

# Eurex Clearing

## Default Management Process

September 2026

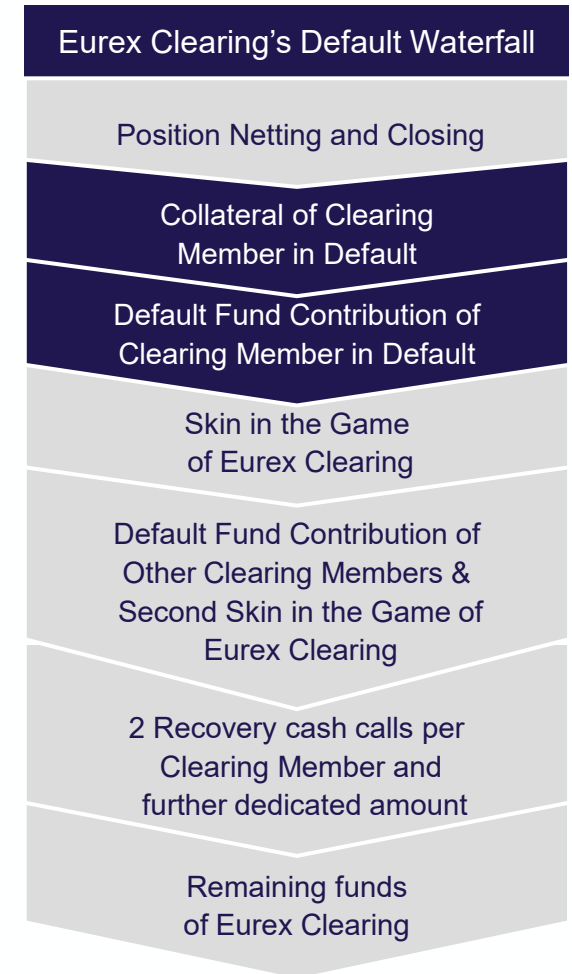


# 1 Default Waterfall

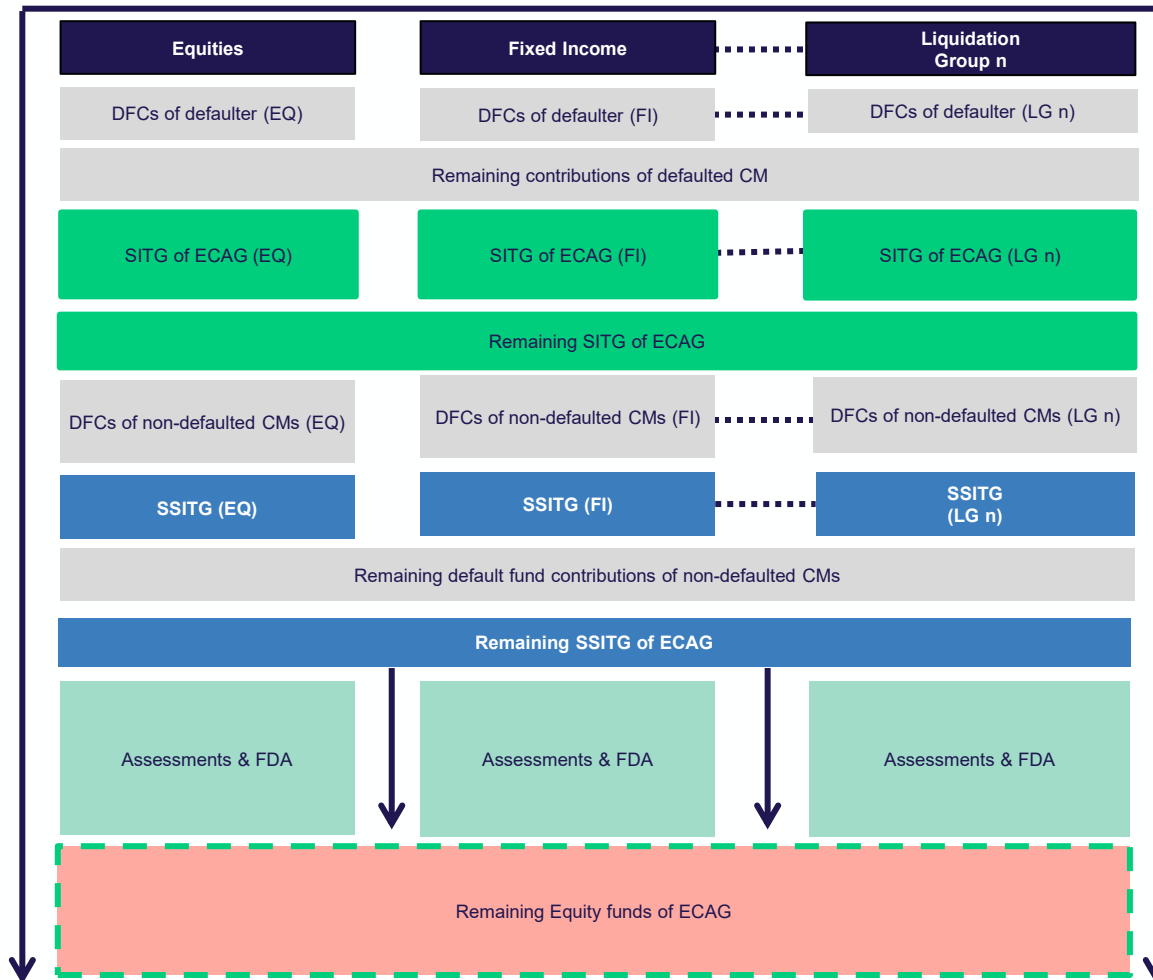
# Eurex Clearing's Default Waterfall

Minimize the effect on the Default Waterfall and to stabilize the markets

- Eurex Clearing provides a multi-level security system
  - First the collateral and the Default Fund contribution of the member in default are utilized.
  - After the defaulter's contributions are exhausted, an assigned dedicated amount of Eurex Clearing, a so-called "Skin in the Game", is applied, before non-defaulting clearing members' Default Fund contributions, a "Second Skin in the Game" and remaining capital of Eurex Clearing are used.
  - Each clearing member's contribution to the Default Fund is based on a minimum contribution and a dynamic component, accounting for the individual clearing member's risk situation.
- There is one segmented Default Fund for all types of products cleared by Eurex Clearing.
- Following a realisation of the Default Fund contributions of non-defaulted clearing members, if losses remain, clearing members are asked to provide recovery cash calls for the affected default fund segment. Eurex Clearing simultaneously provides the further dedicated amount.
- Clearing members' liability is limited to two recovery cash calls per capped period.



# Segmentation of Default Waterfall



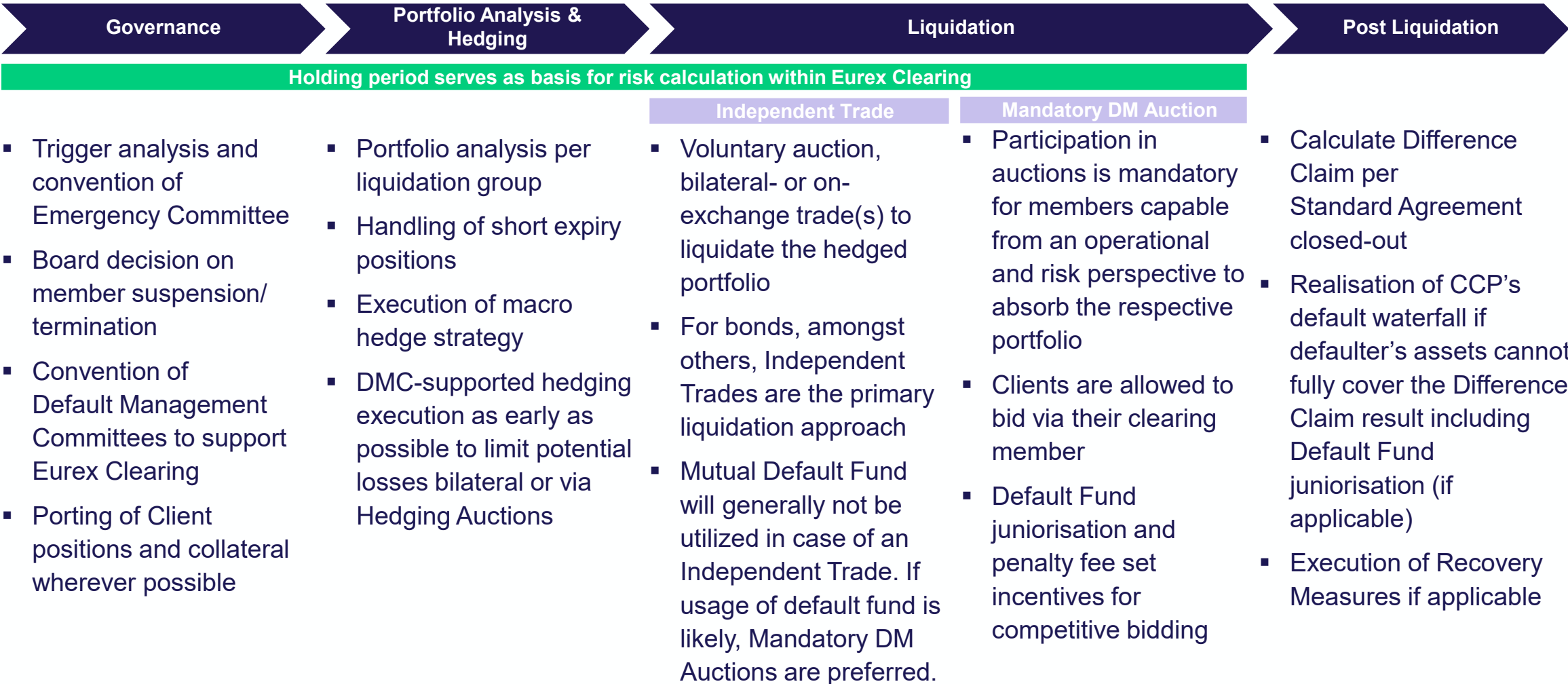
- Each layer of the Default Waterfall is segmented along the liquidation group structure. The size of a Default Fund Segment (DFS) is based on the Initial Margin of the Clearing Member in the respective liquidation group.
- The Default Fund segment of non-affected Liquidation Groups are only utilized if the affected segment have been exhausted.
- The defaulter's contributions will be exhausted prior to any contributions from others.

For updated estimates of the total resources please refer to:  
[Default Waterfall \(eurex.com\)](https://www.eurex.com/default-waterfall)

# 2 Process Overview and Governance

# Overview of Default Management Process

Default Management Process reflects best practice and complies with market requirements and regulatory guidelines



# Default Management Committees supports the Default Management Process

## Default Management Committees (DMCs)

### Role of the DMC

- Each DMC is continuously defined, but only temporarily convened in case of a clearing member default or for regular default simulation exercises.
- A DMC shall advise, assist, and provide recommendations to Eurex Clearing in defining hedging strategies and organizing auctions on liquidation group level.

### Nomination of DMC Members

- Clearing members can volunteer to participate in any DMC. In case of insufficient number of volunteers, Eurex Clearing nominates additional clearing members based on size (in terms of cleared volume 3 months prior to selection).
- Upon nomination, the clearing member has to nominate a DMC Member and a DMC Deputy and provide evidence that the nominees have sufficient knowledge and expertise to fulfil the required tasks within the DMC. Representatives from affiliated entities can be nominated as well.

### Obligations during a clearing member default

- In case of a default, the current DMC Members
  - make themselves available within a short period of time,
  - identify suitable hedging strategies for the defaulted member's portfolio,
  - support parametrisation of auctions before auction takes place (e.g. duration of pricing period).

# The legal framework is built upon three major documents ensuring the enforceability of the Default Management Process

## Legal framework for DMP



FCM Regulations of Eurex Clearing AG (“FCM Regulations”), in conjunction with the FCM Default Rules of Eurex Clearing AG (“FCM Default Rules”), provide a framework for clearing of Swap Transactions through Eurex Clearing AG by FCM Clearing Members acting as agent on behalf of their and, if applicable, for their own account



# 2 Role of Clearing Members

# Clearing Members' responsibilities within the DMP (1/3)

## Ongoing responsibilities

| Obligation                                 | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Appointment of DMP-related Contacts</b> | <p>Pursuant to Chapter I, Part 1, Number 7.5 (4) of the Clearing Conditions of Eurex Clearing, each Clearing Member shall appoint in the Member Section one or more qualified employees of the Clearing Member institution or of a third-party entity as coordinators ("DMP Coordinator") and deputies ("DMP Deputy").</p> <p>For the purpose of the execution of Default Management Auctions Eurex Clearing recommends to Clearing Members to appoint employees in the Eurex Clearing Auction Tool, Clearing Members can assign two different roles in the Eurex Clearing Auction Tool per Liquidation Group: Business Manager and Bidder.</p> |
| <b>Participation in Fire Drills</b>        | <p>Upon request of Eurex Clearing, Clearing Members are obliged to participate in regular fire-drills (Chapter I, Part 1, Number 7.5.5 Clearing Conditions). For each Liquidation Group, Eurex Clearing nominates Clearing Members for whom participation is mandatory.</p> <p>All other (non-mandatory) Clearing Members and Disclosed Direct Clients are invited to participate in the simulation on a voluntary basis.</p>                                                                                                                                                                                                                   |
| <b>Participation in DMCs</b>               | <p>For each Liquidation Group, Eurex Clearing establishes Default Management Committees (DMCs), which are staffed with employees of pre-selected Clearing Members. Clearing Members participating in a DMC shall sign the Agreement for the Participation in a Default Management Committee.</p> <p>Once selected to participate in a DMC, each relevant Clearing Member institution shall nominate employees as DMC Member and as DMC Deputy. In case of a Fire Drill or a termination event, DMC members shall make themselves available on a short notice and provide advice to Eurex Clearing on DMP related matters.</p>                   |
| <b>Market Advisor</b>                      | <p>Eurex Clearing may agree with a Clearing Member on the nomination of Market Advisors with respect to one or more Liquidation Groups. Market Advisors shall advise Eurex Clearing on a continuous basis on the most recent market developments, market liquidity, potential hedging options and hedging costs with respect to the relevant Liquidation Groups.</p>                                                                                                                                                                                                                                                                            |

# Clearing Members' responsibilities within the DMP (2/3)

## Responsibilities in a DMP

| Obligation                                          | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Participation in Hedging Process</b>             | <p>Opted-in Hedging Auction participants can benefit economically from winning the hedge-trade at their price, seniorise their default fund tranche and support rebalancing of the CCP in a critical situation. In case of non- or bad-bidding by the participant, the relevant default fund tranche will be juniorised.</p> <p>Each (voluntary or non-voluntary) Hedging Auction Participant is obliged – upon invitation to a Hedging Auction by Eurex Clearing – to submit bids via the Eurex Clearing Auction Tool.</p> <p>Each Hedging Auction Participant may appoint a third-party or a Disclosed Direct Client to participate in Hedging Auctions.</p> <p>In case of a voluntary participation in DM Hedging Auctions, the relevant Clearing Member needs to sign the Hedging Auction Participation Agreement (incl. the Product Annex).</p> <p>In case the relevant Clearing Member wants to appoint a client to participate in DM Hedging Auctions, in addition the Hedging Auction Bidding Agent Appointment Form (incl. the Product Annex) has to be signed.</p> <p>In case of the participation of a Disclosed Direct Client, the Hedging Auction Client Participant Agreement (incl. Product Annex) needs to be executed. In such a case the Default Fund Contribution of the Clearing Member is not affected. The participating Disclosed Client is liable for bad/non-bidding.</p> |
| <b>Participation in Independent Trade Execution</b> | <p>Eurex Clearing may liquidate small" or "special" portfolios by entering into bilateral trades outside of DM Auctions or on-exchange as Independent Trades in line with Chapter I, Part 1, Number 7.5.3 Clearing Conditions. Any Clearing Member or Disclosed Client can participate on a voluntary basis.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

# Clearing Members' responsibilities within the DMP (3/3)

## Responsibilities in a DMP

| Obligation                                                                              | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Participation in Liquidation Auctions</b>                                            | <p>Eurex Clearing conducts DM Auctions with Clearing Members qualifying as Mandatory Participants (Chapter I, Part 1, Number 7.5.3 (3) (ii) Clearing Conditions).</p> <p>Mandatory Participants are – when invited to a DM Auction – required to participate and to provide Bids via the Eurex Clearing Auction Tool.</p> <p>Non-mandatory Participants can participate on a voluntary basis.</p> <p>Clearing Members may allow their Disclosed Direct Clients or any other customer to participate in DM Auctions. Clearing Members shall sign the Client Participant Appointment Form.</p> <p>For ISA Direct Clearing Members, the relevant Clearing Agent shall participate in DM Auctions. The ISA Direct Clearing Member shall sign the Clearing Agent Participant Appointment Form.</p> <p>Clearing Members may operationally outsource their mandatory bidding obligation by appointing a Bidding Agent or Selected Auction Participant. A signed Bidding Agent Appointment Form or Selected Auction Participant Appointment Form shall be provided to Eurex Clearing.</p> |
| <b>Acting as Replacement Clearing Member for Client Transactions in case of Porting</b> | <p>Disclosed Direct Clients are entitled to select whether their transactions and collateral is ported or terminated by submitting the relevant Porting Election Notice.</p> <p>Eurex Clearing also offers Porting to Undisclosed Direct Clients who have to find a Replacement Clearing Member first, which then contacts Eurex Clearing. It is the responsibility of the respective (Disclosed or Undisclosed) Direct Clients to align with a Replacement Clearing Member on taking up their transactions and collateral.</p> <p>Porting will only be successful, if the applicable Porting Requirements are fully met prior to the expiry of the applicable Porting Period.</p>                                                                                                                                                                                                                                                                                                                                                                                                |

# 3 Hedging Process

# Hedging reduces sensitivity to market movements and stabilizes portfolios during auctions

Hedging to be executed on liquidation group level

## Purpose of hedging

- Hedging is an essential element of the Default Management Process (DMP)– it enables Eurex Clearing to
  - reduce the impact of market movements during the DMP and
  - stabilize the portfolios for liquidation auctions.
- Timely hedging is important to limit losses during the DMP.

## Cornerstones

- In order to conduct efficient hedging, the following cornerstones are defined:
  - For each liquidation group, a set of preferred instruments, qualified to reduce market, and potentially cash-flow risk is chosen.
  - These instruments are product types of the liquidation group to be hedged.
  - Decision on the respective hedging strategy will be taken by Eurex Clearing with recourse to advice of the DMC.
  - The hedging strategy can be executed either bilaterally or via hedging auctions, with any transaction cleared at Eurex Clearing.

## Hedge quality

- The quality of a hedge is measured in terms of reduction of the initial margin requirement.
- Reduction of risk sensitivities is the basis for the decision if and how to hedge.
- Available liquidity and cost of the hedge is considered.

# Hedging Auctions

Eurex has implemented Hedging Auctions with an Opt-In mechanism for Clearing Members and clients (in agreement with their Clearing Member), which allows:

- To **formalize** and improve the **selection of hedging counterparties**, to have committed and capable members supporting Eurex Clearing's portfolio hedging activities. The hedging counterparts are known in advance, the capabilities are evaluated continuously with the help of regular **Liquidity Surveys** and the process is regularly tested in fire drills.
- To **ensure** Eurex Clearing's access to broader liquidity pools. The **accessible liquidity** influences the Liquidity Adjustment component of the Initial Margin. Commitment from a set of liquidity providers allows to account for indirect market access in the calibration of the Liquidity Adjustment.
- To allow those clearing members who want to benefit from such hedging transactions, to **participate** according to **fair** and **adequate incentives**. The participants can benefit economically from winning the hedge-trade at their price, seniorise their default fund tranche and support rebalancing of the CCP in a critical situation.

# Hedging Auction Format

- Hedging auctions are designed to allow for a quick transfer of material market risk.
- The auction format is multi-unit with disclosed total size and number of auction participants, pay-as-you-bid, and two-way pricing.
- Hedging Auctions are executed via the Eurex Clearing Auction Tool.
- For each Liquidation Group, Eurex Clearing will invite opted-in Clearing Members and clients.
- Only in case the number of voluntary participants is insufficient to conduct successful Hedging Auctions, Eurex Clearing may appoint Clearing Members as Hedging Auction Participants according to Chapter 1, Part I, Number 7.5.2 (iii) (c) of the Clearing Conditions of Eurex Clearing.
- All participants in the auction will (generally) have the same minimum bidding requirements and will be allowed to bid for a larger portion than the requirement.
- The auction participants shall have the ability to show an “all or nothing” price.

| An auction participant will know:  | An auction participant will <u>not</u> know: |
|------------------------------------|----------------------------------------------|
| The total size of the portfolio    | The direction of the portfolio               |
| The number of auction participants | The identity of the other participants       |

  
✓ Participants can assess the potential market impact in the pricing

  
✓ Information leakage and front running are prevented



# Validity of a Mandatory Hedging Bid

- Precondition for the validity of a Mandatory Hedging Bid is the economic reasonability which is generally determined as meeting the condition of the “Maximum Hedging Spread Value”:

- $$\text{Maximum Hedging Spread Value} = \text{Max}(\text{worst winning ask} - \text{worst winning bid}, 0) + \text{distance parameter}$$

Evaluation based on bid/ask of the respective portfolio -> **Adapts** the price tolerance to the **market condition**

A **fixed component** given ahead of the auction.

Where:

- **Worst winning ask** being the highest sell price accepted, if auction trades on the ask
- **Worst winning bid** being the lowest buy price accepted, if auction trades on the bid
- **Distance parameter** being a fixed number, defined for each auction by ECAG together with the DMC
- Participants know in advance how to avoid any penalties by knowing the fixed component.

# 4 Liquidation Process

# 4.1 Independent Trades

# Independent Trade: A voluntary bidding and quoting format

Eurex Clearing can liquidate portfolios under formats of a voluntary bidding and quoting obligation.

- Flexibility is important in a default situation and some portfolios are rather suitable for an Independent Trade instead of a structured auction with mandatory participation.
- Dedicated asset class portfolios can therefore be liquidated bilaterally or in an auction format with voluntary participation.
- Eurex Clearing AG will enter into Independent Trades against the recommendation of the relevant DMC(s) only if the entering into such trades does not result in a realization of Contributions of non-defaulted Clearing Members.

## Small portfolios

A voluntary bidding and quoting format is generally suitable for portfolios considered small from an exposure and initial margin requirement perspective

## Special portfolios

A voluntary bidding and quoting format is generally suitable for portfolios with products that are cleared and/or traded by very few clearing members

## Bonds & FWB portfolios

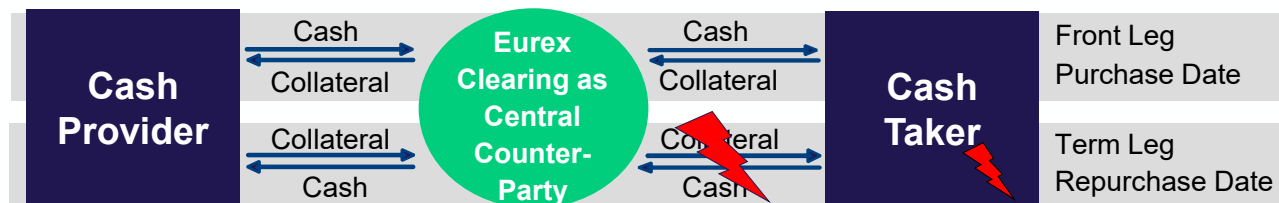
Due to the fragmented bonds and spot market structure, bond or cash market positions are intended to be liquidated via Independent Trades.

# Two-step liquidation needed for repo transactions

## Overview of general liquidation process

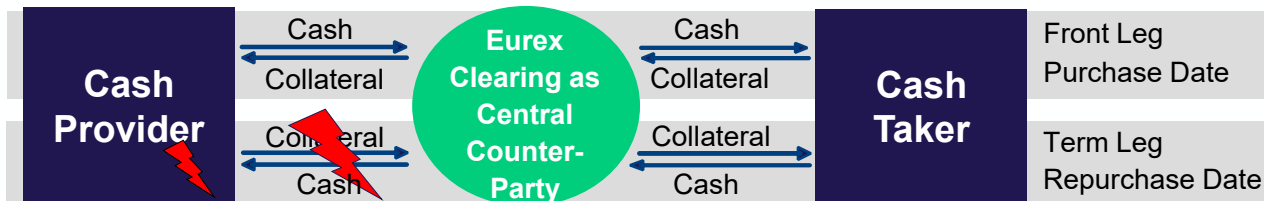
- Due to the product characteristics of repo transactions, **the DMP requires two steps\***:
  - the **CCP needs to buy or sell underlying bonds** in the cash market.
  - the **CCP needs to enter into a repo transaction** replacing the one terminated with the defaulted clearing member.

- Cash taker default in a repo transaction:



If a **cash taker defaults**, Eurex Clearing **acts as cash provider/ collateral taker in the frontleg** of the replacement repo (performing a ‘reverse repo’), **and sells the underlying bond** in the markets.

- Cash provider default in a repo transaction:



If a **cash provider defaults**, Eurex Clearing **buys the underlying bond** in the markets and **acts as cash taker/ collateral provider in the frontleg** of the replacement repo (performing a ‘repo’).

- At maturity of the term leg, cash and bonds are exchanged via Eurex Clearing by the non-defaulted counterparty of the initial repo and the counterparty of the replacement repo.

# Repo Transactions: Independent Trade as main component of the Default Management Process

- For Repo Transactions, Eurex Clearing intends to sell all ISINs taken over from a defaulted Clearing Member via an Independent Trade.
- An Independent Trade means that Eurex Clearing contacts potential counterparties to sell the respective portfolios or ISINs. An Independent Trade will be executed as voluntary auction with typically 3-5 participants via Eurex Clearing Auction Tool.
- Participation in an Independent Trade is voluntary.
  - Clearing members indicate towards Eurex Clearing via a Bond Trading Sheet for which bonds they would like to be contacted or have bond trading capabilities.
  - Members typically provide bids for the full size but can also indicate otherwise.
- An Independent Trade can rely on an auction mechanism (Eurex Clearing contacts multiple potential counterparties) or on bi-lateral execution (Eurex Clearing contacts one counterparty) and be based either on a portfolio or single / multiple ISINs.
- Independent trade can be unhedged or hedged with Eurex Fixed Income derivatives.
- Eurex Clearing AG will enter into Independent Trades against the recommendation of the relevant DMC(s) only if the entering into such trades does not result in a realisation of Contributions of non-defaulted Clearing Members.

# FWB Transactions: Independent trade as main component of Default Management Process for the Cash Market

- Eurex Clearing may invite any active clearing member or client to participate in a cash market product process.
- Participation takes place on a voluntary basis.

## Purchasing principles for short positions

- To prevent coverage of short positions at unreasonable prices, Eurex Clearing defines a maximum price accepted in the purchasing process per ISIN:

Maximum Re-Purchasing Price = minimum of

- a) Settlement price prior night +  $0.5 * \text{margin parameter}$
- b) Settlement price before day of default +  $1.1 * \text{margin parameter}$

- If all attempts to purchase a respective ISIN fail, Eurex Clearing is entitled to cash settle respective positions at the above-defined maximum price.

## 4.2 DM Auctions



# DM Auctions with mandatory participation by clearing members active in the respective liquidation group (ETDs)

Auction format for Exchange Traded Derivatives (ETDs)

## Auction Format

- Two-way, one-off, sealed bid, multi-unit, pay-as-you-bid auction with respect to identical auction units.
- Best bid wins the amount of auction units that it was provided for at the given price.
- A bid is economically reasonable if the price spread between the two prices submitted is within the given maximum spread, and any economically reasonable bid is accepted.

## Auction Participants

- Mandatory participation for all clearing members
  - holding the necessary clearing license to acquire the portfolio,
  - being active in the liquidation group during the last 3 months prior to default and
  - having the necessary infrastructure in place to clear the products.
- Each auction participant is requested to bid at least for an individually defined minimum amount of auction units, depending on the initial margin of the auction participant relative to the overall initial margin in the liquidation group.
- The sum of the minimum amounts across all relevant clearing members exceeds 100% of the auction portfolio.
- Clients can participate in auctions with permission of a clearing member (bids are considered for the minimum bid size calculation).
- Criteria for the selection of Mandatory Participants inter alia are
  - the transactions entered by the clearing member and its clients,
  - the Initial Margin requirement of the clearing member with respect to the relevant Liquidation Group within 3 months prior to the default..

# Loss distribution and penalties set incentives to provide competitive prices in the auction

Loss distribution for the liquidation groups relating to Exchange Traded Derivatives

- If during the auction not all positions are liquidated, any non-bidding auction participant is subject to a contractual penalty, defined as a combination of:
  1. Monetary fine of fraction of (i) the number of the Auction Units for which the CM Non-Bidding Participant has not submitted a valid Mandatory Bid (numerator) and (ii) the total number of Auction Units offered in such DM Auction (denominator), such fraction, multiplied by EUR 50,000,000, but subject to a maximum aggregate amount of EUR 5,000,000.
  2. Juniorisation of the clearing member's Default Fund contribution in case any losses occur which exceed the contributions of the defaulted clearing member.
  3. Claim of Eurex Clearing towards the clearing member to cover the losses resulting from remaining positions from such auction. This part of the fine can be avoided by entering into respective transactions with Eurex Clearing at the auction price after the auction was finalised (last look).

# DM Auctions with mandatory participation by clearing members active in the respective liquidation group (OTC)

Auction format for OTC Interest Rate Swaps

## Auction Format

- One way, one off, sealed bid, single-unit auction per currency.
- Best bid takes the full portfolio all at the given price (No upper/lower limits on price).
- Individual OTC transactions will not be split.
- An OTC portfolio can be split by currency and risk product.
- An auction portfolio might contain listed fixed income derivatives used for hedging purposes.

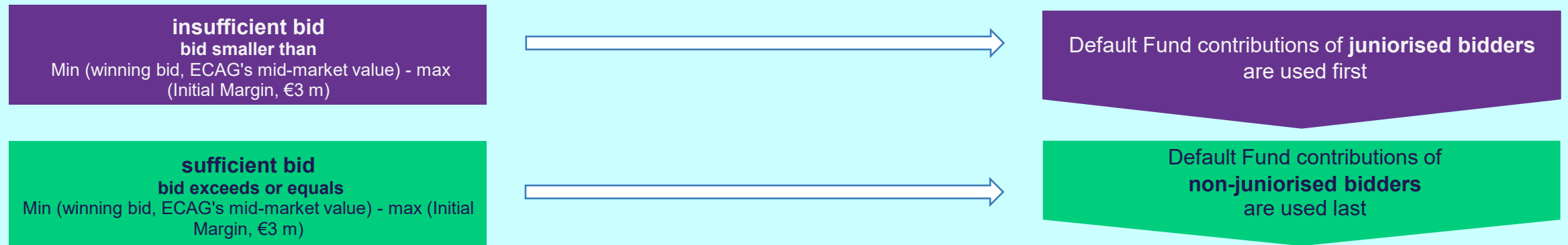
## Auction Participants

- Mandatory participation for clearing members active in the currency
  - holding the necessary clearing license to acquire the portfolio,
  - being active in the currency during the last 3 months prior to default.
- Non-mandatory clearing members and clients are allowed to submit bids in any auction should they wish to upon invitation by Eurex Clearing. Clients need the permission of their clearing member.
- Criteria for the selection of Mandatory Participants inter alia are:
  - the transactions entered by the clearing member and its clients,
  - the Initial Margin requirement of the clearing member with respect to the relevant Liquidation Group within 3 months prior to the default.

# Loss distribution and penalties set incentives to provide competitive prices in the auction

## Loss distribution for OTC Interest Rate Swaps

Bids are ranked according to their quality applying the following formula relative to the winning bid



### Formula contains two Safeguards to protect bidders against unfair juniorisation:

- **Eurex Clearing's own evaluation of mid-market value around the bidding time as minimum reference** - protection against case where winner has placed a bid significantly through the fair value.
- **Fixed amount of EUR 3 million** - backstop in case of a low Initial Margin (IM) requirement applicable to the auction portfolio to protect bidders from getting technically juniorised, where operational costs of processing the portfolio is higher than the risk premium.

### Other:

- Utilization amongst juniorised and seniorised Default Fund contributions is done on pro rata basis.
- Non bidders are juniorised and pay penalty, depending on their Default Fund contribution relative to the overall Default Fund contributions, capped at EUR 5 mn.
- If no bids are provided then Eurex Clearing approaches all clearing members to provide them with a "last look" opportunity to provide bids for the respective portfolio.

# DM Bonds Auctions with mandatory participation by clearing members active in the respective bond clusters

## Multi unit auction for long bond positions

### Auction Format

- Eurex Clearing sub-divides cleared bonds into dedicated clusters with similar bonds grouped by currency, region and issuer/bond type.
- Auction participation requirements are based on the respective clusters.
- One way, one off, sealed bid, multi-unit pay-as-you-bid auction with respect to identical auction units per cluster.
- Best bids win the bid on amount of auction units at the provided bid price.
- Eurex Clearing is entitled to combine – into a DM Bonds Auction – bonds with different ISINs and/or Eurex Transactions that Eurex Clearing deems to offset risks from the relevant bonds

### Auction Participants

- Mandatory participation for all clearing members
  - have been active in the respective bond cluster during the last 3 months prior to default,
  - for GC Pooling collateral taker, have filled out the bond trading sheet and indicated (cash) trading capabilities in the respective bond cluster
- The need to define bidding obligations only in proportion to a clearing member's risk exposure is a direct requirement of Article 37 (6) EMIR and serves to foster general market stability.
- Each auction participant is to bid at least for an individually defined minimum amount of auction units, depending on the initial margin of the auction participant relative to the overall initial margin in the bond cluster.
- The evaluation considers any activity across cash provider / bond purchaser and cash taker / bond seller.
- Clients can participate in auctions with permission of a clearing member.

# Loss distribution and penalties set incentives to provide competitive prices in the auction

## Loss distribution for Repo Transactions

- To encourage clearing members to comply with their bidding requirements, Eurex Clearing will juniorise the default fund contributions of clearing members
  - not providing a valid bid during the DM Bonds Auctions or
  - providing bids below a so called 'reference price\*' defined in the Clearing Conditions.
- A Bonds Mandatory Participant is subject to a contractual penalty, defined as the lower amount of:
  - (I) the product of (i) the fraction of (a) the sum of the Initial Margin and Additional Margin for all Bonds Auction Units for which a Mandatory Bid was not submitted, and (b) the sum of the Initial Margin and Additional Margin for the total bidding requirement and (ii) EUR 5,000,000, or
  - (II) the sum of the Initial Margin and Additional Margin requirement for all Bonds Auction Units of the respective bidding requirement. Such amount is limited to a maximum aggregate amount of EUR 5,000,000.

\* Reference Price: Worst Winning Bid – 0.5 Risk Parameter

# 5 Force Match Book Tools

# Risk assignment (1/2)

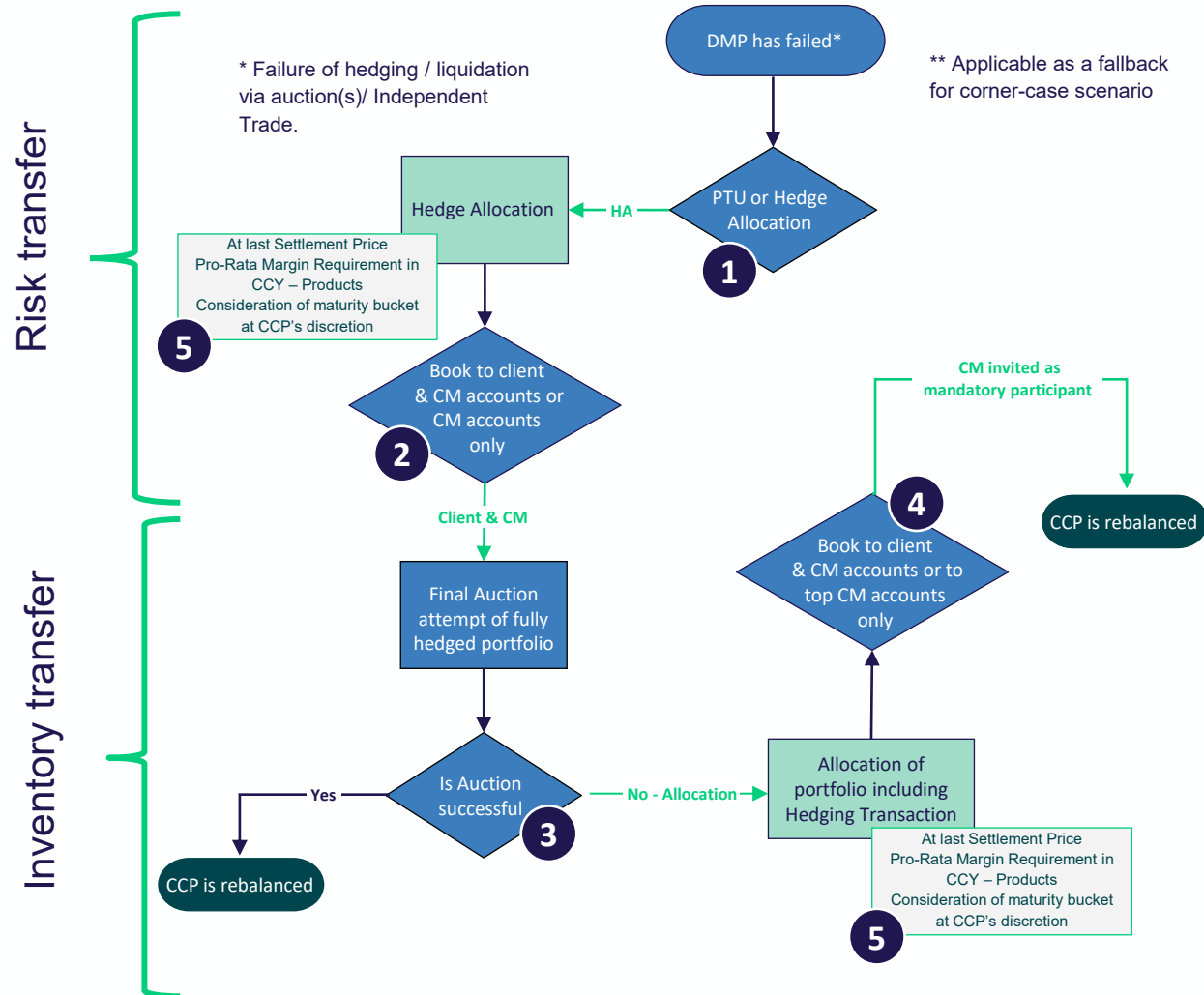
## Position allocation recovery tool

|                                       | Recovery tool                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Legal requirement                     | <ul style="list-style-type: none"><li>▪ <u>Annex, Section A (4) of Regulation (EU) 2021/23</u>: "The recovery plan shall include the following items: ... (4) a comprehensive range of capital, loss allocation, <b>position allocation</b> and liquidity actions required to maintain or restore the viability and financial soundness of the CCP including to restore its matched book and capital..."</li></ul>                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Impact on ECAG                        | <ul style="list-style-type: none"><li>▪ <b>Eurex Clearing amended the Clearing Conditions</b> to complement the existing option to tear-up (cash settle) the entire Liquidation Group, by a more granular tear-up mechanism.</li><li>▪ <b>The Recovery Plan was updated to</b> reflect the introduced PTUs as a loss allocation recovery tool accordingly.</li></ul>                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Amendments to the Clearing Conditions | ETDs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Swaps                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|                                       | <ul style="list-style-type: none"><li>▪ <b>Pro-rata tear-up of open positions</b> with non-defaulted Clearing Members, which have open cleared opposite positions that offset the defaulted Clearing Member's positions remaining on the CCP's book after unsuccessful liquidation attempts.</li><li>▪ For <b>pricing of the positions</b>, if reasonable bids are received during a partially successful auction, tear-up will be executed at auction price. As a fall-back tear-up it will be executed at the last available settlement price determined by Eurex Clearing.</li></ul> | <ul style="list-style-type: none"><li>▪ <b>Mandatory execution of hedging transactions</b> with non-defaulted Clearing Members which have open positions in the affected product and currency at the time when the process is executed. Transactions will be executed at the last available settlement price. Once the portfolio of Eurex Clearing is hedged with the mandatory hedging transactions, <b>another DMP auction attempt will be triggered</b>.</li><li>▪ <b>In case such an auction attempt fails</b>, as a matter of last resort, the remaining portfolio will be transferred at the last available settlement price to all non-defaulted Clearing Members which qualify and have been invited to auctions as mandatory participants in the affected product and currency.</li></ul> |



# Risk assignment (2/2)

## Process of risk assignment for swaps



- 1** Hedge allocation creates smaller risk shifts than PTU on minimal set level
  - 2** Hedges are booked to the end users pro-rata based on open risk exposure towards the CCP. Treatment/passing on of recovery and resolution tools between Clearing Members and their clients is subject to bilateral agreements.
  - 3**
  - 4** Portfolio allocation creates smaller risk shifts than cash settlement of a product in affected currency
  - 5** Portfolio Allocation is risk-free and can be operationally better absorbed by large Clearing Members
- Allocation Parameter**
- Hedge and portfolio trades allocation is based on:
- Pro-rata 3-months IM requirement in the CCY-product: ensures that participants receive risk in proportion to risk exposure towards the CCP which they can manage accordingly
  - Flexibility for the CCP to further subdivide the IM requirement on maturity bucket level, considering following criteria:
    - Liquidity of the currency per tenor
    - Risk structure of the affected portfolio
  - At last available Settlement Price: Most up-to-date stable price calculated by the CCP according to predefined rules which are transparent to the members

# Appendix

# Eurex Clearing assigns products according pre-defined criteria

## Liquidation Group criteria

|                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Proximity of products</b>      | Products within the same Liquidation Group share a set of common risk factors. Price risk of the instruments in the same liquidation group are significantly and reliably correlated, or based on equivalent statistical parameter of dependence, with the price risk of other financial instruments. This correlation is resilient during stressed historical or hypothetical scenarios and there is an economic rationale for the price relation between those instruments.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Joint Hedging Strategy</b>     | Products within the same Liquidation Group allow for a joint hedging approach with the lowest possible market impact of the hedging strategy proposed due to the netting of portfolio sensitivities and availability of market participants to price the joint hedge in a competitive bidding process.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Joint Liquidation Strategy</b> | Products within the same Liquidation Group allow for liquidation with clearing members that are active in this Liquidation Group. The liquidation approach allows to keep the hedge structure intact, either by performing a single liquidation transaction (auction, Independent Trade) or a combination of liquidation transactions (auctions, Independent Trades) whereby each sub-portfolio in these transactions can be considered as well hedged as the combined portfolio. These sub-portfolios are addressed with a subset of clearing members where it is possible to achieve a better overall liquidation price. Starting with the product groups with comparably low member coverage (high relative level of specialization), such risk neutral sub-portfolios can be created by grouping suitable instruments plus appropriate hedge instruments from other product groups either already present in the portfolio or newly created for that purpose (long & short; booked back-to-back by the Clearing department). |
| <b>Member Coverage</b>            | Products within the same Liquidation Group exhibit sufficient member coverage and participation which entails a better hedging & liquidation price under competitive bidding procedures for hedge transactions and the liquidation of hedged sub-portfolios.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

# Liquidation Group setup

Each Liquidation Group has a pre-defined Holding Period (HP)

- In general, margin calculations and Default Management Process are performed on Liquidation Group level. For the Fixed Income and FX Derivatives and the “Crypto Derivatives Liquidation Group, portfolio margining splits are in place that allow for margin offsets only in case of a cross-margining (XM) algorithm, which is implemented between the “OTC IRS” and the “Listed Fixed Income and FX” splits with holding periods of 5 and 2 business days respectively.

| Liquidation Group       | Fixed Income and FX Derivatives<br>(PFI01) |                                          |                                                                       | Bonds<br>(not in scope of BPM)<br>(PBN01) <sup>2</sup><br>HP: 2 days | Listed Equity<br>(Index) Derivatives<br>(PEQ01)<br>HP: 3 days | Derivatives on Fixed Income ETFs<br>(PEF01)<br>HP: 2 days | Crypto Derivatives<br>(PCY01)<br>HP: 3 days | Commodity (Index) Derivatives<br>(PCM01)<br>HP: 3 days | Precious Metal Derivatives<br>(PPM01)<br>HP: 3 days | FX NDF<br>(PNF01)<br>HP: 5 days |
|-------------------------|--------------------------------------------|------------------------------------------|-----------------------------------------------------------------------|----------------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------|---------------------------------------------|--------------------------------------------------------|-----------------------------------------------------|---------------------------------|
| Liquidation Group Split | OTC IRS <sup>1</sup><br>HP: 5 days         | Listed Fixed Income and FX<br>HP: 2 days | Bonds in scope of Bond Portfolio Margining <sup>2</sup><br>HP: 2 days |                                                                      |                                                               |                                                           | Bitcoin<br>Ethereum                         |                                                        |                                                     |                                 |

←

Margin Optimizer

1

If OTC XM is enabled “OTC IRS + Listed FI/MM” LGS is available, otherwise “OTC IRS” LGS is active  
 FX ETD products are not eligible for the XM algorithm

2

In scope of Bond Portfolio margining (BPM) are all Euro denominated Bonds that are:
 

- Zero Coupon and Fixed coupon, bullet Bonds issued by governments of Germany, France, Italy, and Spain
- Zero Coupon and Fixed coupon, bullet Bonds issued by Supranational Organizations (AAA and AA rated).

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