

October 2009

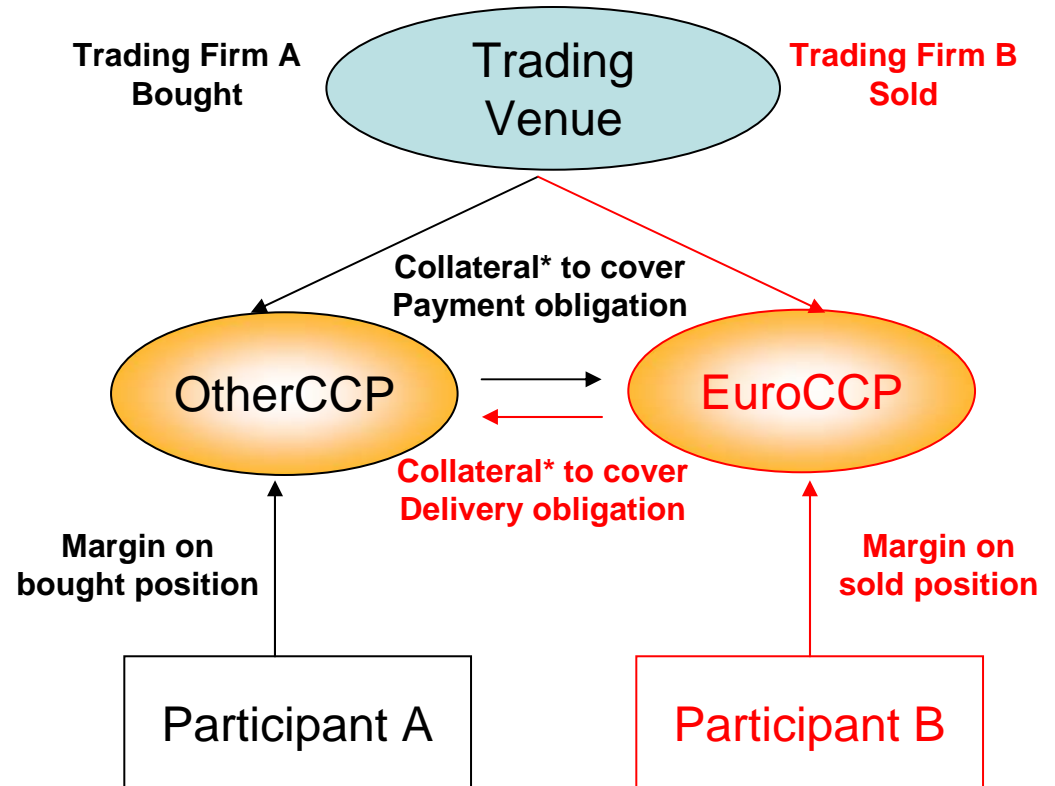
Interoperability Overview

European Central Counterparty is a subsidiary of
The Depository Trust & Clearing Corporation



How interoperability works

1. Trading venue sends trades to the CCP selected by the Trading Firm
2. Each CCP manages its exposure to the other's inability to fulfill obligations by collateralisation
3. If OtherCCP is bankrupt, EuroCCP will use collateral from OtherCCP to cover any losses and expenses involved in closing out OtherCCP's obligations to EuroCCP



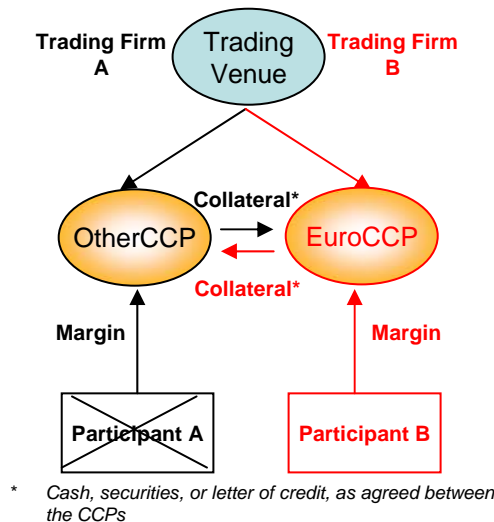
* Cash, securities, or letter of credit, as agreed between the CCPs



Nature of exposure between CCPs

OtherCCP will default if:

- Participant A is bankrupt, *AND*
- Margin OtherCCP collected from A is insufficient to cover OtherCCP's losses after close out of A's unsettled position, *AND*
- OtherCCP has insufficient other financial resources available to cover losses arising from close out of A:
 - A's contribution to clearing/guarantee/loss sharing fund
 - Insurance
 - Equity
 - Parent guarantee (if any)
 - Loss sharing from surviving clearing participants
- OtherCCP as a result cannot meet its obligations to EuroCCP



EuroCCP will suffer a loss if:

- OtherCCP defaults on its obligations to EuroCCP after exhausting all its available financial resources
- Collateral from OtherCCP is insufficient to cover EuroCCP's losses after close out of OtherCCP's obligations to EuroCCP
- Loss to EuroCCP in excess of collateral from OtherCCP will be covered by other financial resources available to EuroCCP, such as equity and loss sharing from surviving clearing participants



Guideline on risk management

Article 84, Access & Interoperability Guideline of the European Code of Conduct on Clearing & Settlement:

“CCPs will recognise the specific status of each other as CCPs and not as risk-taking intermediaries”

- “The CCPs involved have to arrange an adequate collateralisation scheme to cover the exposure of potential losses
- No CCP is obliged to contribute to the other CCP’s participants’ default fund or other post default backing schemes
- A default of a Clearing Member at one CCP should not affect the other CCP unless the first CCP itself is in default”



Inter-CCP exposure management

- Calculate “sufficient collateral” required from OtherCCP to cover loss in case of close out
- Collect “sufficient collateral” from OtherCCP in a timely manner
- Return of collateral given to OtherCCP in the event of OtherCCP’s bankruptcy

Risks to be mitigated include failure of collateral agent, failure of bank providing letter of credit used as collateral, conflict of laws that impedes access to collateral, improper segregation and/or rehypothecation of collateral



EuroCCP advocates a CCP convention

EuroCCP advocates a single convention among all interoperating CCPs, instead of multiple bilateral agreements which are a barrier to full pan-European interoperability among CCPs

| <u>No. of Interoperating CCPs</u> | <u>No. of Bilateral Agreements</u> | |
|-----------------------------------|------------------------------------|--|
| 2 | 1 | } Some concluded and others in progress |
| 3 | 3 | |
| 4 | 6 | |
| 5 | 10 | } Barrier to pan-European interoperability |
| 6 | 15 | |
| 7 | 21 | |
| 8 | 28 | |
| 9 | 36 | |

To simplify interoperability and make it safer CCPs should, as soon as practicable, replace multiple bilateral agreements with a single interoperability convention that is made transparent to trading venues, market participants, and regulators



Why an interoperability convention?

Transparency

- Promotes market understanding of interoperability and participant understanding of related risks and mitigating controls; convention will be a non-confidential document
- Facilitates CCP access to trading venues, per Code of Conduct

Systemic Safety and Risk Management

- CCPs to understand entirety of each other's risk profile (ESCB-CESR Recommendation 11)
- Avoid potential conflicts of law and rules, unexpected obligations
- An agreed common cut off time across all interoperating CCPs on the trade date to reject, terminate or cancel inter-CCP trades, to enable CCPs to identify the point of irrevocability of transfer orders and maintain compliance with Settlement Finality Directive designation
- Unified treatment of inter-CCP exposure limits the impact of different risk parameters used by each CCP
- Harmonised approach to agreed Principles of Interoperability and key terms, e.g. market disruption events, change management, margin obligations, dispute resolution, default management (CCPs and participants), settlement and buy-in practices

Logistical Efficiency

- More efficient and timely path to agreement on terms, avoid timing issues associated with review of multiple interoperability agreements by applicable national regulators
- Contractual certainty ensures interoperability projects can be concluded in a more predictable timeframe with a higher certainty in management of obligations and exposures than via multiple bilateral negotiations
- More efficient change management process trading venues and participants can benefit from



Implementation of interoperability

A. Principles & Procedures

1. Assets cleared
2. BCP
3. Buy-ins
4. Cash settlement
5. Change management
6. Clearing fund / loss sharing
7. Communications
8. Contract governing law
9. CSD instruction
10. Fines, penalties, settlement, clearing and other costs
11. Holiday schedule
12. Margin
13. Netting algorithms
14. Nonstandard nets
15. Settlement date convention
16. Settlement location
17. Settlement obligation cancels
18. Shaping for corporate actions
19. Splitting
20. Static data validation
21. Reconciliation
22. Required approvals
23. Trade cancels / corrects
24. Trade validation, rejection, and point of irrevocability
25. Trading hours

B. Change Management

1. Change Management Principles

- Peer-to-peer relationship, per Code of Conduct; no CCP able to impose changes that cause material adverse business or economic impact to others*
- CCPs that have agreed changes have a duty towards CCPs not part of the agreement but are affected by the changes*

2. Change Management initiation, consultation, decision

- Changes to Principles
- Changes to Procedures
- Urgent issues
- Decision making process in the absence of agreement

C. Legal, commercial, connectivity and technology tasks

- * EuroCCP position on change management still in negotiation with other CCPs



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