

## **Functional Definition of a Central Counterparty Clearing House (CCP)**

The current regulatory environment is changing with regard to security settlement systems and central counterparty services. Various initiatives are addressing these changes, e.g. CESR/ESCB, Giovannini, CPSS/IOSCO, ISD, G30 and the European Commission's Communication on Clearing and Settlement. In this paper, we do not want to resolve or comment on any of these issues, but believe it is of the utmost importance to clearly define the services provided within the clearing and settlement value chain.

Furthermore, we do not want this paper to be seen as promoting any particular regulatory or supervisory authority approach.

Based on our recommended definitions, we believe that the separation of the various functions in the financial market value chain produces a clearer picture for all participants, in particular also for regulators and supervisory authorities.

### **Core Functions in Clearing, Settlement and Custody**

The value chain can be broken down into three main functions:

- Clearing
- Settlement
- Custody

#### Clearing

After the execution of buy and sell orders, transactions are processed in preparation for the transfer of ownership of the product and the fulfilment of all obligations. Depending on the institution providing this service, several additional services are performed, such as the netting of obligations to ensure fewer processes and cash flows, and in particular the evaluation and management of all relevant sources of risk in order to reduce the probability of failure to meet obligations.

In most cases, this function is performed on different levels; firstly by trading parties for their clients, secondly at central counterparty clearing houses (CCP Clearing) and thirdly at central security depositories (CSD/ICSD Clearing) or banking institutions (for internal executions) for public market participants.

With regard to the various different clearing levels, it has to be taken into consideration that the clearing performed by a CCP is different from that performed by a CSD. CCP clearing concentrates on trade management, position management, collateral and risk management, and delivery management. Due to these specifications, CCP clearing takes place prior to the clearing performed by CSDs. CSD clearing concentrates on validating and matching the delivery instructions; the result of which is forwarded to settlement.

#### Settlement

At due date when the obligation is settled, then the ownership of the product is transferred. This process involves matching the buy and sell instructions and subsequently renewing the product's ownership, as well as transferring the related cash. Transactions involving securities are usually settled on a delivery-versus-payment (DVP) basis. Once again, netting can be used in this process to reduce the number of settlement transactions, if this has not already been done by a central counterparty as part of the clearing process.

Several institutions are involved in this process, since settlement can be effected using netting within a central counterparty process, as a facilitation service provided by central security depositories in conjunction with their custodian services and central banks or correspondent banks. In the case of internal trade, however, this process is also performed by banking institutions.

### Custody

Instead of holding physical products at the beneficiaries' premises, the financial industry has organized itself in such a way as to localize financial products at central but national custodians. These custodians fall under the functional definition of central security depositories (CSDs). The advantage of this system is that these CSDs are very close to the issuer and are able to process corporate transactions as efficiently as possible while taking the relevant law and tax requirements into account. In addition to the CSDs, a number of other market participants offer the same service. These participants are often members of the CSDs that offer the custody service to their clients. In some cases, however, they are prime custodians that have a direct relationship with the issuer.

There is a third group of custodians, namely those that have a relationship with local CSDs or custodian banks and consolidate cross-border custody services. Sometimes these custodians even offer cross-border settlement services, either due a lack of efficiency within the local settlement environment or to the internalization of transactions. These market participants are known as international central security depositories (ICSDs) or global custodian banks.

## **Market Participants in Clearing, Settlement and Custody**

It can already be concluded at this stage that various types of market participants perform core functions in clearing, settlement and custody.

- Clearing

Takes place on different levels (trading level and post trade) and can be performed by:

- Central Counterparty Clearing Houses (CCP Clearing)
- Central Security Depositories (CSD/ICSD Clearing)
- Banks (for internal transactions)
- Clearing members (banks, brokers)

- Settlement

- Central Security Depositories (CSD/ICSD)
- Central Counterparties
- Banks (for internal transactions)
- Banks and Brokers

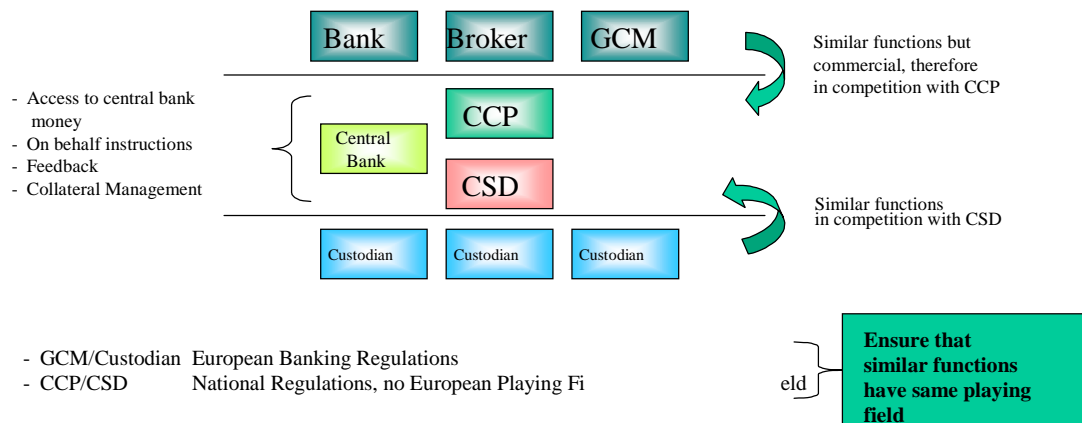
- Custody

- Central Security Depositories (CSD)
- International Security Depositories (ICSD)
- Banks

- Brokers

## Financial Market Value Chain

### Competition in the value chain



Clearing takes place at the break in the value chain between real post-trade services and those services performed at a prior level.

CSD services are traditional post-trade services, which mainly involve settlement, legal transfer of ownership and custody.

CCP services have a strong association with individual trades. This is why CCP services, which focus on trade and risk management should remain independent of the traditional post-trade services.

## Functional Definitions

Taking the opportunity to give a recommendation in the field of clearing and settlement, it is important to note that a clear distinction has to be made between clearing as a CCP service and clearing as a CSD service. We have therefore expanded on these definitions to create a better understanding of the functions and related services. Furthermore, we have included a clearer definition of the key services performed in the clearing and settlement process.

### Main Definitions

#### CCP Clearing

Clearing refers to the management (risk management, transaction monitoring, netting) of a transaction after the matching of a buy and sale trade and prior to the legal fulfillment of the respective obligation. It exists in two forms, either as a CCP, in which case the CCP becomes the counterparty of the original buyer and seller, or as a facilitator, in which case the original buyer and seller remain legal counterparties to each other.

#### CSD Clearing

CSD Clearing focuses on validating and matching the delivery instructions; the result of which is forwarded to settlement.



## Associated Definitions

### Netting (mainly associated with clearing)

Netting is the process of offsetting transactions with the same underlying and the same attributes, such as contracting party, security, or trading currency, into one single net obligation. The netting results in an obligation itself in either cash or cash and securities.

### Risk Management (mainly associated with clearing)

Within the clearing and settlement landscape, risk management is the process of evaluating and calculating counterparty exposure to outstanding obligations. The risk management process is performed at several levels:

- Calculation of daily or intra-day price movements (initial and variation margin) per product and counterparty
- Calculation of future exposures (variation margin) per product and counterparty
- Calculation of stress test scenarios to ensure adequate protection of the organization against shortfalls (e.g. clearing funds, own capital requirements)
- Validation of counterparty creditworthiness
- Evaluation of cross-margin possibilities per product or market
- Definition and enforcement of default procedures to ensure shortfalls are immediately detected and damage kept to a minimum

### Collateral Management (mainly associated with clearing)

Collateral management is the process used to control counterparty assets against the exposure calculated as part of the risk management process. In the event of a shortfall of collateral against exposure, the process involves issuing a request to the parties involved, processing new collateral and evaluating the value on a daily or ongoing basis .

### Delivery versus Payment (mainly associated with settlement)

Delivery versus payment is an interlinked process involving a change of ownership of securities that occurs in parallel with the associated process of cash movement. This process involves checking whether or not the seller owns the appropriate (number of) securities and, in turn, whether or not the buyer has sufficient funds in his settlement account. Settlement is only performed if both parties are granted confirmation.

### Free of Payment (mainly associated with settlement)

The free of payment process is the stand-alone process of moving securities or changing ownership of securities from one account to another. This can be performed within the same organization or across various entities.

### Corporate Actions (mainly associated with custody)

Corporate actions covers a wide range of activities including the collection of interest and dividends from the issuer, the allocation of interest and dividends to the legal owner of the securities, and the evaluation and correct processing of issuers' corporate transactions (stock splits, capital increases, rights, spin-offs, etc.) for the benefit of the legal owner of the financial instrument in question. These transactions do not have to be limited to cash securities only, as they may also have an impact on derivatives or other financial products. This process cannot be limited solely to the custody service either, because these

transactions impact on transactions throughout the entire value chain between execution and custody.

### **Core Functions within a Central Counterparty Clearing House**

As we have previously advocated, we strongly support the functional approach of regulators and supervisory authorities. We, as clearing houses and central counterparties, do not consider ourselves responsible for settlement institutions and custodians, and have therefore only chosen to comment on clearing and the central counterparty service. However, we strongly recommend the introduction of uniform standards and, if required, regulations for all organizations performing the same service regardless of their position in the value chain of a transaction. Clearing and central counterparty services institutions that perform the following tasks should therefore be supervised and possibly even regulated on an equal basis across Europe. Regardless of whether or not central counterparties or facilitation institutions provide this service, the core functions in the clearing process are:

- Processing transactions after a successful match of two trading parties until the successful fulfilment of the legal obligations either at expiration, settlement day or any day on which legal obligation is fulfilled.
- Management of transactions between execution and fulfilment of the legal obligation between the two trading parties or any other associated institutions nominated by the trading parties. This also includes processing corporate actions during this period, as well as any previously announced move of pending obligations towards another counterparty, e.g. position transfer, give-up and take-up.
- Counterparty risk exposure calculation covering all of the relevant risks for the period of a transaction between execution and fulfilment of legal obligations. There are several methods of risk evaluation. At the very least, there should be an adequate methodology in place to evaluate daily price moves, as well as the foreseeable long-term exposure. For more details, we refer to the EACH risk management standards.
- Depending on the evaluation of the daily or intra-day risk exposure (intra-day), margin calls are issued and collected in form of collateral.
- Collateral, either in the form of securities or cash, needs to be evaluated on a daily basis to ensure adequate coverage of risk exposure regardless of whether or not it has been legally pledged or changed in ownership.
- During the life cycle of a transaction, i.e. between execution and fulfilment of the obligation, transactions can be netted to reduce the number of settlements and risk exposures of gross transactions.
- Sending instructions to settlement institutions' custodian and payment banks (e.g. CSDs, custodian banks, central banks, correspondent banks) with regard to the legal fulfilment of obligations resulting from transactions, and meeting margin requirements.
- Providing any kind of service to the parties involved in the transaction during the period of execution and fulfilment of legal obligation that will change risk management and the settlement process as originally initiated.
- Issuing of daily reports regarding transactions, modifications and exposure components.

We would like to emphasize once again that these clearing functions are mainly performed by clearing houses and central counterparties, but also, either in full or in part, by central securities depositories and clearing members, as well as banks that have internal transaction matching systems..