

An aerial photograph of a group of approximately ten people standing on a large, light-colored floor that features a faint, grey world map. The people are dressed in business attire and are arranged in a loose circle, appearing to be in a meeting or collaborative work session. The lighting creates soft shadows on the floor.

ECC – Direct Clearing system

August 2023

DCP Limit Concept

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.

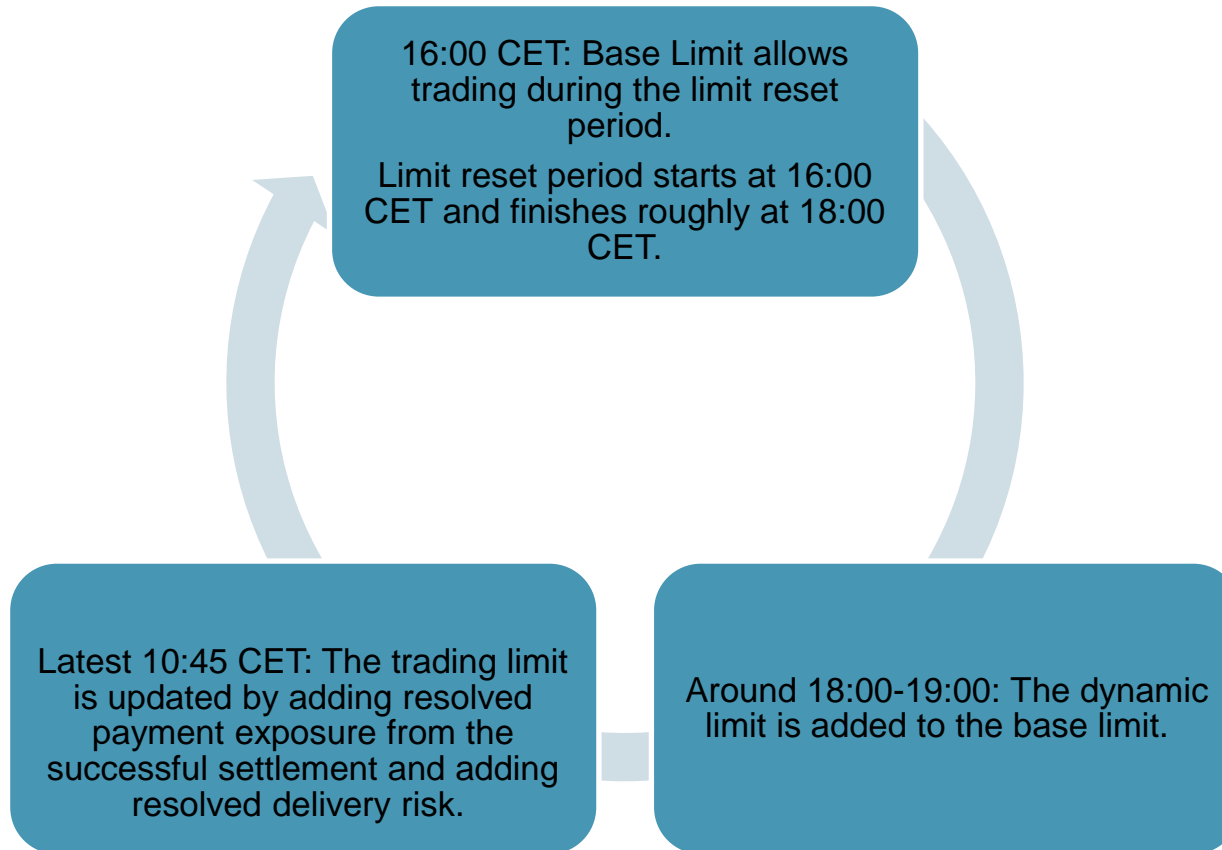
Calculation of the trading limit

- 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.

Advantages of the dynamic limit system

- This gives DCPs a high degree of trading flexibility, making as much of the posted collateral available for trading as possible. The collateral value can be determined by the DCP as long as it does not exceed their capped collateral value (CAP limit). As a result, the dynamic trading limit calculation offers DCPs greater capital efficiency as, in most cases, less collateral will be required for obtaining the same trading limits; or higher limits are available with the same collateral compared to the NCM model.

Limit update cycle



Additional information

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).

Market explanation

Different markets have different characteristics. Therefore, the Base limit requirement is calculated differently for each market.

This is illustrated on the following slides, with an example week for each scenario for better understanding.

Euro markets EPEX/HUPX/BSP Continuous & Auction

EPEX/HUPX/BSP EURO

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

Example Continuous EURO, EPEX/HUPX/BSP, Situation: 10€ Collateral, Base Limit BD = 1€, Base Limit NBD = 1€

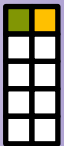
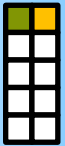













-  Not known exposure
-  Given Limit (excess Collateral)
-  Given Base Limit
-  Reserved Base Limit (Base Limit NBD)
-  Reserved Baselimit (Base Limit BD)
-  Known financial exposure

5€ Exposure

9€ Exposure

3€ Exposure

2€ Exposure

16:00	Monday Limit: 1€ Exposure: unknown		Tuesday Limit 1€ Exposure: unknown		Wednesday Limit 1€ Exposure: unknown		Thursday Limit 1€ Exposure: unknown		Friday Limit 3€ Exposure: unknown	
18:00 - 19:00	Monday Limit: 9€ Exposure: 0€		Tuesday Limit 4€ Exposure 5€		Wednesday Limit 1€ Exposure 9€		Thursday Limit 4€ Exposure 3€		Friday Limit 7€ Exposure 2€	
9:30 - 10:45	Tuesday Limit: 9€ Exposure: 0€		Wednesday Pay. Rec. 5€ Limit 9€ Exposure: 0€		Thursday Pay. Rec. 9€ Limit 9€ Exposure: 0€		Friday Pay. Rec. 3€ Limit 7€ Exposure: 0€		Monday Limit 9€ Pay. Rec. 2€ Exposure 0€	

EPEX/HUPX Euro

Base Limit requirement definition for Auction 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)	€ 5,000 (= 3 * max(NBD Base limit, Baselimit BD) / 3)
Base Limit Requirements	€ 5,000 = Base Limit BD	€ 5,000 = Base Limit BD	€ 5,000 = Base Limit BD	€ 15,000 = Base Limit BD + 2 * max(NBD Base limit, Baselimit BD)	€ 15,000 = Base Limit BD + 2 * max(NBD Base limit, Baselimit BD)

Example Auction EURO, EPEX/HUPX,

Situation: 10€ Collateral, Base Limit BD = 1€, Base Limit NBD = 1€





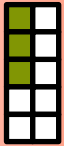




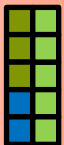





- Not known exposure
- Given Limit (excess Collateral)
- Given Base Limit
- Reserved Base Limit (Baselimit NBD)
- Reserved Base Limit (Baselimit BD)
- Known financial exposure
- Reserved Base Limit max(Base Limit NBD, Base Limit BD)

5€ Exposure

9€ Exposure

3€ Exposure

2€ Exposure

16:00	Monday Limit: 1€ Exposure: unknown		Tuesday Limit 1€ Exposure: unknown		Wednesday Limit 1€ Exposure: unknown		Thursday Limit 1€ Exposure: unknown		Friday Limit 3/3€ Exposure: unknown	
18:00 - 19:00	Monday Limit: 10€ Exposure: 0€		Tuesday Limit 5€ Exposure 5€		Wednesday Limit 1€ Exposure 9€		Thursday Limit 5€ Exposure 3€		Friday Limit 8/3€ Exposure 2€	
9:30 - 10:45	Tuesday Limit: 10€ Exposure: 0€		Wednesday Pay. Rec. 5€ Limit 10€ Exposure: 0€		Thursday Pay. Rec. 9€ Limit 10€ Exposure: 0€		Friday Pay. Rec. 3€ Limit 8€ Exposure: 0€		Monday Limit 10€ Pay. Rec. 2€ Exposure 0€	

BSP Euro

Base Limit requirement definition for BSP Auction 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	€ 5,000	€ 5,000	€ 5,000	€ 5,000 (= 3 * max(NBD Base limit, Baselimit BD) / 3)
Base Limit Requirements	€ 10,000 = Base Limit BD * 2	€ 10,000 = Base Limit BD * 2	€ 10,000 = Base Limit BD * 2	€ 20,000 = Base Limit BD + 3 * max(NBD Base limit, Baselimit)	€ 20,000 = Base Limit BD + 3 * max(NBD Base limit, Baselimit)

Example BSP Auction EURO,

Situation: 10€ Collateral, Base Limit BD = 1€, Base Limit NBD = 1€

- Not known exposure
- Given Limit (excess Collateral)
- Given Base Limit
- Reserved Base Limit (Baselimit NBD)
- Reserved Base Limit (Baselimit BD)
- Known financial exposure
- Reserved Base Limit max(Base Limit NBD, Base Limit BD)

5€ Exposure

9€ Exposure

3€ Exposure

2€ Exposure

16:00	Monday Limit: 1€ Exposure: unknown		Tuesday Limit 1€ Exposure: unknown		Wednesday Limit 1€ Exposure: unknown		Thursday Limit 1€ Exposure: unknown		Friday Limit 3/3€ Exposure: unknown	
18:00 - 19:00	Monday Limit: 9€ Exposure: 0€		Tuesday Limit 4€ Exposure 5€		Wednesday Limit 1€ Exposure 9€		Thursday Limit 4€ Exposure 3€		Friday Limit 7/3€ Exposure 2€	
9:30 - 10:45	Tuesday Limit: 9€ Exposure: 0€		Wednesday Pay. Rec. 5€ Limit 9€ Exposure: 0€		Thursday Pay. Rec. 9€ Limit 9€ Exposure: 0€		Friday Pay. Rec. 3€ Limit 7€ Exposure: 0€		Monday Limit 9€ Pay. Rec. 2€ Exposure 0€	

GBP markets Continuous & Auction

EPEX GBP

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 + 2 * Base Limit NBD)
Base Limit Requirements	£ 15,000 = Base Limit BD * 3	£ 15,000 = Base Limit BD * 3	£ 21,000 = Base Limit BD * 3 + Base Limit NBD * 2	£ 21,000 = Base Limit BD * 3 + Base Limit NBD * 2	£ 21,000 = Base Limit BD * 3 + Base Limit NBD * 2

Example Continuous GBP, Situation: 10 £ Collateral, Base Limit BD = 1 £, Base Limit NBD = 1 £

- Not known exposure
- Given Limit (excess Collateral)
- Reserved Base Limit (Base Limit NBD)
- Reserved Baselimit (Base Limit BD)
- Given Base Limit
- Known financial exposure

5£ Exposure

8 £ Exposure

3 £ Exposure

2 £ Exposure

16:00	Monday Limit: 1£ Exposure: unknown		Tuesday Limit 1£ Exposure: unknown		Wednesday Limit 1£ Exposure: unknown		Thursday Limit 1£ Exposure: unknown		Friday Limit 3£ Exposure: unknown	
18:00 - 19:00	Monday Limit: 8£ Exposure: 0£		Tuesday Limit 3£ Exposure 5£		Wednesday Limit 1£ Exposure 8£		Thursday Limit 3£ Exposure 3£		Friday Limit 6£ Exposure 2£	
9:30 - 10:45	Tuesday Limit: 8£ Exposure: 0£		Wednesday Pay. Rec. 5£ Limit 8£ Exposure: 0£		Thursday Pay. Rec. 8£ Limit 6£ Exposure: 0£		Friday Pay. Rec. 3£ Limit 6£ Exposure: 0£		Monday Limit 8£ Pay. Rec. 2£ Exposure 0£	

EPEX GBP

Base Limit requirement definition for Auction 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)	£ 5,000 (= 3 * max(NBD Base limit, Baselimit BD) / 3)
Base Limit Requirements	£ 15,000 = Base Limit BD * 3	£ 15,000 = Base Limit BD * 3	£ 25,000 = Base Limit BD * 2 + 3 * max(NBD Base limit, Baselimit)	£ 25,000 = Base Limit BD * 2 + 3 * max(NBD Base limit, Baselimit)	£ 25,000 = Base Limit BD * 2 + 3 * max(NBD Base limit, Baselimit)

Example Auction GBP,

Situation: 10 £ Collateral, Base Limit BD = 1 £, Base Limit NBD = 1 £

- Not known exposure
- Given Limit (excess Collateral)
- Reserved Base Limit (Baselimit NBD)
- Reserved Base Limit (Baselimit BD)
- Given Base Limit
- Known financial exposure

5£ Exposure

8 £ Exposure

3 £ Exposure

2 £ Exposure

16:00	Monday Limit: 1£ Exposure: unknown		Tuesday Limit 1£ Exposure: unknown		Wednesday Limit 1£ Exposure: unknown		Thursday Limit 1£ Exposure: unknown		Friday Limit 3/3£ Exposure: unknown	
18:00 - 19:00	Monday Limit: 8£ Exposure: 0£		Tuesday Limit 3£ Exposure 5£		Wednesday Limit 1£ Exposure 8£		Thursday Limit 3£ Exposure 3£		Friday Limit 6/3£ Exposure 2£	
9:30 - 10:45	Tuesday Limit: 8£ Exposure: 0£		Wednesday Pay. Rec. 5£ Limit 8£ Exposure: 0£		Thursday Pay. Rec. 8£ Limit 6£ Exposure: 0£		Friday Pay. Rec. 3£ Limit 6£ Exposure: 0£		Monday Limit 8£ Pay. Rec. 2£ Exposure 0£	

SEMOp_x £/€

No differentiation between GBP or EURO

SEMOpX Euro/GBP

Base Limit requirement definition for SEMOpX Auction 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	€ 5,000	€ 5,000	€ 5,000	€ 5,000 (= 3 * max(NBD Base limit, Baselimit BD) / 3)
Base Limit Requirements	€ 10,000 = Base Limit BD * 2	€ 10,000 = Base Limit BD * 2	€ 10,000 = Base Limit BD * 2	€ 20,000 = Base Limit BD + 3 * max(NBD Base limit, Baselimit)	€ 20,000 = Base Limit BD + 3 * max(NBD Base limit, Baselimit)

Example SEMOPX Auction EURO,

Situation: 10€ Collateral, Base Limit BD = 1€, Base Limit NBD = 1€

- Not known exposure
- Given Limit (excess Collateral)
- Reserved Base Limit (Baselimit NBD)
- Reserved Base Limit (Baselimit BD)
- Given Base Limit
- Known financial exposure
- Reserved Base Limit max(Base Limit NBD, Base Limit BD)

5€ Exposure

9€ Exposure

3€ Exposure

2€ Exposure

16:00	Monday Limit: 1€ Exposure: unknown		Tuesday Limit 1€ Exposure: unknown		Wednesday Limit 1€ Exposure: unknown		Thursday Limit 1€ Exposure: unknown		Friday Limit 3/3€ Exposure: unknown	
18:00 - 19:00	Monday Limit: 9€ Exposure: 0€		Tuesday Limit 4€ Exposure 5€		Wednesday Limit 1€ Exposure 9€		Thursday Limit 4€ Exposure 3€		Friday Limit 7/3€ Exposure 2€	
9:30 - 10:45	Tuesday Limit: 9€ Exposure: 0€		Wednesday Pay. Rec. 5€ Limit 9€ Exposure: 0€		Thursday Pay. Rec. 9€ Limit 9€ Exposure: 0€		Friday Pay. Rec. 3€ Limit 7€ Exposure: 0€		Monday Limit 9€ Pay. Rec. 2€ Exposure 0€	

nEHS markets

Auction takes place on Tuesday and Thursday

EPEX nehs Base Limit requirement definition for Auction 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)	%	%
Base Limit Requirements	€ 5,000 = Base Limit BD	%	€ 5,000 = Base Limit BD	%	%

Baselimit settings for nEHS markets only have a purpose if the member is active on multiple markets. Otherwise, due to settlement between each auction, the full collateral is available for trading.

Example nEHS EURO,

Situation: 10€ Collateral, Base limit BD = 1€, Base limit NBD = 1€

- Not known exposure
- Given Limit (excess Collateral)
- Reserved Base Limit (Base Limit NBD)
- Reserved Baselimit (Base Limit BD)
- Given Base Limit
- Known financial exposure

5€ Exposure

0€ Exposure

3€ Exposure

0€ Exposure

16:00	Monday Limit: 1€ Exposure: 0€		Tuesday: No Update	Wednesday Limit 1€ Exposure: 0€		Thursday: No Update	Friday No Update
18:00 - 19:00	Monday Limit: 10€ Exposure: 0€		Tuesday No Update	Wednesday Limit 1€ Exposure 0€		Thursday: No Update	Friday No Update
9:30 - 10:45	Tuesday Limit: 10€ Exposure: 0€		Wednesday Pay. Rec. 5€ No Update	Thursday Pay. Rec. 0€ Limit 10€ Exposure: 0€		Friday Pay. Rec. 3€ No Update	Monday No Update

GO auctions

GO auctions take place once a month.

If members are only participating in this GO auction and are not active on any other market, then the limit will be equal to the posted collateral. Collateral can be posted through the O10 form (for extent timer periods) or the O11 form (per auction).

On the other hand, if members are active on multiple markets simultaneously, they can define a Base Limit to be applied for the GO auction.

The financial risk will be settled on the next day.

Member Settings

- ECC accepts guarantees and cash collateral
- DCP member can deposit/release collateral through the O10 form
- For some unique auctions, the O11 form is sufficient
- To change member preference the O09 form is needed

Found here: [Admission Forms \(ecc.de\)](https://www.ecc.de/Admission-Forms)

Thank you

For further question don't hesitate to reach out to the
direct.clearing@ecc.de.