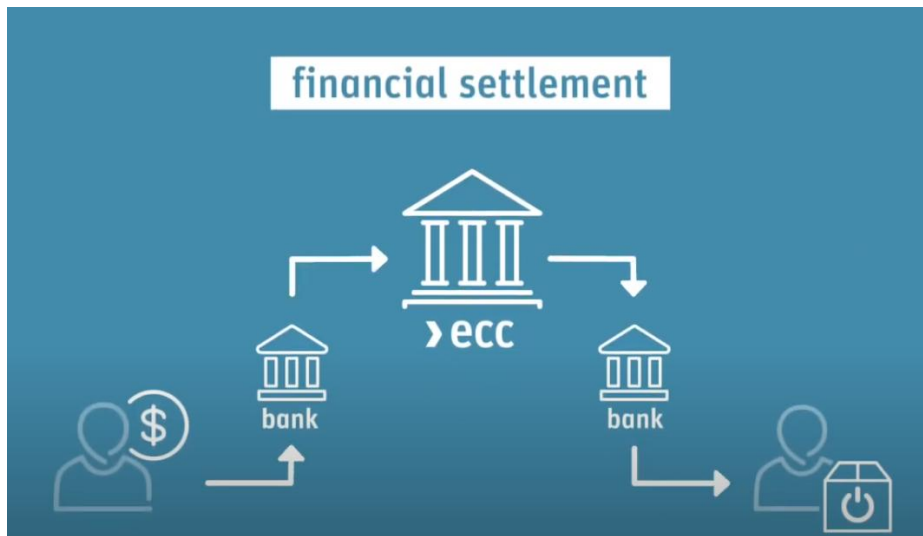
A large, light gray world map is centered on the page. Overlaid on the map are several small, 3D-rendered figures of business people in various poses, some standing and some sitting, scattered across different continents. The background is split into a white top-left quadrant, a gray top-right quadrant, a dark blue middle-right quadrant, and a bright blue bottom-right quadrant.

# ECC Physical and Financial Settlement / Invoicing

Karolis Bagdonas  
Senior Key Account Manager

# Clearing house ECC and its functions

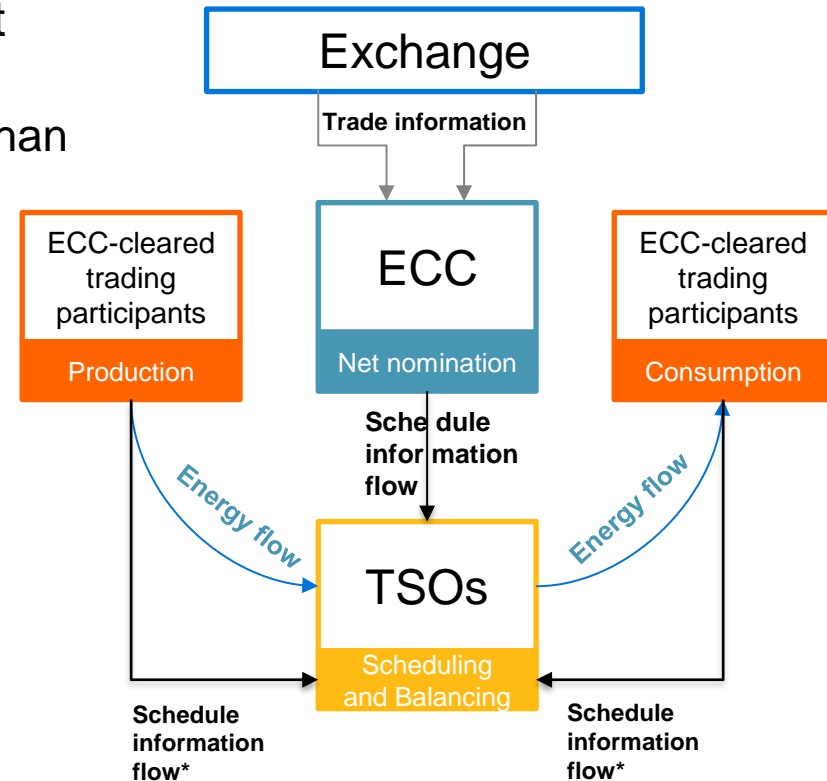


# What is Physical Settlement?

Physical settlement is all about nomination. ECC sends net “nominations” to the relevant (power or gas) grid operator to initiate the physical delivery. ECC is connected to more than 30 Transmission System Operators (TSOs).

## Nomination Process:

- Trade information is gathered from the order book trading on exchange or Trade Registration deals.
- ECC aggregates nominations per market participant (MP) and delivery period (hour, 30min, 15min) for the respective TSO into one nomination schedule.
- TSO confirms the correct matching of nominated schedules by both the MP and ECC as its counterpart. If a mismatch occurs the TSO sends an alarm message.

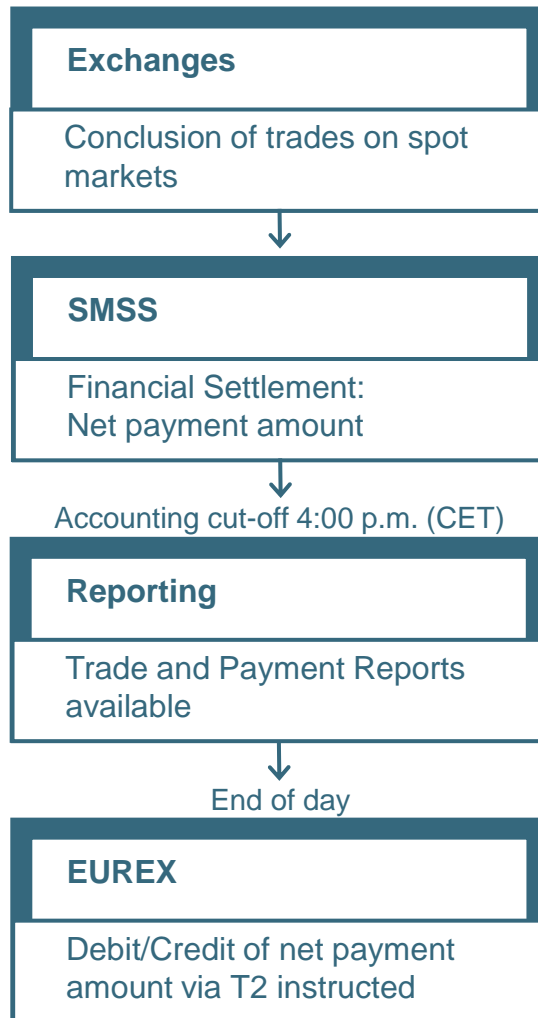


\*in some markets only

# ECC Financial Settlement Overview

- As a Central Counterparty, ECC guarantees financial fulfilment and carries out cash clearing for all transactions concluded on ECC's Partner Exchanges (EEX, EPEX Spot, HUPX, Seepex etc.)
- ECC co-operates with international banks as Clearing Members, Settlement Banks, Multi-Currency Payment Banks and Correspondent Banks. For Euro settlement, the transfer is done via the robust and reliable T2 infrastructure of ECB.
- ECC has been approved as a designated payment system according to Article 10 of the Settlement Finality Directive 98/26/EC. Payments in foreign currencies are settled with a selection of Correspondent Banks.
- ECC has a harmonised invoicing and fee settlement process across all of its products, markets and asset classes.

# ECC Financial Settlement



- ECC provides fee settlement for its Partner Exchanges. ECC collects the fees on behalf of the exchanges from the participants via their Clearing or Settlement Bank.
- Financial settlement of EUR takes place on every ECC business day (Monday to Friday, except T2 holidays).
- The trades are netted out into one net payment amount per Clearing Member or Settlement Bank respectively.
- ECC established a daily booking cut at 16:00:00 CET. All trades concluded before the booking cut are financially settled on the next ECC business day. Trades concluded after 4:00 p.m. are settled on the ECC business day after tomorrow (T+2).
- Payments in EUR are processed at around 8 a.m. CET before market opening on T2 operating days
- All trades concluded on the spot markets of our Partner Exchanges are imported into ECC's clearing system SMSS promptly after trading with the help of the existing ECC member ID (e.g. ABCEX).

# ECC Reports

- **Delivery Reports** provide an overview of all physically settled trades to the member for a complete specific delivery day with delivery periods from 00:00 to 24:00 (positions are netted).
- **Trade Reports** submitted on T provide an overview of all executed trades of a member from T-1 16:00:01 to T 16:00:00. Trades with execution after 16:00:00 CE(S) on T will be published in the Trade Report on T+1.
- **Payment Reports** provide an overview of all trades to be financially settled on B+1. All trades from 16:00:01 B-1 to 16:00:00 on B are considered in the Payment on B+1.
- **Margin Reports** contain Initial Margin Spot Market (IMSM).
- **Collateral Reports** contain collateral transactions and balances of bank guarantees used by an NCM as collateral and collaterals of DCPs.
- **Invoice Reports** contain all Spot and Derivatives Market transactions as well as delivery instructions from expired futures and options positions which have fallen due per invoice.

# ECC Clearing Process

## Invoicing 1|3



- ECC only invoices fees for the provision of clearing and settlement services.
- ECC creates monthly invoices at the latest until the 5<sup>th</sup> business day of the following month.
- ECC issues invoices for Clearing Fees and commodity amounts.
- The invoices are sent to the customers by e-mail via download link and/or by FTP access
- Reports (Invoice and Payment Reports) can be subscribed via the ECC Member Area
- Fees are debited on the 10th ECC business day of the following month via the T2 or commercial bank account of the participant's clearing bank or the settlement account of the DCP

# ECC Clearing Process

## Invoicing 2|3

ECC issues 2 major groups of invoices of clearing fees: “Delivery” and “Trading”

ECC Lux invoices (deliveries)	ECC AG invoices (trading)
<p>Contains all purchased and sold commodities of products with physical deliveries:</p> <ul style="list-style-type: none"> <li>→ spot transactions</li> <li>→ intraday transactions</li> <li>→ future expiries.</li> </ul>	<p>Contains all derivatives market products or financially fulfilled contracts.</p> <p>The invoice is divided into purchases and sales.</p>
<p>Invoice is based on the delivery day of the concerned transactions (= delivery month).</p>	<p>Invoice is based on the timestamp of the concluded transactions (= trading month).</p>
<p>It comprises the clearing fees for the previous month if applicable including VAT.</p>	<p>It comprises the clearing fees for the previous month if applicable including VAT.</p>



# ECC Clearing Process

## Invoicing 3|3



European Commodity Clearing Luxembourg S.à.r.l.  
The Square, 42, Avenue JF Kennedy, L-1855 Luxembourg

Company  
Street  
City  
Country

Clearing & Settlement  
Tel.: +49 (0) 341/24680-444  
Fax: +49 (0) 341/24680-409  
E-Mail: clearing@ecc.de

VAT ID LU23418829

2024-04-30

Invoice No. ABCEX\_L2400001  
for the period of service from 2024-04-01 to 2024-04-30

Tax ID: n/a  
VAT ID: ABC1234567

Currency of Invoice: EUR

### Invoice Summary

Invoice Item	Commodity	Fees	Net	Domestic VAT 0.00 %	Gross
Purchases	351,173,731.62	14,800.86	351,188,532.48	0.00	351,188,532.48
Sales	1,053.65	4.97	1,058.62	0.00	1,058.62
<b>Total Gross</b>					<b>351,189,591.10</b>

The total fee amount of 14,805.83 € will be debited on Wed, May 15, 2024 via your Clearing-Member(s) or Settlement Bank. The commodity and the respective VAT have already been settled via your Clearing Member(s) or Settlement Bank.

### Attachments :

- Invoice Details
- Remarks

The attachments are an integrated part of this invoice.

The Invoice Report Detail is an integrated part of this invoice/self-bill invoice.

European Commodity Clearing Luxembourg S.à.r.l.  
The Square, 42, Avenue JF Kennedy  
L-1855 Luxembourg  
Managing Board: Jaap Meijer, Hugo J.L. Neuman

R.C.S. Luxembourg: B134.195  
Tax No.: 2007 2461 003  
USH-ID: LU 234 188 29  
S.à.r.l. capital: 12,500 €

Phone: +352 243-36120  
Fax: +352 243-38276  
info@ecc-lux.de  
www.ecc-lux.de



European Commodity Clearing AG  
Augustusplatz 9, 04109 Leipzig

Company  
Street  
City  
Country

Clearing & Settlement  
Tel.: +49 (0) 341/24680-444  
Fax: +49 (0) 341/24680-409  
E-Mail: clearing@ecc.de

VAT ID DE248156757

2024-04-30

Invoice No. ABCEX\_E2400001  
for the period of service from 2024-04-01 to 2024-04-30

Tax ID: n/a  
VAT ID: ABC1234567

Currency of Invoice: EUR

### Invoice Summary

Invoice Item	Fees	Domestic VAT 0.00 %	Gross
Purchases	93,750.30	0.00	93,750.30
Sales	89,816.61	0.00	89,816.61
<b>Total Gross</b>			<b>183,566.91</b>

The total fee amount of 183,566.91 € will be debited on Wed, May 15, 2024 via your Clearing-Member(s). The commodity and the respective VAT have already been settled via your Clearing Member(s).

### Attachments :

- Invoice Details
- Remarks

The attachments are an integrated part of this invoice.

The Invoice Report Detail is an integrated part of this invoice/self-bill invoice.

European Commodity Clearing AG  
Augustusplatz 9  
04109 Leipzig, Germany  
info@ecc.de, www.ecc.de  
P: +49 341 24680-444  
+9 341 24680-409

HRB 22362, Amtsgericht Leipzig  
VAT ID: DE 248 156 757

Baden-Württembergische Bank  
IBAN: DE07600501010002801568  
S.W.I.F.T: SOLADEST

Executive Board: Peter Reitz (Chairm.)  
Dr. Götz Dittrich, Jens Riek

Chairwoman of the Supervisory Board:  
Heike Eckert

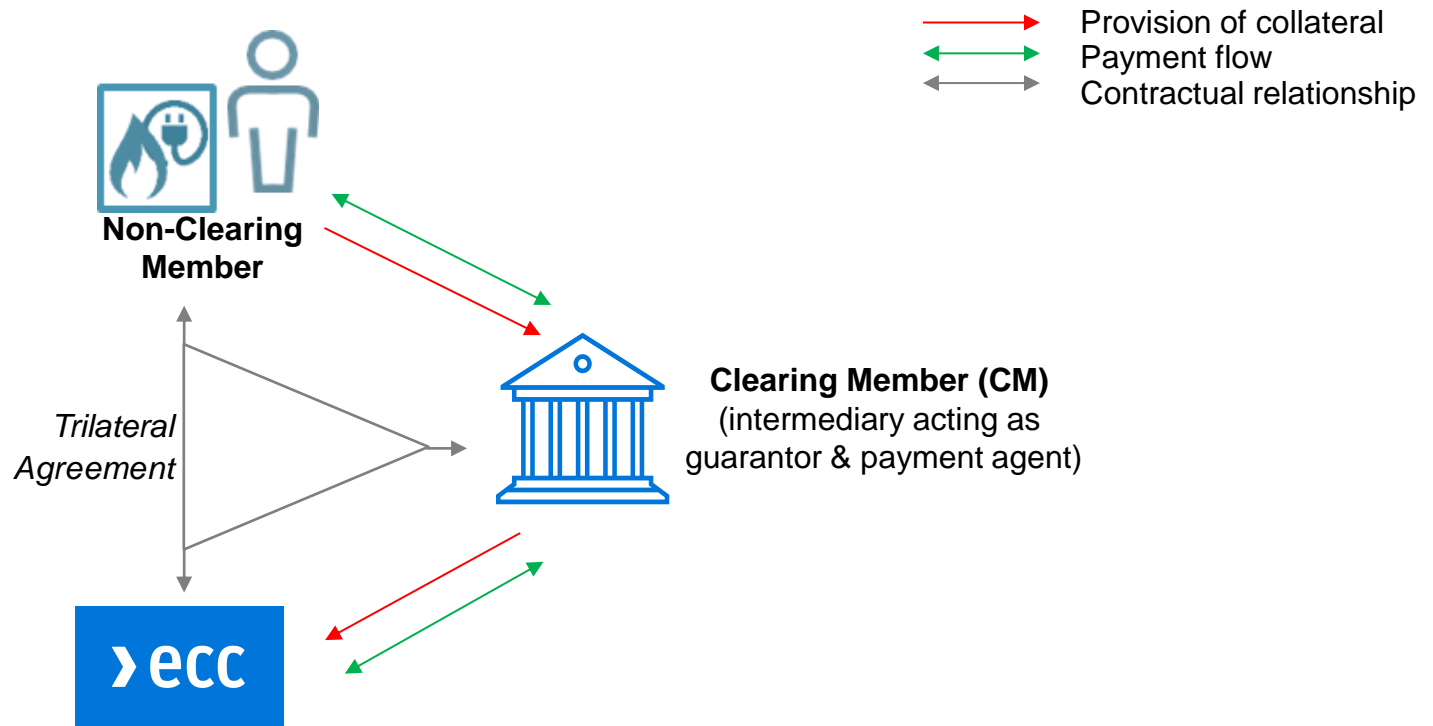


An aerial photograph of a group of people in business attire standing on a large, light-colored world map. The map is centered on the Atlantic Ocean, with North and South America visible on the left and Europe and Africa on the right. The people are scattered across the map, some standing in small groups, others looking at their phones or talking. The background is a light gray, and the map itself is a very light, almost white color.

# NCM & DCP Trading Limits and Collateral Requirements

Simonas Blažaitis  
Trading Operations Manager

# Spot Market Access Models Non-Clearing Member (NCM)



- Non-Clearing Member requires involvement of an intermediary – a **Clearing Member**.
- A Clearing Member is **liable towards ECC** for the obligations arising from trading activities of its NCM.

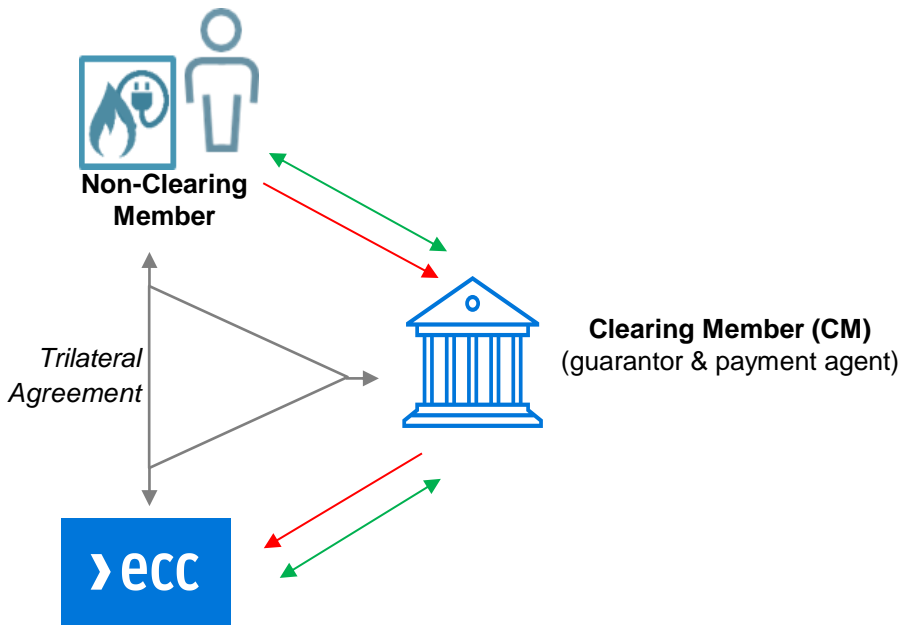
# A CM is liable towards ECC for its NCM

- To mitigate risk a CM can set pre-trading limits on spot market
- From the trade history ECC calculates Collateral requirement (Margin) towards CM
- CM forwards margin requirements to the NCM, that is part of the CM-NCM relationship

# Spot Market Access Models NCM vs DCP

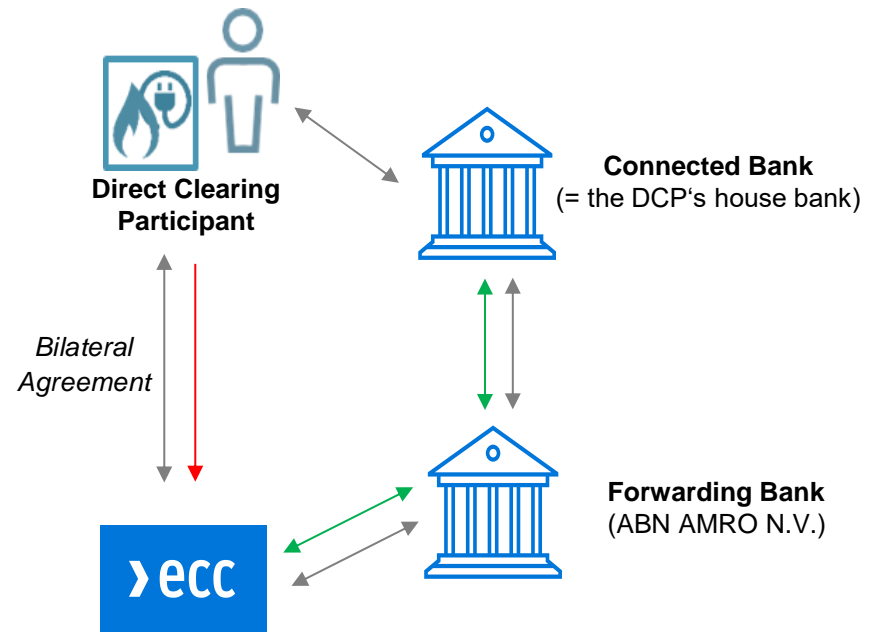
## Non-Clearing Member (NCM) model

for spot and derivatives markets



## Direct Clearing Participant (DCP) model

for spot markets only



- Provision of collateral
- ← Payment flow
- ↔ Contractual relationship

# DCP Limit Concept

## General information

- Trading days go from 16:00-16:00 CET.
- Not matched future orders in the ETS and M7 will be deleted from the trading system if they don't match the current limit (i.e. future orders will be deleted if they exceed the Base Limit after 16:00).
- The DCP decide on the collateral it wants to pledge with ECC – no lower limit exist
- The upper limit is defined by the CAP limit. The CAP limit is an outcome of the KYC process starting at 3 mio €

## Base Limit

- Base Limit: Available limit between from 16:00 onwards, next limit update usually around 18:00
- Base Limit requirement: Amount of reserved collateral to ensure the next base limit
- It is not required to have a base limit.

## Financial and delivery risk

- Financial risk is calculated volume times price. Netting between buy and sell is applied.
- Delivery risk is calculated by risk parameter (found on ECC website) \* volume. Netting only applies for the exact same delivery minute. No netting for different times of delivery. Delivery risk applies only to UK marketes.
- Between delivery risk and financial risk is no netting. The financial or delivery risk must be larger or equal to 0.

## Non-Business day

- For Continuous market there is no limit reset on non-business days, the limit needs to be rationed over these days by the DCP.
- For Auction market there is a limit reset also on non-business days at 16:00 resulting in a lower trading limit (for weekend a third, but that third is reset every day and available for trading).

### Nature of the dynamic limit system

- The dynamic limit system calculates twice per business day the maximum possible trading limit by determining the exact outstanding risk exposure and subtracting it from the collateral. The remainder becomes available for trading and the limit will be set according to the distribution preferences given by you in the O09 form.

### Function of the Base Limit

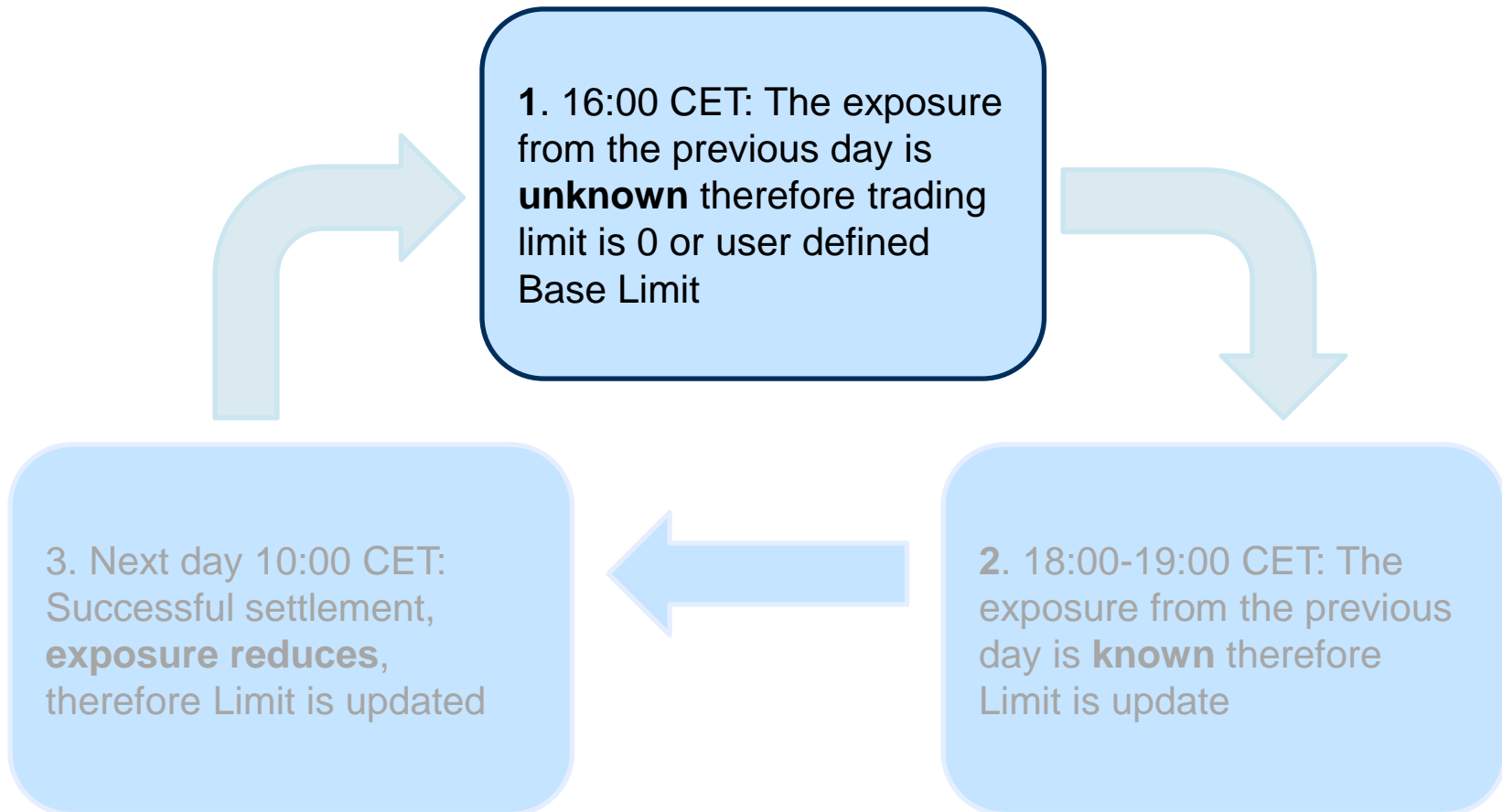
- Instead of simply resetting the limit at the time of the ECC booking cut, namely at 16:00 CET, a pre-defined so-called "Base Limit" will be active. Each DCP can define this base limit by themselves. Trading during the limit reset period (between 16:00 CET until approximately 18:00-19:00 CET on best effort basis) is covered by a base limit.

### Calculation of the trading limit

- In the limit reset period, ECC will calculate the remaining trading limit based on the collateral value, actual outstanding exposure, base limit requirement, the member's distribution preferences and the payment calendar, for maximum collateral efficiency. At approximately 18:00-19:00 (on best effort basis), the result from this trading limit calculation is added to the remaining base limit. The next morning, after successful financial settlement, the trading limits are increased again where possible by adding the resolved payment exposure.



# Start of the Trading day



# Start of the Trading day

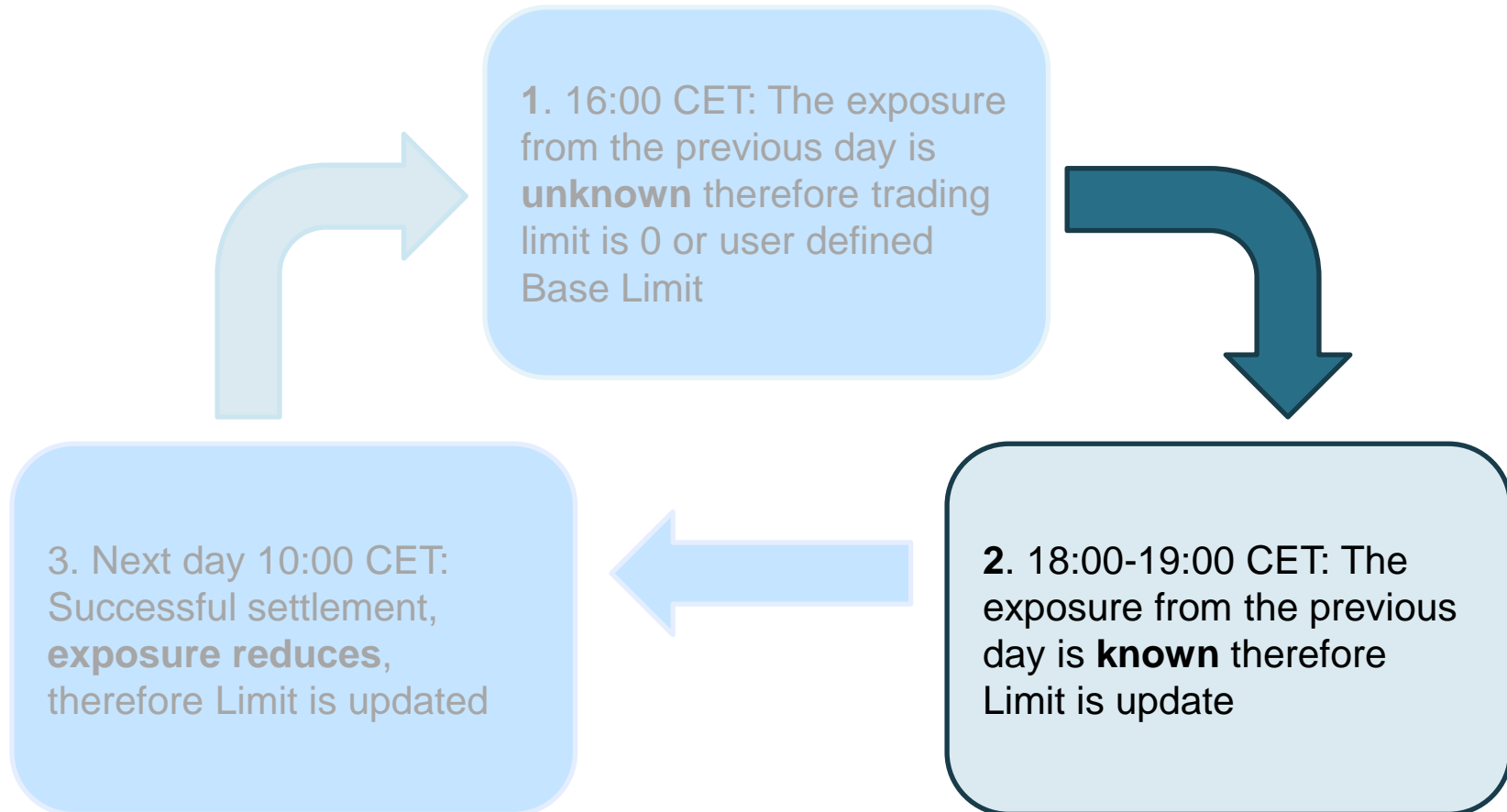
Base Limit should be defined as low as possible, but as high as needed. It has an impact on the overall trading limit.

1. 16:00 CET: The exposure from the previous day is **unknown** therefore trading limit is 0 or user defined Base Limit

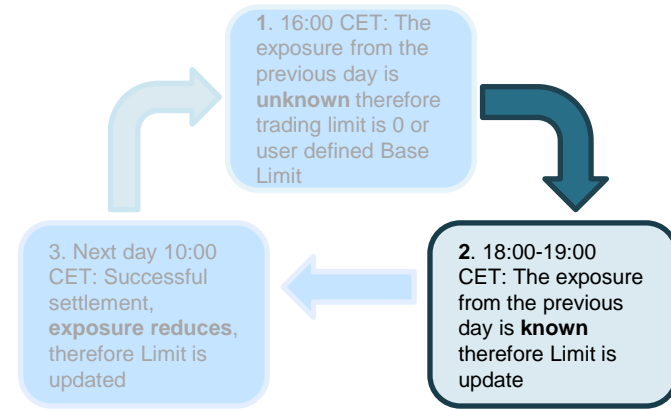
2. 18:00-19:00 CET: The exposure from the previous day is **known** therefore Limit is update

3. Next day 10:00 CET: Successful settlement, **exposure reduces**, therefore Limit is updated

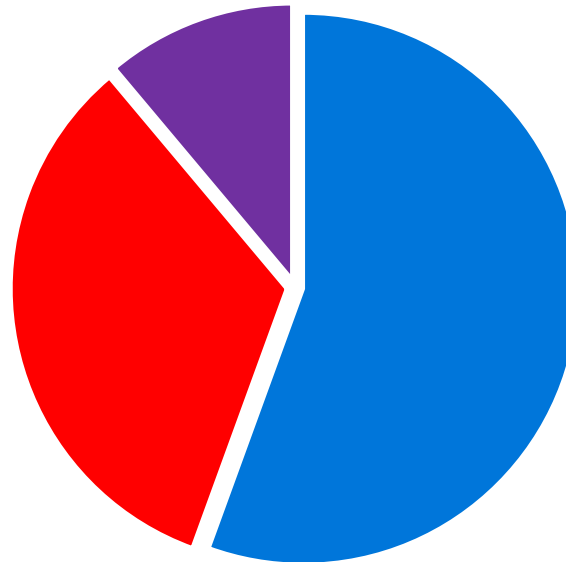
# 1. Limit Update



# 1. Limit Update



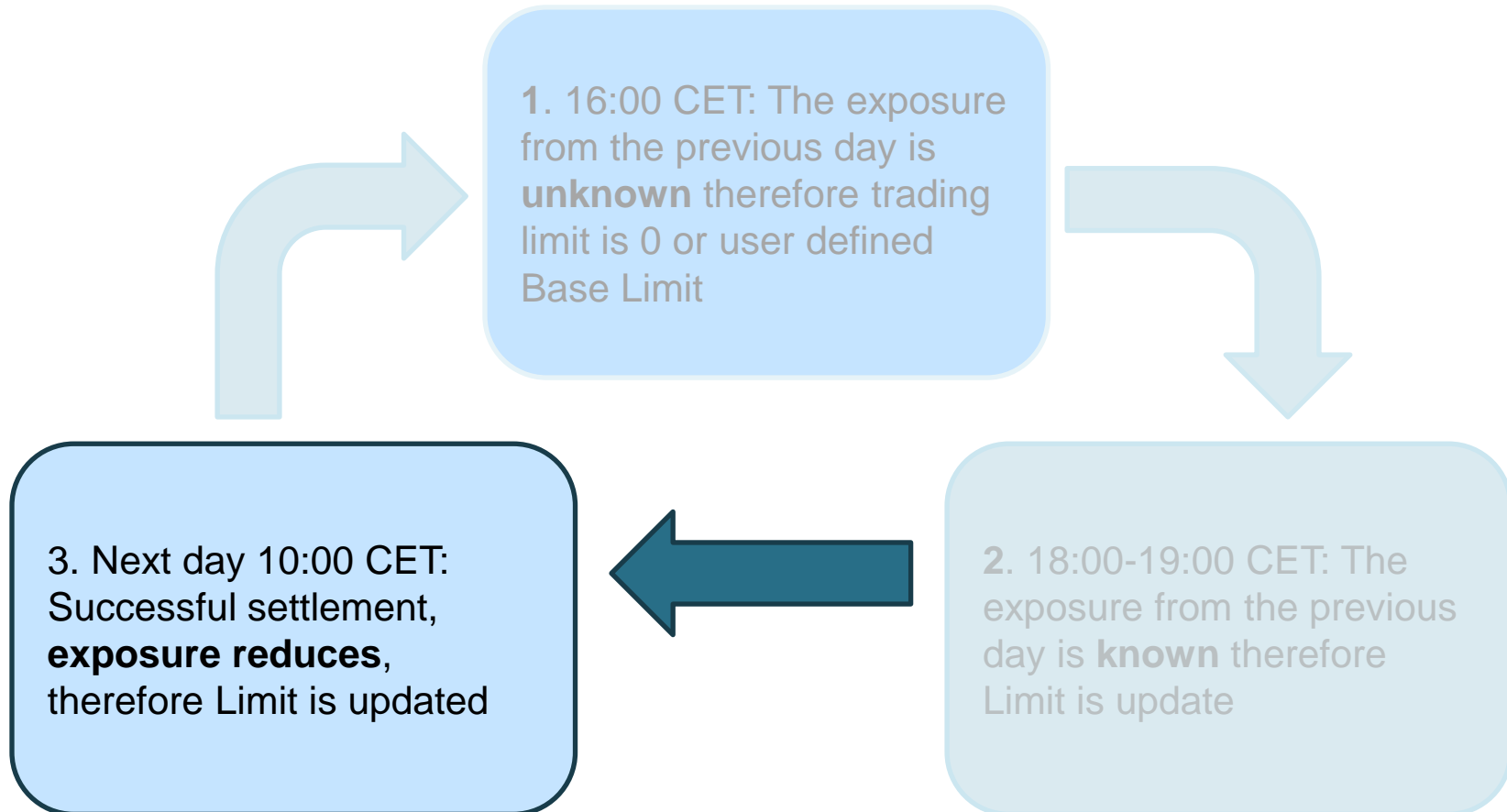
Collateral



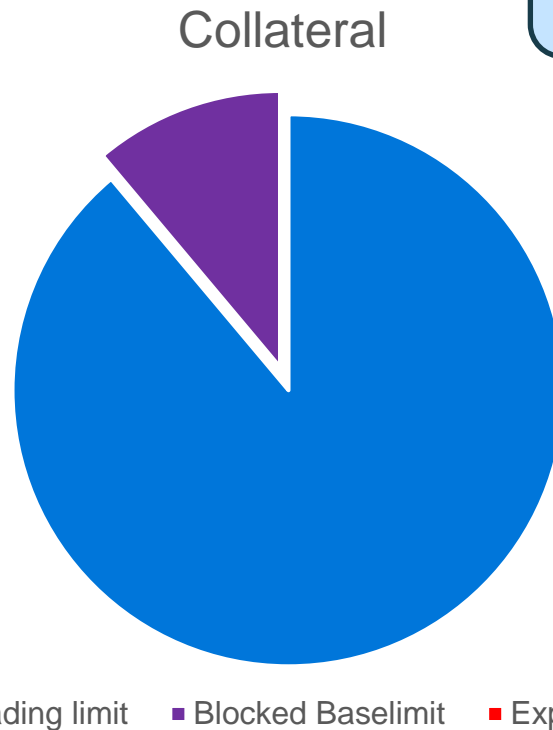
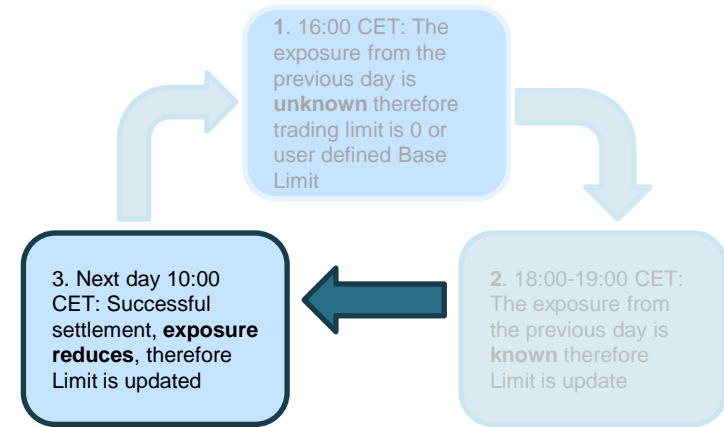
■ Trading Limit ■ Exposure ■ Blocked Base Limit

Collateral - **Exposure** - Blocked Base Limit for next days = Trading Limit

## 2. Limit Update



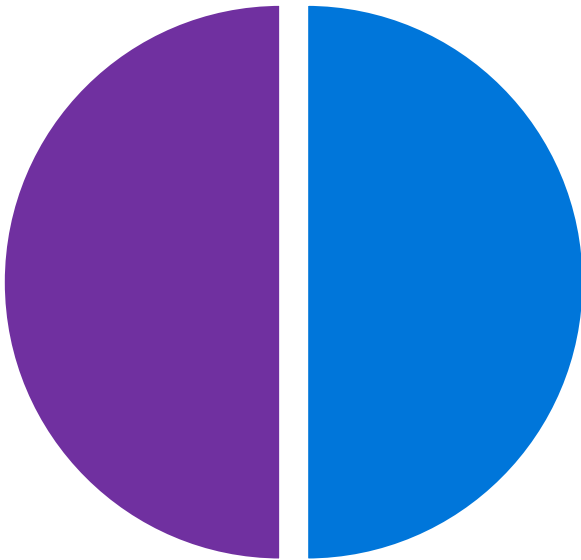
# 2. Limit Update



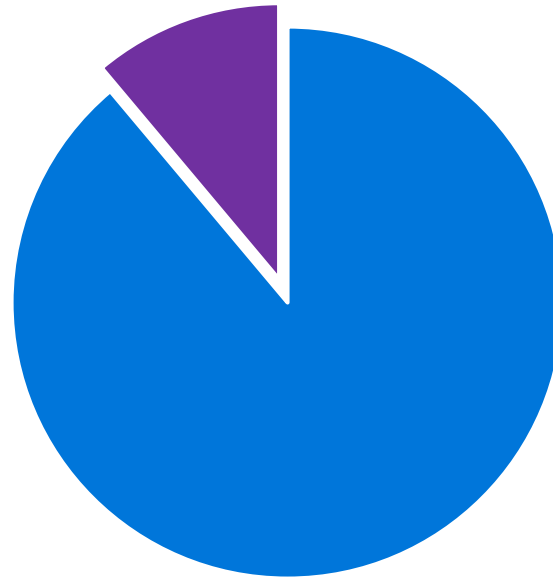
$$\text{Collateral} - \text{Exposure} - \text{Blocked Base Limit for next days} = \text{Trading Limit}$$

# Baselimit can be set up and changed in accordance with your trading strategy

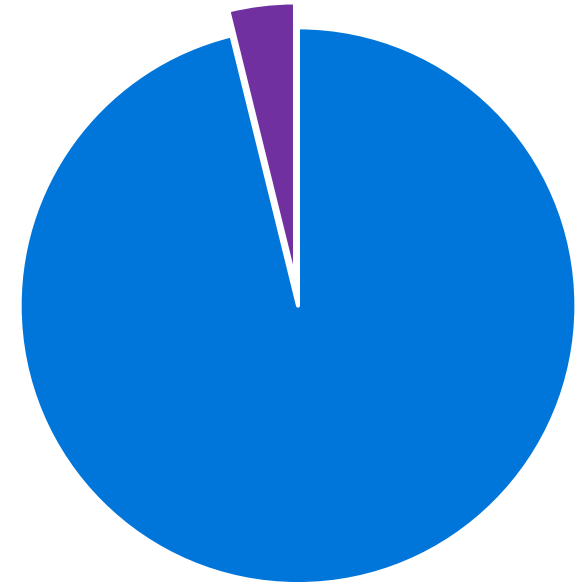
Collateral



Collateral

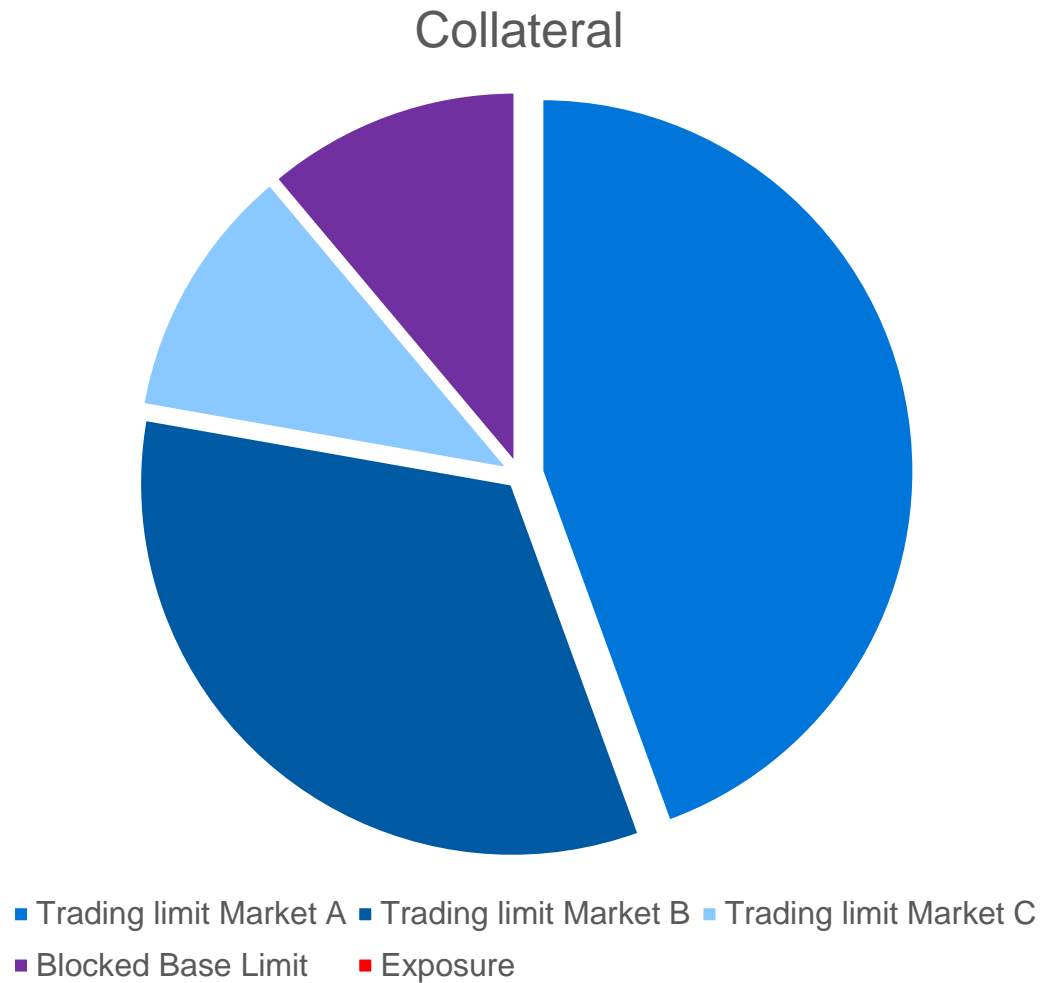


Collateral



■ Trading limit ■ Blocked Baselimit ■ Exposure

# The available collateral can be split over markets





# Base Limit requirement definition for Continuous market

Example:

Base Limit Business Day (BD): 5000 €

Base Limit Non-Business Day (NBD): 3000 €

Day	Monday 16:00 to Tuesday 16:00	Tuesday 16:00 to Wednesday 16:00	Wednesday 16:00 to Thursday 16:00	Thursday 16:00 to Friday 16:00	Friday 16:00 to Monday 16:00
Base Limit	€ 5,000 (= Base Limit BD)	€ 5,000 (= Base Limit BD)	€ 5,000 (= Base Limit BD)	€ 5,000 (= Base Limit BD)	€ 11,000 (= Base Limit BD + Base Limit NBD * 2)
Base Limit Requirements	€ 10,000 = Base Limit BD * 2	€ 10,000 = Base Limit BD * 2	€ 10,000 = Base Limit BD * 2	€ 16,000 = Base Limit BD * 2 + Base Limit NBD * 2	€ 16,000 = Base Limit BD * 2 + Base Limit NBD * 2

# 009 Form - Base limit Definition and Collateral Distribution Preferences

(DCP Clearing Members only)

European Commodity Clearing AG  
 Email: [direct.clearing@ecc.de](mailto:direct.clearing@ecc.de)  
**Return the form 2 business days before value date!**

The creation as well as the adjustment of an existing collateral distribution over multiple spot markets requires the submission of this form by the DCP Clearing Member.

Name of the company: <input style="width: 90%;" type="text"/>	Member-ID: <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/>
Telephone: <input style="width: 90%;" type="text"/>	Contact Person: <input style="width: 90%;" type="text"/>
E-Mail: <input style="width: 90%;" type="text"/>	Value Date*: <input style="width: 60%;" type="text"/>

\*Value date: Base limit **decrease** comes into effect **same day** at 16:00 CET, base limit **increase** comes into effect **next business day** at 16:00 CET.

## Limit Distribution

Define the absolute base limit amount for business and non-business days, as well as distribution of the remaining collateral here. Please note that a Limit Definition can comprise multiple spot markets, for more information please refer to our "ECC Risk Management Services Manual" at our website [www.ecc.de](http://www.ecc.de). An increase

Limit Definition	Currency	Business Day –Base limit (optional*)	Non Business Day – Base limit (optional*)	Collateral Distribution key in %**

# O10 Form - Cash Collateral

European Commodity Clearing AG  
 Email: [direct.clearing@ecc.de](mailto:direct.clearing@ecc.de)  
**Return the form 2 business days before value date!**

## Deposit / Release

(DCP Clearing Members only)

**From:**

Telephone: <input style="width: 90%;" type="text"/> Fax: <input style="width: 90%;" type="text"/>	Contact Person: <input style="width: 95%;" type="text"/>
Member ID: <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> E <input style="width: 20px;" type="text"/> X	Member Name: <input style="width: 95%;" type="text"/>

<input type="checkbox"/> <b>Release</b>	<input type="checkbox"/> <b>Collateral for Trading</b>	<input style="width: 95%;" type="text"/>
<input type="checkbox"/> <b>Deposit</b>	<input type="checkbox"/> <b>Clearing Fund*</b>	<input style="width: 95%;" type="text"/>

\*Please keep in mind, in case you are active in the UK power markets, 4% of the provided collateral must be allocated to the Clearing Fund.

**Value Date\*:**

\*Value date for collateral increase: On this day the amount will be drawn from connected account and available for trading at 16:00.

\*Value date for collateral decrease: On this day the reduced collateral will be considered from 16:00 onwards. Payout to connected account will be d+1 (or d+3 for UK power markets).

<input type="checkbox"/> <b>EUR</b> <input type="checkbox"/> <b>GBP</b>	Amount <input style="width: 95%;" type="text"/>	Amount in words: <input style="width: 95%;" type="text"/>
--	--	--

# Useful links

- DCP Collateral and Limit presentation: [Collateral and Limits](#)
- General limit documentation: [ECC Limit Manual](#)
- DCP Limit Calculation: [DCP Limit Tool](#)

Thank you for your attention!