

Open Credit Default Swaps Clearing Solution

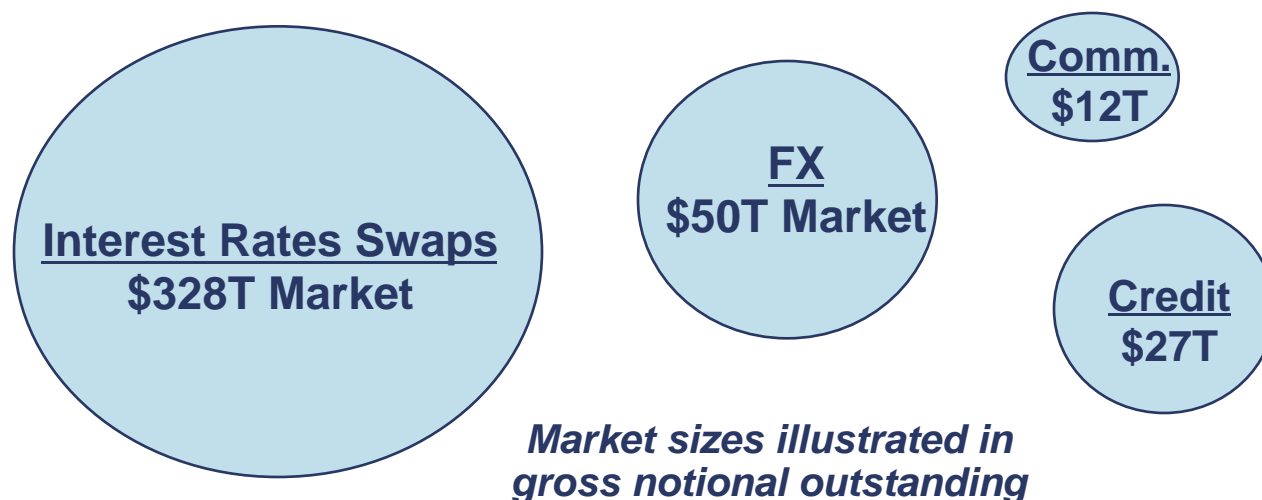
Security. Neutrality. Transparency.

Kim Taylor

June 10, 2009

CME ClearPort: Expanding Across Asset Classes

- Flexible clearing services open to OTC market participants across asset classes
 - More than energy, independent of execution
 - Significant mitigation of counterparty risk
 - Independent, neutral settlement prices
 - Capital and operational efficiencies
 - 100+ years of risk management experience and financial safeguards



Sources: Interest Rates Swaps and FX updated through December 2008. BIS Tri-Annual Survey April 2007, BIS Quarterly Review June 2008 and DTCC. Interest Rates Swaps market includes U.S.\$ Swaps only. Commodities as defined by BIS precious metals (other than gold), petroleum, lumber or agricultural products and indexes on included and related products.

Agenda

- **Overview of Open CDS Solution**
- **Product Offering**
- **Risk Management**
 - Multi-factor system
 - Financial safeguards
- **Clearing firm participation standards**
- **Trade flows and migration**

Open Clearing CDS Solution Overview

CME Clearing and CMDX

- **EFFICIENCIES:** streamlined processing and reduced operational risk:
 - Real-time trade processing, throughout the day, every day
 - Trade confirmations as close as possible to trade execution
 - Daily portfolio compression
 - Risk management for full trade lifecycle
 - Straight-through-processing and industry standard protocols
- **SECURITY:** time-tested customer segregation regime approach
- **PRODUCT OFFERING:** standardized single name and index contracts consistent with ISDA OTC templates, determinations and auction process
- **FLEXIBILITY:** daily migrations of legacy contracts – for those held in DTCC TIW or an existing paper trade
- **RISK MANAGEMENT:** transparent and replicable multi-factor portfolio margining model

Open Clearing CDS Solution Overview

Collaboration with Regulatory Authorities and Industry Organizations

➤ **European Regulatory/Industry Approval Status:**

- Designated ROCH today; working with FSA to apply for RCH status
- Pending approval, CME RCH intended to clear CDS initially
- After CDS, will apply to be permissioned for other asset classes
- View RCH status as another example of our global growth strategy and ability to serve market participants worldwide

➤ **US Regulatory/Industry Approval Status:**

- Special exemption from SEC for CDS through CME Clearing and CMDX platform
- Completed Fed, SEC and CFTC risk management reviews
- Approved inclusion of cleared CDS in combined guaranty fund
- Licensed Markit credit default swap indices and Markit RED identifiers
- Finalizing licensing agreements with ISDA
- Seeking CFTC 4d order that permits customer funds used to margin, secure or guarantee CDS to be held in Section 4d segregated customer accounts

Overview - Day 1 Product Offering

Covering Up to 75% of the Volume in the Corporate CDS Market

Most Comprehensive Day 1 Product Offering

- CDX IG, HVOL, and HY Indices
 - 3, 5, 7 and 10 year tenors
 - Current and Previous 3 off-the-run series
- iTraxx Europe, and HVOL
 - 3, 5, 7 and 10 year tenors
 - Current and Previous 3 off-the-run series
- iTraxx Financial Senior and Financial Subordinate
 - 5 and 10 year tenors
 - Current and Previous 3 off-the-run series
- Single name constituents of CDX and iTraxx indices (over 500 ref. entities)
 - Standardized fixed coupons of 100 bps and 500 bps so that the risk profiles of the cleared contract match those of existing OTC contracts
 - Quarterly maturities up to 10 years
- Forthcoming product offerings (e.g. sovereigns, tranches, additional indexes, additional single names) will:
 - Be based on recommendations of CMDX Product Advisory Board
 - Maintain prudent risk management requirements

Risk Management Overview

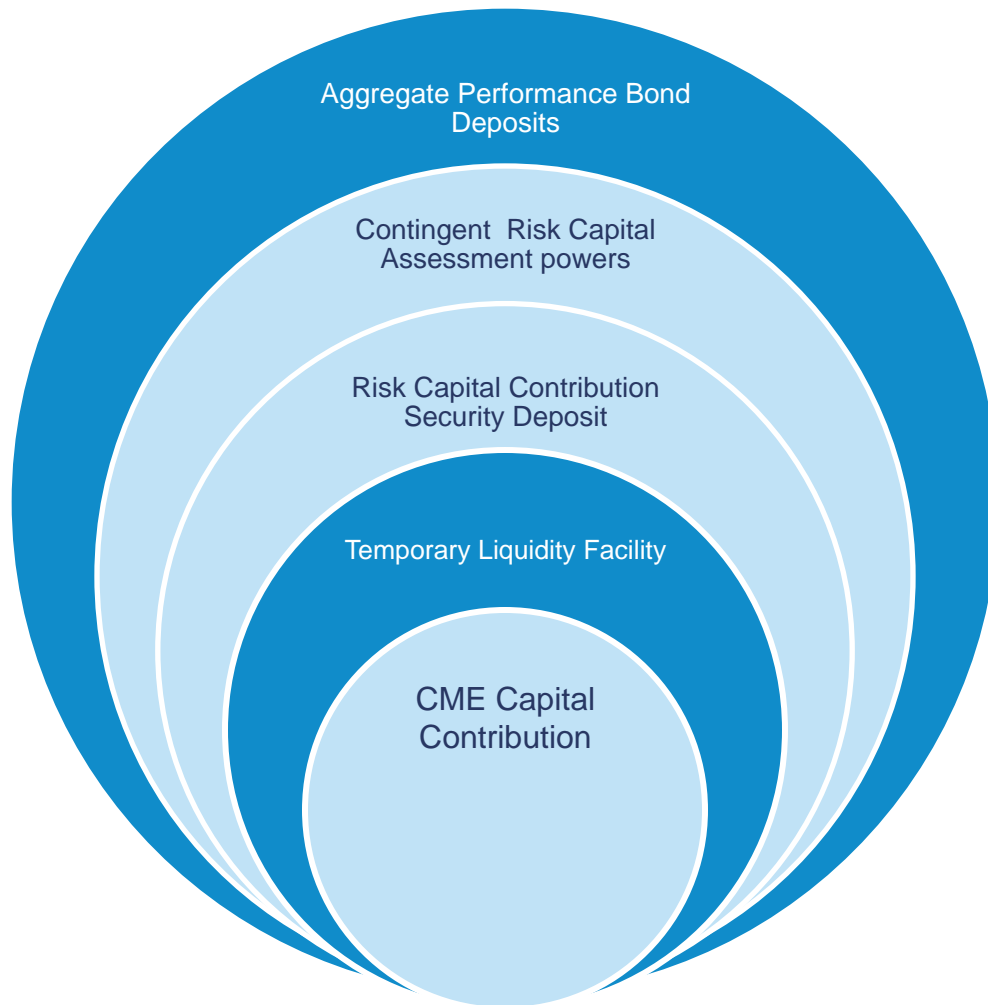
Innovative Multi-Factor Margin Methodology

- **Multi-factor portfolio margining model designed to efficiently and transparently assess the risk of CDS portfolios**
 - Macro-economic credit risks:
 - Systematic, curve, and spread convergence/ divergence risk
 - Sector-level risk
 - Idiosyncratic risk
 - Liquidity risk
 - Basis risk

- **Total portfolio margin:**
 - Sum required to cover individual shocks to each of the seven risk factors (and subject to a minimum total portfolio margin requirement)
 - Completely replicable by participants

- **Margin regime thoroughly tested**
 - Robust results, providing coverage even in the most volatile periods of 2008
 - Validated in real life portfolio tests (including toxic ones) for both sell- and buy-side

Risk Management – Financial Safeguards

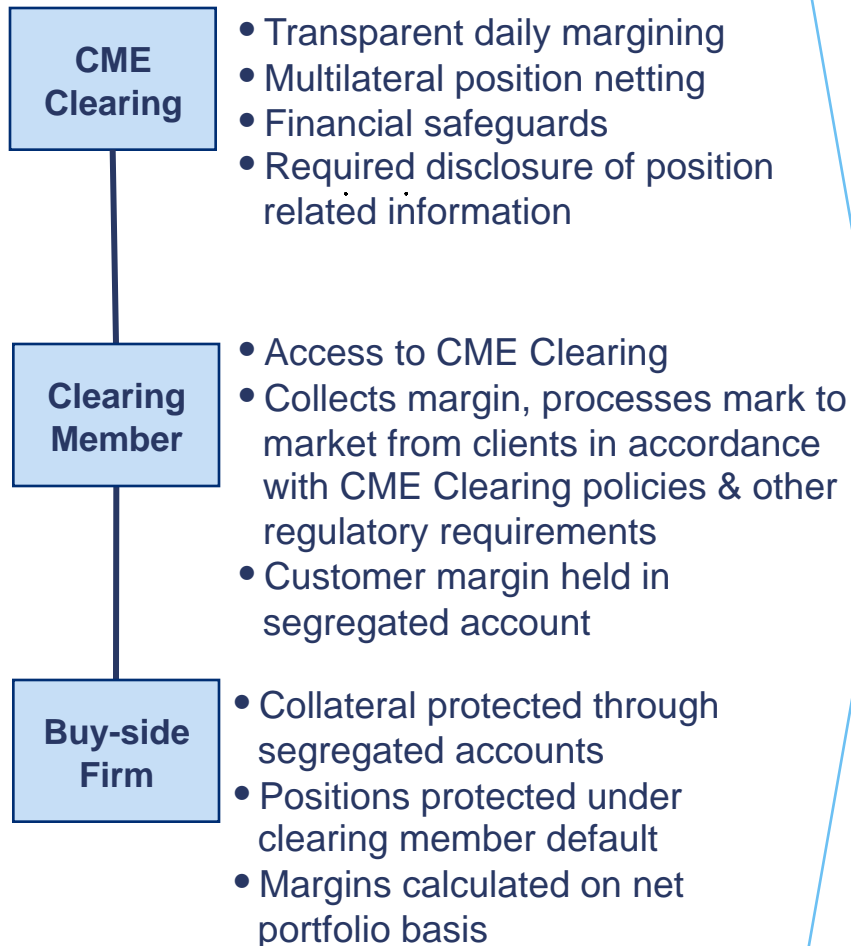


- **European CDS, pending approval, will have separate financial safeguards**
 - CME Group capital contribution
 - Customer capital contribution – fluctuating based on number/ portfolios of participants
- **Designed to anticipate potential market exposures and ensure sufficient resources are available to cover future obligations**
- **Set based on ability to cover at least the largest potential net debtor, accounting for collateral damage**
- **Accept wide variety of collateral**

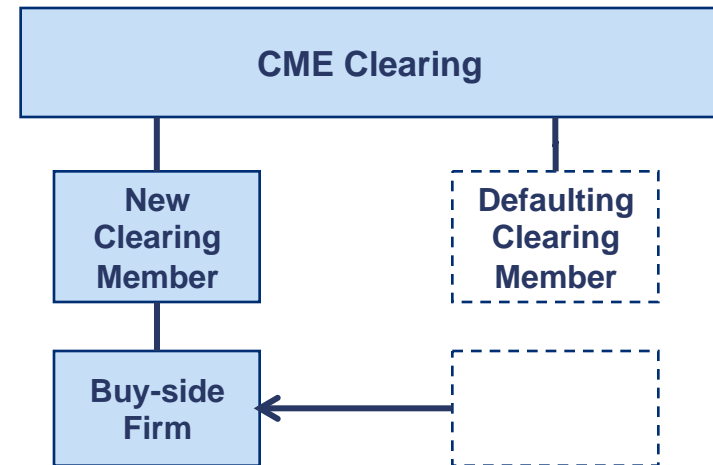
Risk Management – Default Provisions

CME Clearing will facilitate an orderly liquidation and protect its clearing members in the event of a clearing member default

Pre-Default Position



Event of a Clearing Member Default



Defaulting members positions

- Market access restricted
- Collateral captured
- Portfolios smoothly liquidated, in part due to liquidity on the trading facility

Customer protection

- Collateral held in segregated account
- Positions maintained and moved to a new clearing member

For more information on Financial Safeguards, please visit <http://www.cmegroup.com/clearing/files/financialsafeguards.pdf>

Clearing Firm Participation Standards

Requirements Vary By Type of Participant

CURRENT CLEARING MEMBER CLEARING CDS

- Clearing Members with Adjusted Net Capital (ANC) of \$300M face minimal additional requirements
- Verification of existing business, financial, and operational capabilities to support CDS market activity
- Additional security deposit may be required to reflect CDS book of business

NEW CLEARING MEMBER FOR CDS ONLY

- Minimum Tier One capital or ANC of \$300M
- Minimum membership requirement deposit of \$5M
- Additional security deposit requirement \leq \$7M
- Verification of existing business and operational capabilities to meet CDS clearing member requirements

NON-CLEARING MEMBER PARTICIPANTS

- Non-Clearing Members required to transact through a CME Clearing Member
- Account administration, suitability, and verification performed by chosen firm
- Existing Prime Broker may have futures affiliate that is a CME Clearing Member

ADDITIONAL SCREENING MAY INCLUDE

- Financial health via submission of certified and/or regulatory financial filings
- Disciplinary history including verification with other exchanges where the firm is a member
- Credit reviews through a credit check
- Ability to submit end of day CDS curves and participate in the event of a default

Day 1 Product Offering

Overview of Contract Comparison

	Bilateral Contracts Today	Bilateral Contracts after April 2009*	CME Cleared Contracts
Credit event determination	<ul style="list-style-type: none"> • Either counterparty can submit credit event notice • Notices handled on bilateral basis 	<ul style="list-style-type: none"> • ISDA will hardwire credit event determinations 	<ul style="list-style-type: none"> • Will adhere to ISDA determinations
Cash settlement for non-Restructuring credit events	<ul style="list-style-type: none"> • Settlement process is bilateral • Market participants typically adhere to ISDA auction protocol and settle based on auction final price 	<ul style="list-style-type: none"> • Cash settlement hardwired based on ISDA auction 	<ul style="list-style-type: none"> • Will adhere to ISDA cash settlement processes
Physical settlement for non-restructuring credit events	<ul style="list-style-type: none"> • Settlement process is bilateral • Market participants typically adhere to ISDA auction protocol and settle based on auction final price 	<ul style="list-style-type: none"> • ISDA auction protocol hardwired into contracts • Participants will have right to take part in the auction 	<ul style="list-style-type: none"> • Physical settlement is an option through the ISDA auction

* Expected date for ISDA amendment incorporating the ISDA Credit Derivatives Determination Committee

Day 1 Product Offering cont'd

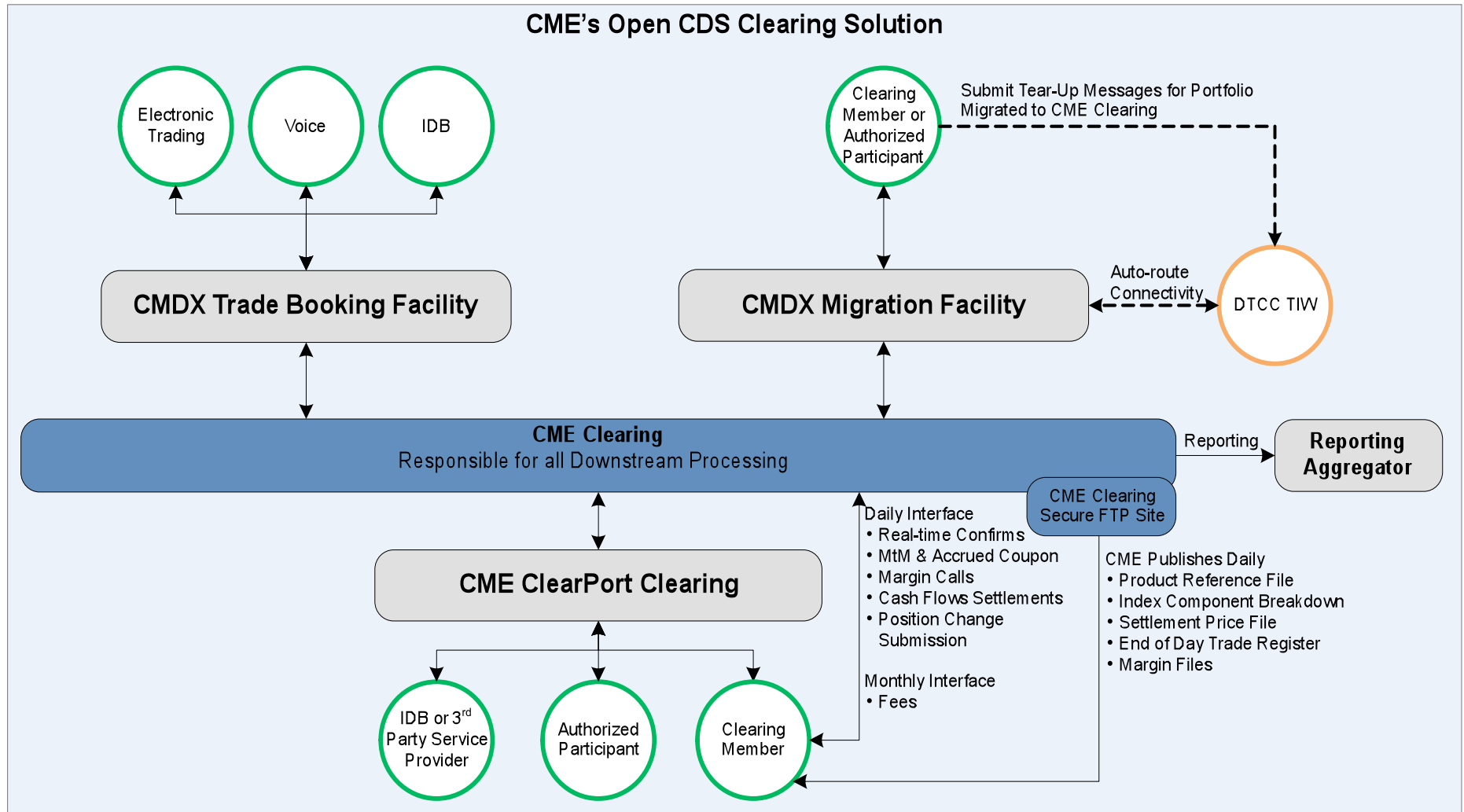
Overview of Contract Comparison

	Bilateral Contracts Today	Bilateral Contracts after April 2009*	CME Cleared Contracts
Succession event determination	<ul style="list-style-type: none">• Determined bilaterally; however counterparties generally adhere to advise of ISDA and market	<ul style="list-style-type: none">• ISDA will hardwire Succession event determinations	<ul style="list-style-type: none">• Will adhere to ISDA determinations
Calculation agent	<ul style="list-style-type: none">• Bilaterally agreed upon	<ul style="list-style-type: none">• Bilaterally agreed upon	<ul style="list-style-type: none">• CME Clearing

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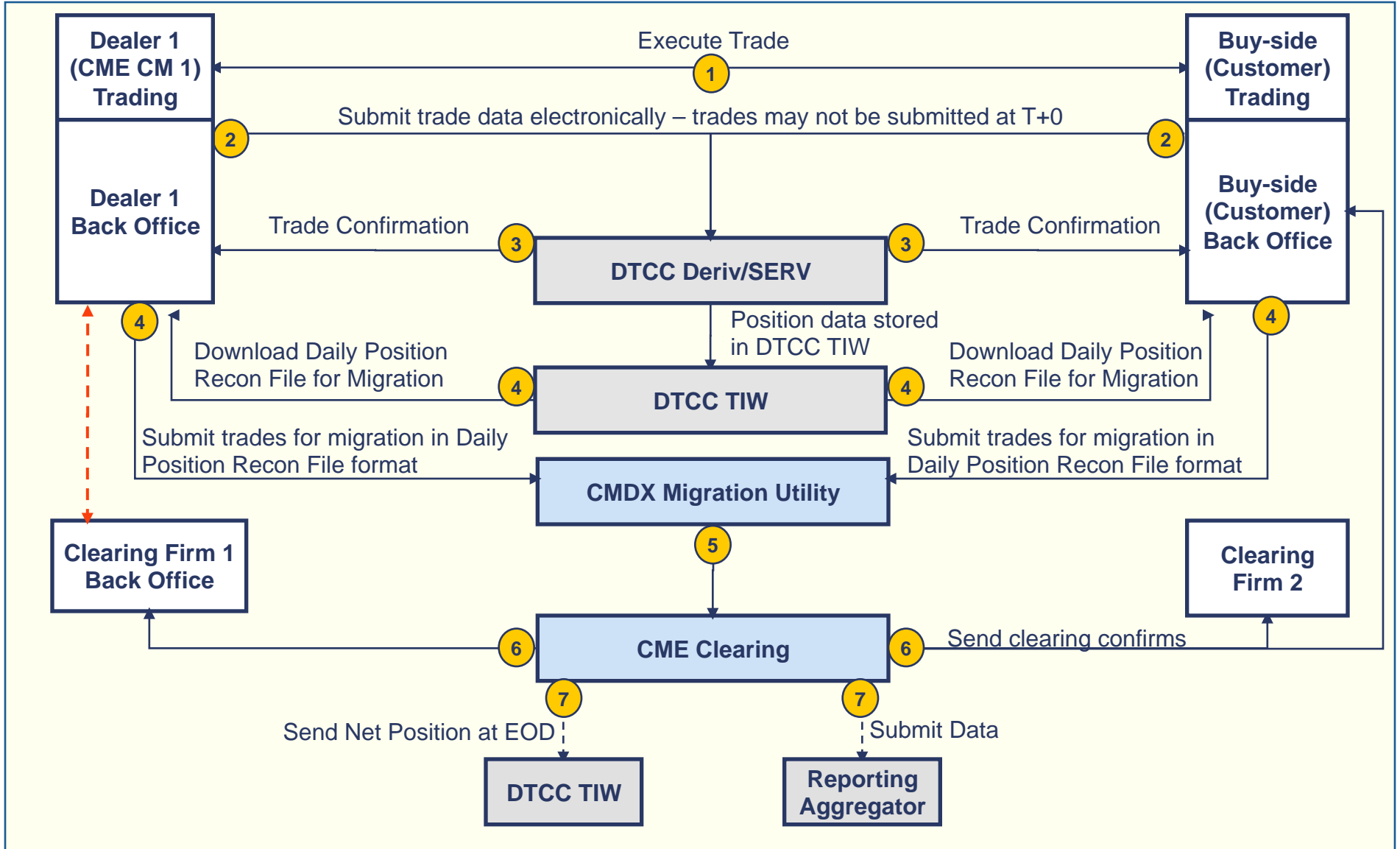
CME Clearing's Open Clearing CDS Architecture

Industry Framework for Managing CDS



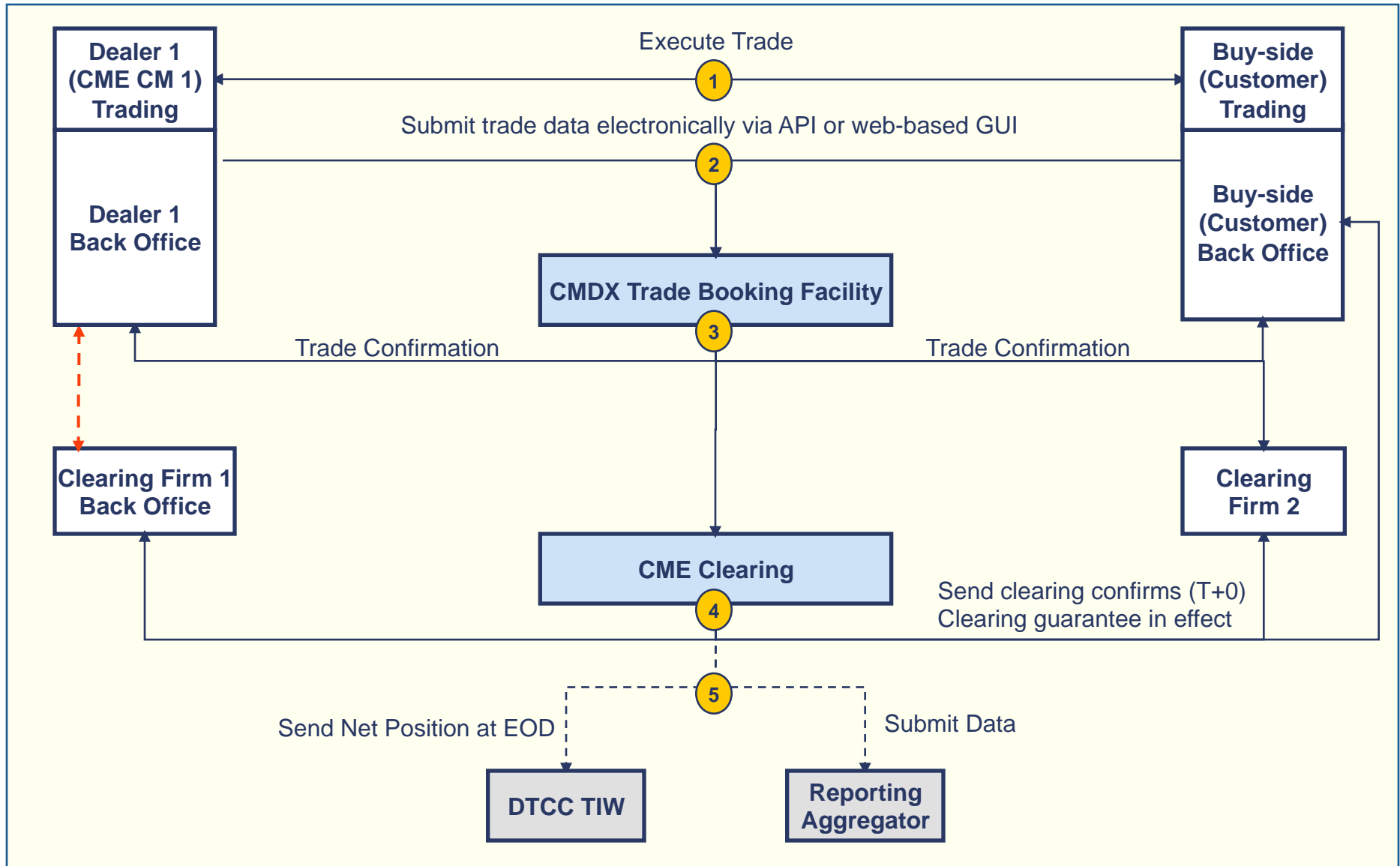
Trade Processing

Capture Trades Post DTCC TIW Confirmation



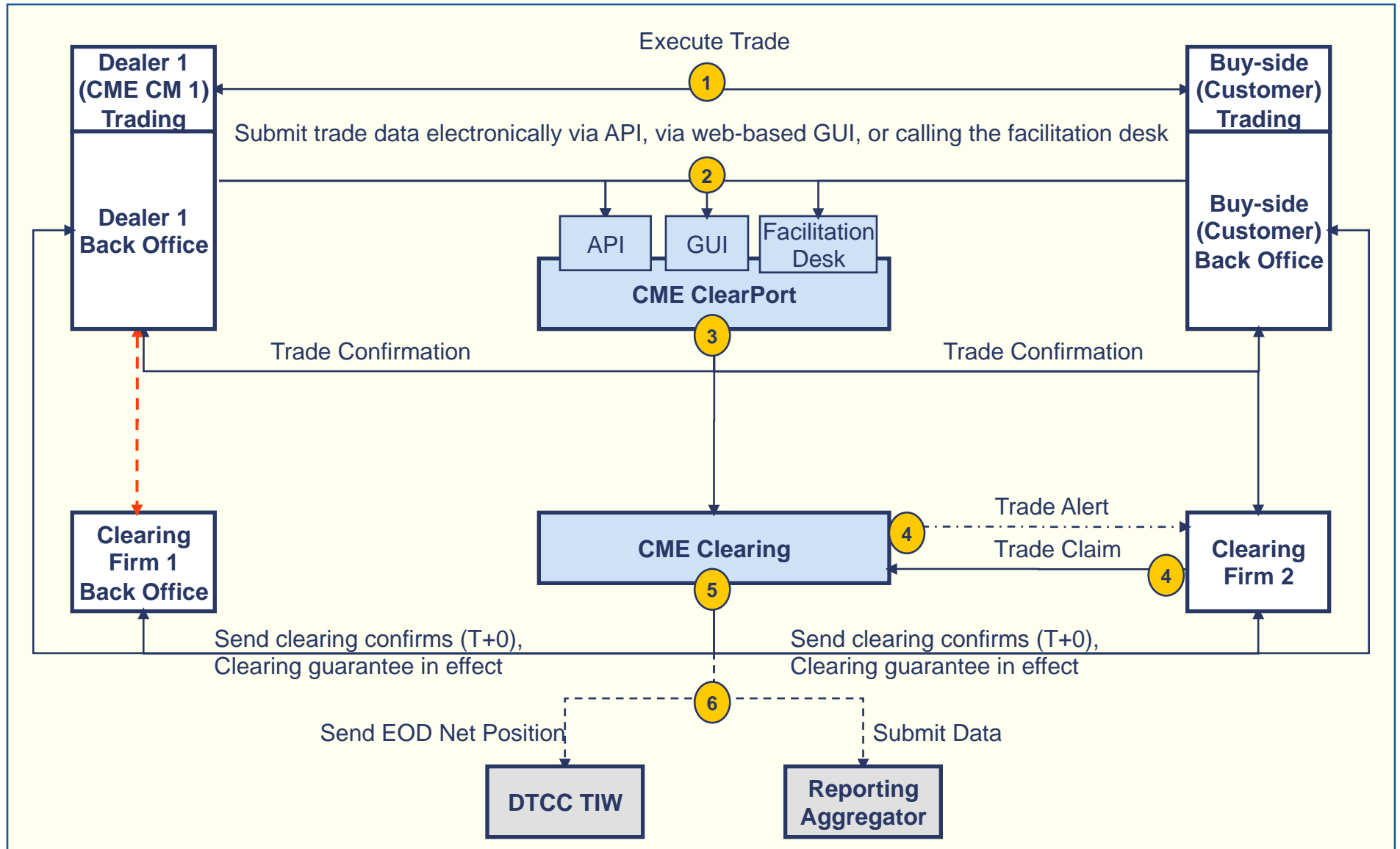
Trade Processing

Capture Trades Directly through CMDX Trade Booking Facility



Trade Processing

Capture Trades through CME ClearPort



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