



***Cash Equity CCP***  
***Oslo Clearing ASA***

# Agenda

- *Our offer*
- *Member structure*
- *Account structure*
- *Functionality*
- *Risk*
- *Post Default Backing*
- *Process*



***Our offer***

# *Our CCP offer*

- Oslo Clearing CCP offer includes
  - All stocks, primary capital certificates and ETFs quoted on Oslo Børs or Oslo Axess
  - Voluntary clearing of all off-exchange matched trades in order to obtain higher degree of netting and reduced counterparty risk
- State of the art collateral management solution
  - Several cash collateral agents
  - Tri-party ICSD collateral services for international fixed income instruments
  - Norwegian equities, primary capital certificates, ETFs and fixed income instrument held on pledged VPS accounts



## *Our offer*

- Real time risk management
  - “Real time” web-solution for clearing members
  - Risk management feed to proprietary systems or ISV’s
- Efficient integration with existing infrastructure
  - Efficient integration and utilisation of existing infrastructure and functionality
- Competitive pricing
  - Transparent and easy to understand price model adapted to new trading patterns
  - Collateral management, lending schemes and penalties, priced on “at cost basis”





# ***Membership structure***

# Membership

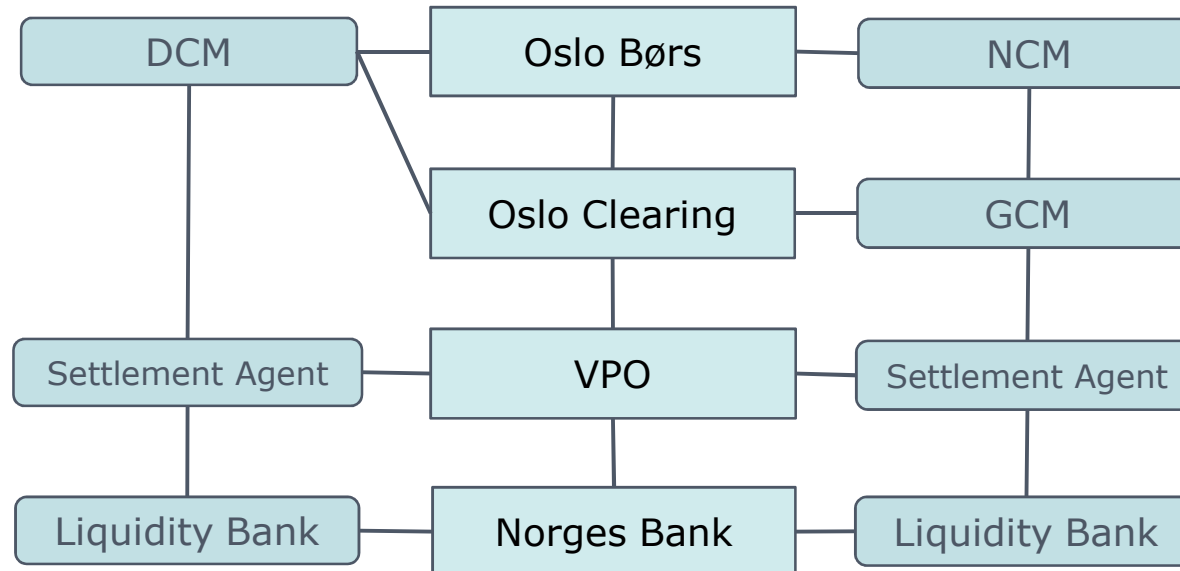
## Member Categories

- Direct Clearing Member (DCM)
  - Clears proprietary and client trades
- General Clearing Member (GCM)
  - Proprietary trading, clients trades and trades performed by other exchange members
- Non Clearing Member (NCM)
  - Member of the Stock Exchange but clears through a GCM

## Membership Criteria

- Domiciliation (applicable jurisdiction)
  - Authorised investment firm of credit institution
  - Subject to supervision within the EEA-area
- Minimum capital requirement
  - 500 MNOK GCM
  - 40 MNOK DCM
  - GCM responsible for the NCM
- Accepted collateral
  - Cash held in a financial institution approved by the CCP
  - Securities held in an (I)CSD pledged to the CCP
  - Bank guarantees
- Credit risk assessment
  - regular reporting of capital adequacy
  - credit evaluation
  - Defined credit limits
- Settlement
  - No formal requirements given by the CCP
  - Directly or through settlement agent

# Membership structure

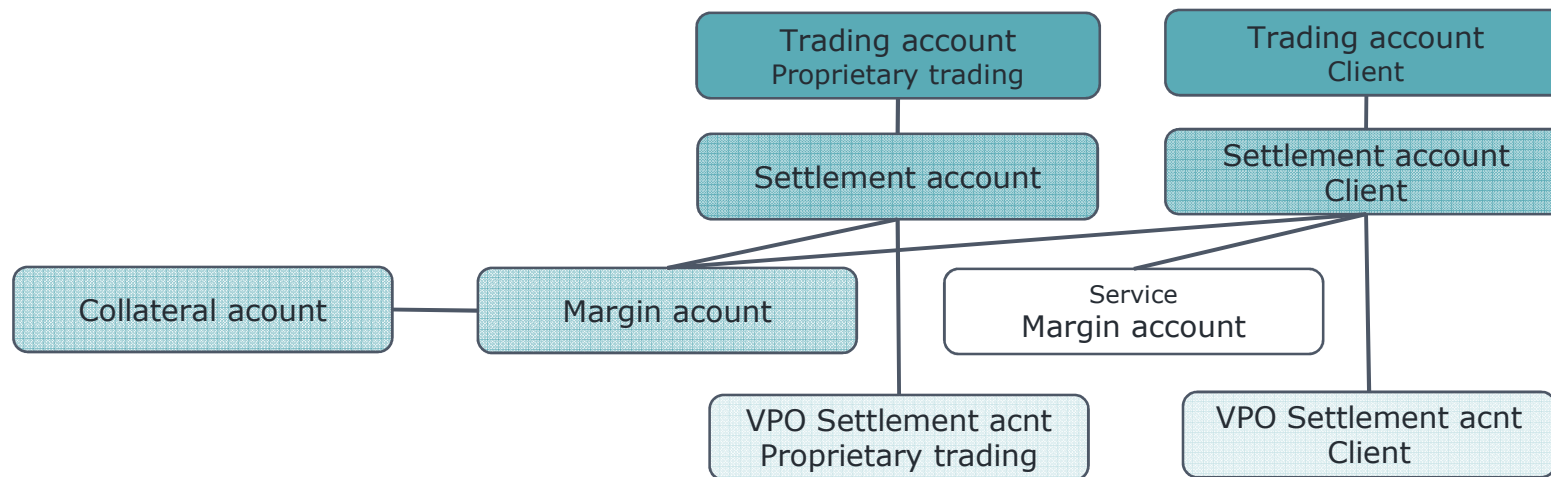


- *Liquidity Bank* Declares that the cash leg of transactions of a given clearing member will be settled through the account of the liquidity bank in the central bank (Norges Bank). Bears no legal obligation towards the CCP
- *Settlement Agent* A participant in the Securities Settlement System (VPO) responsible for delivery and receipt of securities and cash on behalf of a given clearing member. Bears no legal obligation towards the CCP



# ***Account Structure***

# System of accounts



- Four types of accounts available in the clearing system
  - *Trading account (TA)*
  - *Settlement account (STLM)*
  - *Margin account (MA)*
  - *Collateral account (CA)*
- Flexible system of accounts enabling:
  - *tailor made account structures supporting the clearing members business model*
  - *service accounts for settlement and margin calculation on sub account level*
  - *segregation of proprietary and client accounts*



***Functionality***

# *Functionality*

- **Corrections and cancelations**
  - In accordance with the Exchange Rules
- **Netting**
  - Clean nets, except payments only
- **Securities Lending Scheme**
  - Covering delivery failures
- **Partial deliveries**
  - Automated procedures based on PoAs
- **OTC clearing**
  - Voluntary, based upon request
- **Give ups**
  - Voluntary, based upon request
- **Non clearing member (NCM) functionality**
  - Providing GCMs with options and tools for improving their NCM services



***Risk management***

# *Risk model*

- **Member credit assessment**

- first line of defense

- **Margin Requirements**

- second line of defense

- real time calculation based on a VaR model and a 99 % confidence level

- full offset between settlement obligations and collaterals in the same underlying ISIN

- offset between settlement obligations and collaterals based on correlation between different underlying ISINs.

- **Default Fund**

- funded by clearing members joint and several liable default fund contributions

- contribution requirements based on the clearing members average margin requirement

- the contribution of the clearing member in default will be the third line of defense, liable for any loss exceeding the members margin collateral

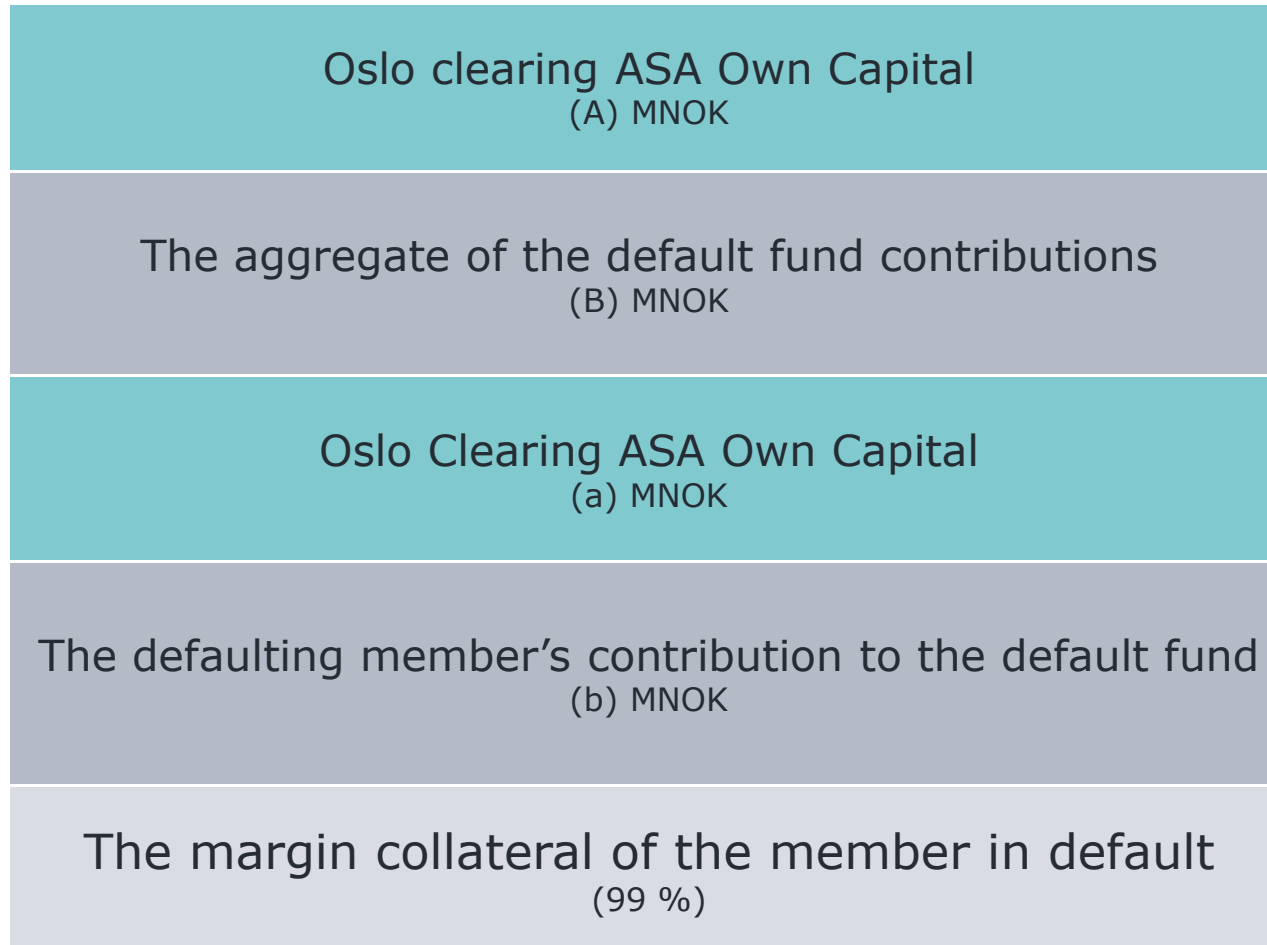
- non default members joint and several liable contributions will be protected behind a layer of Oslo Clearing ASA own risk capital, being the fourth line of defense.

- non defaulting members potential loss will be limited to their joint and several liable contribution to the default fund in a default situation.

- **Oslo Clearing own capital**

- Liable for any loss exceeding all other resources available in a default situation

## Defence Lines



# *Accepted Collateral*

- **Margin Collaterals**
  - Equities, primary capital certificates and Exchange Traded Funds
  - Interest rate instruments (Bills, Bonds, etc.)
  - Guarantees
  - Cash
- **Contribution to the Default Fund**
  - Interest rate instruments
  - Guarantees
  - Cash
- **Securities (Financial instruments)**
  - registered in a VPS account pledged to Oslo Clearing, managed by the clearing member or a custodian
  - registered in an ICSD account pledged to Oslo Clearing
- **Cash**
  - held in custody in an independent bank, approved by Oslo Clearing, pledged to Oslo Clearing and with entitlement
- **Guarantees**
  - issued by a financial institution approved by Oslo Clearing

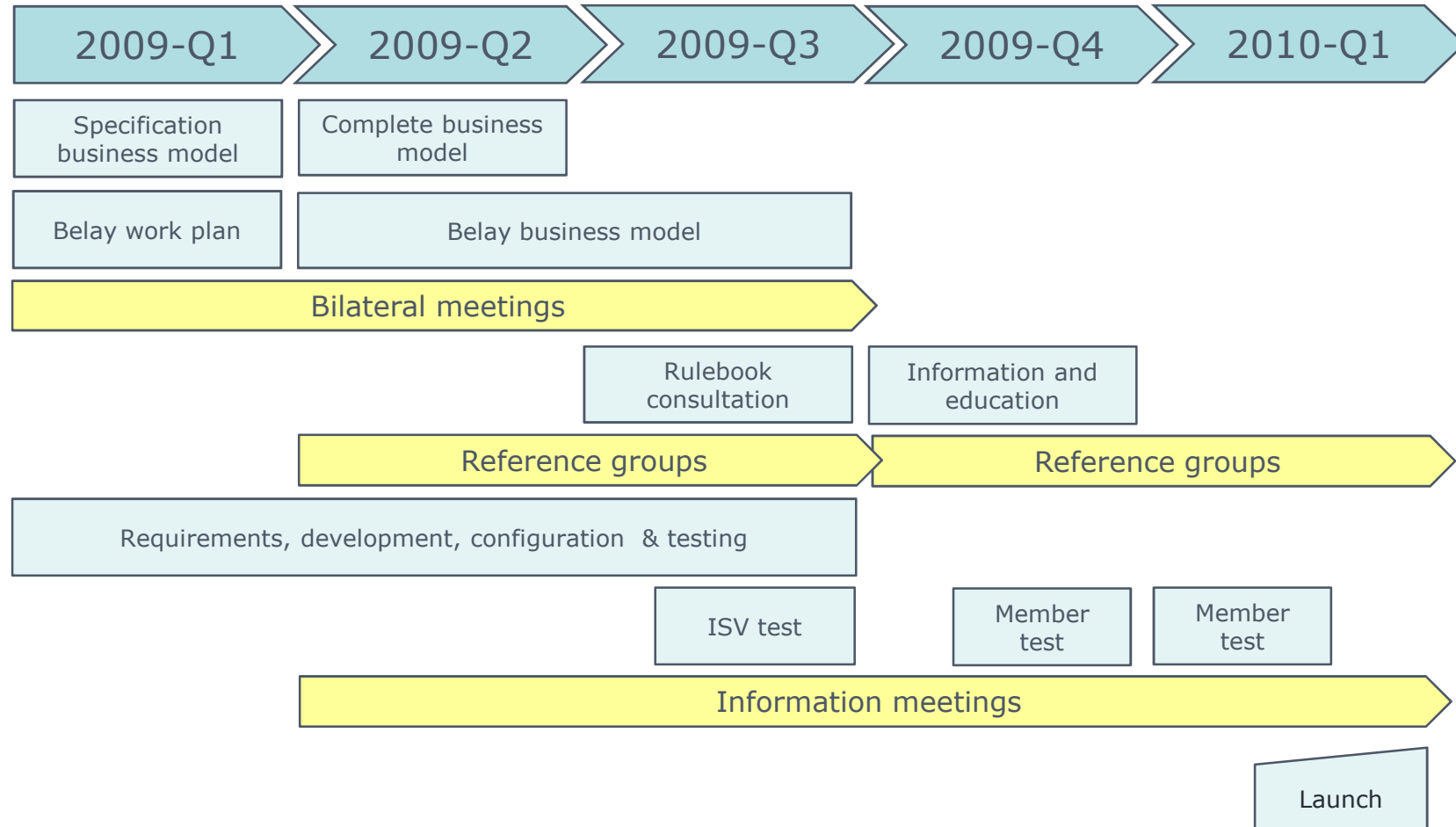


***Process***

## *Preliminary time schedule*

<b>Period</b>		<b>Activities</b>
2009	Q1	Belay work plan and process
	Q2	Complete business model and functionality
	Q2	Requirements and development
	Q3	Configuration and testing
	Q3	ISV testing
	Dec	Member test 1
2010	Jan	Member test 2
	Feb	Launch preparations
	Mar	Launch

# Time schedule (due to client readiness)



## *Contact details*

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