

**Meeting between OTC Derivatives Regulators Forum (ODRF) members
and representatives of trade repositories (TRs) and central counterparties (CCPs)
October 4 - 5, 2011**

Participants: See attached two Attendee Lists:

- (i) ODRF Attendees with TR representatives, and
- (ii) ODRF Attendees with CCP Representatives.

Summary: On October 4, 2011, OTC Derivatives Regulators Forum members met with representatives of five TR service providers to discuss questions and issues related to trade repository functionality and market transparency.

ODRF members also met with representatives of eight CCP representatives on October 5, 2011 that currently provide or are planning to provide OTC derivatives clearing services, to discuss questions and issues related to clearing of OTC derivatives products.

The TR and CCP representatives provided brief status updates of their respective services, and discussed current market developments, including Dodd-Frank Wall Street Reform and Consumer Protection Act, and ongoing engagement with ODRF members. See attached agendas for the topics covered.

Press Releases related to the October 4 -5, 2011 ODRF meetings are available at:

- ODRF Press Release: http://www.otcdrf.org/press_releases/pr_20111010.htm
- UK-FSA Press Release: <http://www.fsa.gov.uk/pages/Library/Communication/Statements/2011/odrf.shtml>

OTC Derivatives Regulators' Forum – TR Session
4 October 2011

List of Registered Attendees

Australia	Australian Securities and Investments Commission Reserve Bank of Australia Financial Services and Markets Authority	(Dialing in) Mark Chambers
Belgium	National Bank of Belgium	Didier Niclaes Steven van Cauwenberge
Canada	Alberta Securities Commission Autorité des marchés financiers (Québec)	Debra MacIntyre Jean-Philip Villeneuve Derek West Carolyn Wilkins
European Authorities	Bank of Canada Office of the Superintendent of Financial Institutions Ontario Securities Commission European Central Bank European Commission	Brad Shinn Kevin Fine Corinna Freund Perrine Herrenschmidt Muriel Jakubowicz (by phone) Fabrizio Planta (by phone) Frederico Alcântara de Melo (by phone)
France	European Securities and Markets Authority Autorité de Contrôle Prudentiel (ACP) Autorité des Marchés Financiers	Julien Mignot Catherine Dias
Germany	Banque de France Banque de France BaFin	Philippe Mongars Anne-Laure Roche-Rault Claudia Grund Sophie Hübner
Hong Kong	Deutsche Bundesbank Hong Kong Monetary Authority	Anna Pliquet Polly Lee Pansy Pang
International Organisations	Hong Kong Securities and Futures Commission Bank for International Settlements	Ryan Ko Can Okay
Italy	Bank of Italy	Domenico Gammaldi
Japan	Bank of Japan Financial Services Agency	Keiko Harimoto Makoto Seta Luis Manuel de los Santos
Mexico	Bank of Mexico	Cayetano David Margolin
Singapore	Monetary Authority of Singapore	Shu Ping Chien Pui Hoon (by phone) Nagatsuka Ken (by phone) Tiak Peow Phua (by phone)
Spain	Banco de España CNMV	Montserrat Jimenez Miguel Ángel Herrero Alvite
Sweden	Financial Supervisory Authority Sveriges Riksbank	Jan Axelsson Johanna Stenkula von Rosen
The Netherlands	AFM De Nederlandsche Bank	Wim Moeliker Frans Alexander Rijkschroeff
United Kingdom	Bank of England Financial Services Authority	Robleh Ali Robert Barnes Benjamin Cohn-Urbach Sarah Harris David Lawton Ben Mitchell

United States	Commodity Futures Trading Commission	Warren Gorlick Sebastian Pujol Schott
	FDIC	Petrina Dawson John Feid
	Federal Reserve Bank of Chicago	Richard Heckinger Robert Steigerwald
	Federal Reserve Bank of New York	Marsha Takagi Christopher Tsuboi
	Federal Reserve Board	Jennifer A. Lucier Namirembe Mukasa Jeff Stehm
	New York State Department of Financial Services	Regina Stone Paul Zhang
	Office of the Comptroller of the Currency	Michelle Taylor Kurt Wilhelm
	Securities and Exchange Commission	Kim Allen Dawn Patterson

TR Representatives at TR Session

Spain	REGIS-TR	Jesus Benito Teresa Castilla
Sweden	TriOptima TriResolve	Mireille Dyrberg Raf Pritchard
United Kingdom	DTCC Derivatives Repository Ltd	Stewart Macbeth
United States	DTCC Trade Information Warehouse ICE ICE Trade Vault & ICE eConfirm	Marisol Collazo Chuck Vice Bruce Tupper

OTC Derivatives Regulators' Forum – CCP Session
5 October 2011

List of Registered Attendees

Authorities

Australia	Australian Securities and Investments Commission Reserve Bank of Australia Financial Services and Markets Authority	(Dialing in) Mark Chambers
Belgium	National Bank of Belgium	Didier Niclaes Steven van Cauwenberge
Canada	Alberta Securities Commission Autorité des marchés financiers (Québec)	Debra MacIntyre Jean-Philip Villeneuve Derek West Carolyn Wilkins
European Authorities	Bank of Canada Office of the Superintendent of Financial Institutions Ontario Securities Commission European Central Bank European Commission	Brad Shinn Kevin Fine Corinna Freund Perrine Herrenschildt Muriel Jakubowicz (by phone)
France	European Securities and Markets Authority Autorité de Contrôle Prudentiel (ACP) Autorité des Marchés Financiers	Fabrizio Planta (by phone) Julien Mignot
Germany	Banque de France Banque de France BaFin	Catherine Dias Philippe Mongars Anne-Laure Roche-Rault Claudia Grund Sophie Hübner
Hong Kong	Deutsche Bundesbank Hong Kong Monetary Authority	Anna Pliquet Polly Lee Pansy Pang
International Organisations	Hong Kong Securities and Futures Commission Bank for International Settlements	Ryan Ko Can Okay
Italy	Bank of Italy	Domenico Gammaldi
Japan	Bank of Japan Financial Services Agency	Keiko Harimoto Makoto Seta Luis Manuel de los Santos
Mexico	Bank of Mexico	Cayetano David Margolin
Singapore	Monetary Authority of Singapore	Shu Ping Chien Pui Hoon (by phone) Nagatsuka Ken (by phone) Tiak Peow Phua (by phone)
Spain	Banco de España CNMV	Montserrat Jimenez Miguel Ángel Herrero Alvite
Sweden	Financial Supervisory Authority Sveriges Riksbank	Jan Axelsson Johanna Stenkula von Rosen
The Netherlands	AFM	Wim Moeliker
United Kingdom	De Nederlandsche Bank Bank of England Financial Services Authority	Frans Alexander Rijkschroeff Robleh Ali Robert Barnes Benjamin Cohn-Urbach Sarah Harris David Lawton Ben Mitchell

United States	Commodity Futures Trading Commission	Warren Gorlick Robert Wasserman
	FDIC	Petrina Dawson John Feid Richard Heckinger
	Federal Reserve Bank of Chicago Federal Reserve Bank of New York	Marsha Takagi Christopher Tsuboi
	Federal Reserve Board	Jennifer A. Lucier Namirembe Mukasa
	New York State Department of Financial Services	Regina Stone Paul Zhang
	Office of the Comptroller of the Currency	Michelle Taylor Kurt Wilhelm
	Securities and Exchange Commission	Kim Allen Dawn Patterson
CCP Representatives at CCP Session		
Germany	Eurex Clearing	Patrick Deierling
Hong Kong	Hong Kong Exchanges and Clearing Limited	Kelvin Lee
Japan	Japan Securities Clearing Corporation Tokyo Stock Exchange	Takeshi Hirano Moriyuki Iwanaga
United Kingdom	ICE Clear Europe LCH.Clearnet SwapClear	Paul Swann Michael Davie Daniel Maguire
United States	CME	Kim Taylor Sasha Rozenberg
	ICE Clear Credit	Chris Edmonds Peter Barsoom
	IDCG	Garry O'Connor Alan Sobba

**OTC Derivatives Regulators' Forum
Joint Session with Authorities and Trade Repositories**

Federal Reserve Bank of New York

Tuesday, 4 October 2011, 2.00 pm – 3.30 pm EDT

Agenda

TRs Participating

- *DTCC Derivatives Repository Ltd – Stewart Macbeth (General Manager, Global Repositories Business)*
- *DTCC Warehouse Trust Company – Marisol Collazo (Managing Director)*
- *ICE Trade Vault – Chuck Vice (ICE President & COO) and Bruce Tupper (ICE Trade Vault & ICE eConfirm VP)*
- *Regis-TR – Jesus Benito (Managing Director) and Teresa Castilla (Functional Development Manager)*
- *TriOptima - Mireille Dyrberg, (COO) and Raf Pritchard (CEO triResolve)*

Topics for Discussion

1. Comments from TRs on the practicalities of making data available to authorities, including the systems used by the TRs, and how extendable these systems are once the amount and scope of information received increases.
2. What aggregate information have TRs observed as being the kinds of information authorities want to see out of trade repositories, and are there particular types of aggregate data that TRs have found or expect to find challenging to compile? How will TRs aggregate data or allow for the aggregation of data in a multiple-TR environment? How can authorities ensure there are no unreasonable barriers to aggregation? Who will be responsible for the practical aggregation of data, authorities or the TRs themselves?
3. What information do TRs currently disclose to the market? As legislation comes into effect in each jurisdiction that will allow/require TRs to make certain information public, what do the TRs see as the information that should be made public?
4. What challenges have TRs experienced, or expect to experience, as supervisory regimes for TRs are put into place, and how do they expect to manage these challenges?
5. What is the future of TRs – what developments should we expect to see across TRs over the next 3-5 years, and how will the landscape look once TR regimes are in force across the globe?

6. What key points would the TRs like authorities to be aware of, and what engagement are TRs seeking with authorities, and in what form do they expect this to take place?
7. Could TR's please give an overview of the key operational risk planning they have undertaken and any mitigating actions taken as a result (e.g. Business Continuity Planning and Data Security)?

Discussion and questions on any other issues

**OTC Derivatives Regulators' Forum
Joint Session with Authorities and CCPs**

Federal Reserve Bank of New York

Wednesday, 5 October 2011, 9.00 am – 11.00 am EDT

Agenda

CCPs Participating:

- *CME - Kim Taylor (Managing Director and President, Clearing Division)*
- *Eurex - Patrick Deierling (Senior Vice President, Clearing Initiatives)*
- *ICE Clear Europe - Paul Swann*
- *ICE Clear Credit - Chris Edmonds (President) & Peter Barsoom (Chief Operating Officer)*
- *International Derivatives Clearing Group (IDCG) - Garry O'Connor (CEO) and Alan Sobba (Chief Policy and Communications Officer)*
- *Japan Securities Clearing Corporation –Moriyuki Iwanaga (Executive Officer, Tokyo Stock Exchange) and Takeshi Hirano (Director, OTC Derivatives Clearing Service)*
- *LCH.Clearnet Ltd SwapClear – Michael David (CEO, SwapClear) and Daniel Maguire (Head of OTC Derivatives, Risk and Operations)*
- *HKEX – Kelvin Lee (VP – Market Development Division)*

Topics for Discussion

1. Gain views from CCPs on their experiences with information sharing about their operations amongst regulators and the usefulness of the different forms of information sharing used globally, including the use of supervisory colleges, PLS, public disclosure etc.
2. Exchange of views between Authorities and CCPs about what information CCPs currently disclose, both about their own operations and regular data about volumes cleared, etc, and the information that should be disclosed or could usefully made public by all CCPs.
3. Provide the CCPs with an opportunity to discuss issues of interest to them with the ORDF (will require advanced notification of topics from CCPs).



Deriv/SERV Trade Repository Services

Cleared for Public Release

ODRF Update

Oct 4, 2011



Overview

Industry Mandates:

- DTCC has support to develop global trade repository offerings as follows:
 - Equity derivatives: selected by ISDA, joint bid with MarkitSERV
 - Rates derivatives: selected by ISDA
 - Commodities: selected by ISDA, joint bid with EFETnet
 - FX: selected by AFME, SIFMA and ASIFMA, joint bid with SWIFT
 - Credit: existing business is accepted as a credit repository

Objectives:

- These mandates each have a number of components:
 - Support voluntary reporting, including OTC Derivatives Supervisors Group (“ODSG”) commitments
 - Meet detailed jurisdictional obligatory regulatory reporting requirements of many jurisdictions as they become known, e.g. current proposed CFTC and SEC rules

Positioning:

- Market neutral
 - No commercial interest in data, direct or indirect, i.e. not trying to restrict competition in any service
 - Support and promote open common standards, and support product evolution
- Operationally secure, reliable and capable
- Regulator access should be TR location agnostic





TR Development

- Core cross-product platform in UAT as of 30 Sep 2011
 - For ODSG and Dodd-Frank requirements
 - Designed so that has flexibility to meet other jurisdictional requirements
- Detailed message specifications are with user groups
 - Generic messages, and product extensions, for all except FX
 - Predominantly confirmation based so fully granular as to trade attributes, but include other information e.g. execution time, sales/trader location
 - Application processing in real-time on receipt of data (certain standard reports are scheduled)
 - May need subsequent enhancement for any final rules for additional fields
- Regulatory access
 - Direct access via portal to scheduled reports
 - Direct access via portal to support frequency ad hoc queries
 - Further tailored queries supported on request
- Credit TR continues its operations
 - Full flow trade coverage (including CDS, swaptions, recovery swaps and locks) in near real-time
 - Summary structured trades coverage for OSDG group
 - Expansion of portal reports ongoing, over 30 regulatory authorities have direct access to data





TR Development

- **Equities TR**
 - G14 will add underlying information in Nov 2011
 - Nov 2011 will also see additional regulatory reporting (position level, with underlying sector, location, exchange) and public reporting
 - Full detail on index options and variance April 2012, following near real time confirmation based model
- **Rates TR**
 - G14 adoption Nov 2011
 - Summary data on full portfolio
 - Detailed information on electronically confirmable trades in near real-time. Coverage estimated to be 85% of G14 activity, fully paired records, full confirmation detail (including counterparty name)
- **Commodities**
 - G14 plus (3 energy firms) adoption from Jan 2012
 - Oil reporting initial focus, although platform capable of wider range of products
 - Flexible to open use formats ConfirmHub, EfetNET(CpML), FpML, and CSV
- **FX**
 - G22 adoption date TBD, potentially Q2 2012
 - Full trade details for all flow trades
 - <10% exotic tail will be covered using summary data





TR Operation

- Regulatory access to be TR location agnostic
 - Operate all asset classes through both new US SDR company and DTCC Derivatives Repository Limited
 - Commodities likely to have dedicated companies, to reflect user group and EFET JV
 - Operations to be extended in Asia-Pacific
 - Standard reports developed from ODRF guidance
- Strong user support for DTCC offering, due to benefits of aggregate provision
 - User costs minimized with single interface and message protocol, using existing flows and existing services, where accessible
 - Informative public data, due to completeness – avoids misleading information about net open interest
 - Efficient regulator access – direct access to complete relevant data set, eliminating costs of collection, standardization and aggregation
 - **Opportunity now is to do this right.** Industry is supportive that data should be available to regulators and RFP selections provide scale opportunity
 - Primary threats come from jurisdictional rule differences and restrictions, and commercial providers looking to restrict access to data, internalize or commercialize data





TR Implementation

➤ Implementation

- Near dates achieve full population reporting, plus very timely detailed information on flow/ electronically confirmable trades, which are high percentages of all activity
 - Rich data set for many purposes – eg detailed liquidity analyses for trading and clearing obligations
- Mark-to-market valuation submissions will follow, and should be able to be implemented leveraging processes that support current financial accounting, client valuation and bilateral collateral processes
 - Mark-to-market data is needed for prudential and systemic regulation
- Structured trades more difficult to cleanly report with authoritative data, particularly in compressed time periods
 - Details can be provided in certain PDF documents as support, if required
- There is a significant effort required to add certain attributes and represent certain trades in consistent forms, but this impacts a minority of trades and data, however these issues significantly extend time to the full implementation of regulatory reporting
- Firms' lead times to implement new automated processes are often 12 months, as have to fit into release cycles, and these can involved complex internal system co-ordination and integration which limit capacity for change.
- G14+ are making progress leveraging existing processes heavily to avoid such implementation bottlenecks, and other firms will be able to adopt a similar approach. DTCC is now reaching out beyond G14
- Flexibility to participant reporting is key, with an expectation that timeliness will tighten and trades will move from summary reporting to full electronic reporting in market standard form over time
- Very prescriptive jurisdictional reporting process and formats add complexity and time to implementation. Regulatory focus needs to be on regulatory output needs which are largely common
- In addition, the freedom for the counterparties to chose their TR for regulatory reporting and any linking of TR services are important regulatory issues. Regulations must eliminate anti-competitive or coercive practices





ICE Trade Vault
Swap Data Repository
ODRF Meeting October 4, 2011

ICE: The Logical Choice for a Commodities SDR

Experienced & Trusted

- Over 10 years successfully building & operating global derivatives businesses
- Deep & broad knowledge of commodity markets in all areas of the company
- Repeatedly partner with participants to launch new clearing & confirmation services

Capable

- Process & store millions of confidential transactions every year without incident
- All systems designed, developed & operated by an in-house staff of over 500 technologists
- All systems meet mission critical demands for response time, availability & scalability

Global

- Roughly 50% of total ICE revenue is generated outside North America
- Exchange & clearinghouse subsidiaries operate under the direct jurisdiction of local US, UK/EU & Canadian regulators
- ICE liaisons with more than 25 foreign regulators beyond ICE's "home" regulators

Limited Investment by Market Participants

Advantages for ICE Users:

- Existing interfaces only need minor modifications to enable reporting
- Cleared Trades (ICE DCOs):
 - Primary, Continuation & Valuation Data Provided by ICE DCOs & Large Trader Reports
- Non-Cleared Trades (ICE eConfirm):
 - Add submission of paper confirmed trades
 - Add valuation data
 - Use Click & Confirm functionality to meet End-User Exception reporting

Trade Details Confirmation - End-User Exception to Mandatory Clearing of Swaps

You are about to manually confirm trade details.

TestTradeId

Please enter the following:

Trade Reference ID:

Trader:

Credit Support Agreement: Y N

Pledged or Segregated Assets: Y N

Guarantee: Y N

Sole Reliance on Available Financial Resources: Y N

Obligations through Other Means: Y N

End User Election Party:

Financial Entity:

Affiliate to Qualifying Party: Y N

Hedge or Mitigation to Commercial Risk: Y N

Board Approval Required: Y N

SEC Central Index Key Number:

Key SDR Data Sources

ICE is uniquely qualified to provide a commodities SDR given the key data sources.

	ICE Cleared	CME Cleared *	Bilateral-Electronic Confirmation	Bilateral-Paper Confirmation
Swap Creation Data	ICE Trading Platform or ICE Block	N/A	ICE eConfirm	Reporting Counterparty
Swap Confirmation Data	ICE Clearinghouses	N/A	ICE eConfirm	Reporting Counterparty
Swap Continuation Data	ICE Clearinghouses	N/A	Reporting Counterparty	Reporting Counterparty
Swap Valuation Data	ICE Clearinghouses	N/A	Reporting Counterparty	Reporting Counterparty

* CME OTC Cleared trades are categorized as futures for regulatory reporting purposes. Therefore, they do not need to be reported to an SDR.

PET Data - Bilateral Trades (Non-Cleared)

Post Dodd-Frank implementation, anticipated that bilateral trades will represent <5% of market share.

ICE eConfirm Counterparty Trades

- ICE eConfirm will submit all “Matched” trades to SDR
- Limited technical effort required by ICE eConfirm Participants
- Existing ICE eConfirm API will be enhanced (e.g., new status & events)

Non-ICE eConfirm Counterparty Trades

- Today, Participants do not send paper confirmations to ICE eConfirm
- ICE eConfirm will be enhanced to allow for submission of these deals
- Paper confirmations will not be electronically matched - only submitted for reporting purposes to SDR

Continuation Data: Position Reporting

Continuation Data: Cleared

- Cleared position data for market participants is managed by FCMs - Large Trader Reports (LTRs) from FCMs to SDR
- Today, LTRs are limited to select products & trading levels (e.g., 50 lots)

Continuation Data: Non-Cleared

- Participants to notify SDR of post-trade or life cycle events – allows SDR to report non-cleared positions
- ICE eConfirm will be enhance to allow submission & matching of life cycle events among counterparties

Position Reporting: LTRs

- Combining cleared & non-cleared data - Trade Vault will be able to provide regulators with position view for contracts covered under LTRs

Trade Vault Development

Significant investment by ICE underway

- Creating central database of trades processed by: ICE Trading Platform, ICE Clearinghouses & ICE eConfirm
- Building regulatory reporting component
- Designing submission requirements for participants & trusted sources
- Preparing participant reporting views & screens

Operations & Technical Working Groups to address:

- Submission of life-cycle events & exotic trades
- Calculation of notional amounts, positions & valuations
- Review of ICE Trade Vault Legal Documents

Work with regulators to design reports component

- Reporting views & screens for staff
- Successfully meet SDR duties (accept & maintain data for monitoring)



Contact us at ICE Trade Vault
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Cleared for Public Release



**Implementing A Swap Data Repository Service
Dodd-Frank Act Reporting Requirements**

White Paper
August, 2011

Table of Contents

EXECUTIVE SUMMARY	3
KEY DATA RESOURCES	6
<i>Reporting Party Hierarchy.....</i>	<i>7</i>
<i>Swap Creation & Confirmation Reporting Responsibility</i>	<i>7</i>
TRADES EXECUTED ON-PLATFORM & CLEARED	8
TRADES EXECUTED OFF-PLATFORM & NOT CLEARED	9
<i>Off-Platform & Not Cleared Reporting.....</i>	<i>9</i>
EXOTIC TRADES	9
TRADE CONTINUATION DATA	10
UNIQUE IDENTIFIERS.....	10
ACCESS CONTROLS	12
CONCLUSION	14

ICE Trade Vault functionality designs are based on the proposed rules of the Dodd-Frank Act. ICE is prepared to make appropriate adjustments as needed when the rules are final. In areas where the rules diverge from logical operational processes, ICE designed the ICE Trade Vault service to reflect industry best practices for the commodity and energy asset class.

Executive Summary

IntercontinentalExchange, Inc. (“ICE”) will offer active participants in the commodity and energy trading market a Swap Data Repository (“SDR”) service that leverages a widely-accepted technology platform, applies an industry-standard confirmation service, and relies on data delivery protocols that will provide easy integration and workflow compatibility for a wide range of internal and third party systems. The ICE SDR called Trade Vault (“Trade Vault”) will be a high-performance, high-volume transaction recording and reporting service built on a responsive, scalable, and flexible architecture. Trade Vault will offer storage and retrieval features that meet applicable global regulations, and will support the compliance efforts of market participants as they transition to new regulatory regimes.

The regulatory reporting of swap transactions is a fundamental component of the Dodd Frank Wall Street Reform and Consumer Protection Act (“Dodd-Frank Act”), which requires all participants to report trade details on every swap transaction. To help meet these requirements, ICE is offering market participants a new service that leverages its network of trading systems (e.g. webICE trading platform and ICE Block) and clearing houses (e.g. ICE Clear Europe) to submit trade data to Trade Vault on behalf of its customers. Trade Vault will also accept data from ICE eConfirm, an electronic confirmation matching service used by more than 250 firms in the commodity and energy markets for the submission of confirmation trade data from their in-house trading systems. Customers will be able to extend their existing ICE eConfirm interfaces to meet SDR recordkeeping requirements. ICE intends to ease reporting burdens by minimizing the cost of development and compliance.

To address this task, ICE will create Trade Vault, focused exclusively on the commodities asset class, to record, retrieve and maintain trade data. Trade Vault will support specific goals of the Dodd-Frank Act, by standardizing commodity reference data, resolving duplicate records, and permitting multiple parties to submit and query a secure, reliable database on a real-time or ad hoc basis.

Trade Vault will create unique identifiers for individual transactions and derivative products as well as specific participants. It also will provide a Real-time Ticker or trade reporting service that satisfies regulatory mandates for public dissemination, and it will track block and large notional value swaps with applicable time delays.

Trade Vault will have controls and multi-tiered, rights of access functionality to ensure confidentiality of trade data and users, who will have access to a support team on a 24/7 basis. The ICE SDR envisions a launch date in the first quarter of 2012 for the global financial oil, natural gas, electricity, and natural gas liquids markets, with subsequent markets, such as metals, agricultures and coal following on a phased basis.

Overview: Swap Data Repositories

The Dodd-Frank Act requires that all swap transaction data, without exception, be reported to new, regulated market entities defined as Swap Data Repositories, or SDRs. The fundamental purpose of an SDR is to provide transparency to the swaps market and to deliver real-time, public disclosure of transaction data. An SDR will be required to register with the Commodity Futures Trading Commission (“CFTC”) and meet compliance requirements by reporting economic terms of a swap transaction, reporting and recording lifecycle events related to that transaction, manage data reporting obligations, and maintain policy and procedures to ensure data security. SDRs will interact directly with a range of market participants, and its core duties include:

- Acceptance and confirmation of data;
- Recordkeeping;
- Real-time reporting;
- Monitor, screening, and analyzing data;
- Maintenance of data privacy and integrity;
- Permitting access to regulators.

To better understand the impact of submitting trade data to an SDR, ICE has provided the following definitions derived from the Dodd-Frank Act. These definitions are subject to final rule-making by regulators and will impact the actual roles and responsibilities of market participants. ICE has included the statutory definitions to provide context for determining how an organization may prepare itself for new swap data reporting requirements. Key terms of the legislation are:

- **Swap:** [Section 721 of Dodd-Frank Act] Defines “swap” expansively bringing in most financial instruments or transactions. Physically settled forwards and options, exchange traded futures, and equity securities are excluded from definition of swaps. Swaps are regulated by the CFTC.
- **End-User:** An end user is a participant that is not a financial entity [a commodity pool operator, (e.g. hedge fund), a swap dealer, or major swap participant] that is using a swap to hedge or mitigate commercial risk.
- **Swaps Dealer:** (“SD”) [Section 721 of Dodd-Frank Act] A firm that holds itself out as a dealer in swaps; makes a market in swaps; regularly enters into swaps with counterparties in the ordinary course of its business for its own account; or engages in any activity causing the person to be commonly known in the trade as a dealer or market-maker in swaps.
- **Major Swaps Participant:** (“MSP”) [Section 721 of Dodd-Frank Act] An entity that: (1) maintains a substantial position in swaps for any of the major swap categories as determined by the CFTC (excluding positions held for hedging or mitigating commercial risk and positions maintained by any employee benefit plan for the primary purpose of hedging or mitigating any risk directly associated with the operation of the plan); (2) has substantial counterparty exposure that could have serious adverse effects on the financial stability of the U.S. banking system or financial markets; or (3) is a financial entity that is not subject to capital requirements imposed by any federal banking agency, is highly leveraged relative to the amount of capital it holds and maintains a substantial position in outstanding swaps in any major swap category.
- **Swaps Execution Facilities:** (“SEF”) [Sections 721, 733 of Dodd-Frank Act] A facility, trading system or platform in which multiple participants have the ability to execute or trade swaps by

accepting bids and offers made by other participants that are open to multiple participants in the facility or system, through any means of interstate commerce.

- Designated Contract Markets: (“DCM”) Must have 85% of their transactions (by volume) executed on exchange. DCM can list a swap, but unlike a SEF, the swap must be cleared.
- Designated Clearing Organization: (“DCO”) [Sections 723, 725 of Dodd-Frank Act] All clearable swaps must be cleared. Dodd-Frank Act also mandates that these swaps transactions must be cleared through a DCO and FCMs shall manage participants’ accounts.
- Swaps Data Repository: (“SDR”) the facilitator of the transparency requirements. The SDR disseminates to the public and the CFTC swap data on a real-time basis.
- Unique Swap Identifier: (“USI”) would be created and assigned to a swap at the time it is executed, and used to identify that particular swap transaction throughout its existence.
- Unique Counterparty Identifier: (“UCI”) would be used for precise, reliable, and unique identification of each counterparty to any swap subject to the Commission's jurisdiction, in all recordkeeping and data reporting concerning swaps.
- Unique Product Identifier: (“UPI”) would be used for categorization of swaps with respect to the underlying products referenced in them.

The CFTC’s proposed rules envisage reporting for all derivatives, both bilateral and cleared, and include reporting of trade details, trade confirmations and valuation data. Dodd-Frank does not allow for any reporting exemptions for certain participants; therefore, this piece of the legislation will affect all market participants. In addition, CFTC prescribes that SDRs be constructed by asset class, and that each have the ability to accept and process all products in the class.

These definitions are subject to final rule-making, though market participants should begin **now** to consider a Swap Data Repository service provider. Regulators have made it clear with the recent passage of rules establishing SDRs that these entities will be among the first priority for implementing key aspects of the Dodd-Frank Act. ICE is launching Trade Vault to provide market participants with a simple, cost-effective solution to address this critical regulatory mandate.

With deep expertise in technology and markets, ICE is in a unique position to provide electronic services that increase operational efficiency and support regulatory compliance. As the preferred solution for the world's largest trading firms and financial institutions, Trade Vault will build on ICE’s widely-accepted clearing infrastructure as well as the ICE eConfirm service and provide market participants with a viable and clear path through a complex regulatory environment.

Key Data Resources

ICE is uniquely qualified to create a commodity SDR because of its connection to the data sources that must populate the repository. With the advent of mandatory clearing regulation as required in the Dodd-Frank Act, ICE anticipates that 90+% of the volume in the OTC market will be cleared. The remaining will trade bilaterally, and these transactions will consist of non-clearable swaps, exotic swaps, and trades where one party elects an end-user clearing exception.

Today, commodity trades are cleared via CME or ICE. Currently, CME’s OTC Cleared trades are categorized as futures for regulatory reporting purposes. Therefore, CME Cleared deals do not have an SDR reporting requirement. Unless regulatory developments change, ICE and its clearinghouse will be the dominant source of cleared swaps in the SDR. (See chart below)

In accepting and processing bilateral trades, ICE eConfirm will provide the platform for reporting these trades to Trade Vault and will enable ICE eConfirm users to utilize their existing interfaces. Bilateral trades can be subdivided into two categories – those confirmed electronically and those confirmed via paper. ICE eConfirm participants typically report that they electronically confirm 80+% of their swaps business online. As a result, the ICE eConfirm matched trades provide the second key data source for Trade Vault.

Lastly, for the remaining bilateral trades that are confirmed via paper, ICE eConfirm will be enhanced to allow participants to submit initial trade information and paper trade confirmations to Trade Vault. These trades will be accepted for regulatory reporting purposes and will not utilize the confirmation matching engine.

	ICE Cleared	CME Cleared	Bilateral: Electronic Confirmation	Bilateral: Paper Confirmation
Creation	ICE Trading Platform or ICE Block	N/A	ICE eConfirm	Reporting Counterparty
Confirmation	ICE Clearinghouses	N/A	ICE eConfirm	Reporting Counterparty
Continuation	ICE Clearinghouses	N/A	Reporting Counterparty	Reporting Counterparty
Valuation	ICE Clearinghouses	N/A	Reporting Counterparty	Reporting Counterparty

Proposed Reporting Roles & Trade Flows

Trade Vault will have the ability to receive data from multiple sources, including clearinghouses, SEF/DCMs, and reporting parties. In addition, any participant may transmit data to Trade Vault using a third-party service provider. ICE’s real-time, integrated systems will collect and standardize trade data and send it via a trade capture module for storage in Trade Vault’s database. Once the data is collected in Trade Vault, both regulators and participants will access a robust reporting module, subject to access controls, and the public will view data via the CFTC-prescribed Real-Time Ticker.

Reporting Party Hierarchy¹

1. Swap Dealer (“SD”)
2. Major Swap Participant (“MSP”)
3. Non-SD/Non-MSP

The Dodd-Frank Act establishes a framework for determining reporting party responsibility for each swap trade. A hierarchy of counterparty types is described, in which SDs outrank MSPs, who outrank non-SD/MSP counterparties. When both counterparties are at the same hierarchical level, proposed regulation calls for them to select the counterparty obligated to report. Final-rulemaking is likely to refine these conventions, which in their current form, may prompt confusion or delay with respect to reporting responsibilities and timing. However, ICE is developing Trade Vault to address various scenarios, and provide participants with the capacity to act on the appropriate reporting roles.

Swap Creation & Confirmation Reporting Responsibility²

Swap Data recordkeeping and reporting requirements are contained in the statute, and the following table provides a summary view of the obligation which depends upon entity type, execution venue, and type of swap data:

	On-Platform & Cleared	On-Platform & Not Cleared	Off-Platform & Cleared	Off-Platform & Not Cleared
Creation Data	SEF/DCM	SEF	SD/MSP/ Non-SD/Non-MSP	SD/MSP/ Non-SD/Non-MSP
Confirmation Data	DCO	SD/MSP/ Non-SD/Non-MSP	DCO	SD/MSP/ Non-SD/Non-MSP

¹ “Under the proposed regulations, determination of who must report required swap creation data is based on two criteria. The first criterion is whether the swap is (1) executed on a SEF or DCM and cleared on a DCO; (2) executed on a SEF or DCM but not cleared; (3) not executed on a SEF or DCM but cleared on a DCO; or (4) not executed on a SEF or DCM and not cleared. The second criterion is whether the reporting counterparty (as determined according to Sec. 45.5) is an SD or MSP, or instead is a non-SD/MSP counterparty. Using these two criteria to determine who reports is intended to streamline and simplify the data reporting approach, by calling for reporting of each set of swap creation data by the registered entity or counterparty that has the easiest, fastest, and cheapest access to the set of data in question. The results of this approach are shown in the following table:” (Dodd-Frank Act)

² “Under the proposed regulations, determination of who must report required swap continuation data is based on two criteria. The first criterion is whether or not the swap is cleared on a DCO. The second criterion is whether the reporting counterparty (as provided in the proposed regulations) is an SD or MSP, or instead is a non-SD/MSP counterparty. Using these two criteria to determine who reports is intended to streamline and simplify the data reporting approach, by calling for reporting of each set of swap continuation data by the registered entity or counterparty that has the easiest, fastest, and cheapest access to the set of data in question. The results of this approach are shown in the following table:” (Dodd-Frank Act)

Swap Continuation & Valuation Data Reporting Responsibility

Swap Data continuation and valuation requirements are contained in the statute and the following table provides a summary view of the reporting responsibility which hinges on entity type and clearing scenario:

	Cleared	Not Cleared
Continuation Data	SD/MSP/ Non-SD/Non-MSP	SD/MSP/ Non-SD/Non-MSP
Valuation Data	SD/MSP/ & DCO	SD/MSP/ Non-SD/Non-MSP

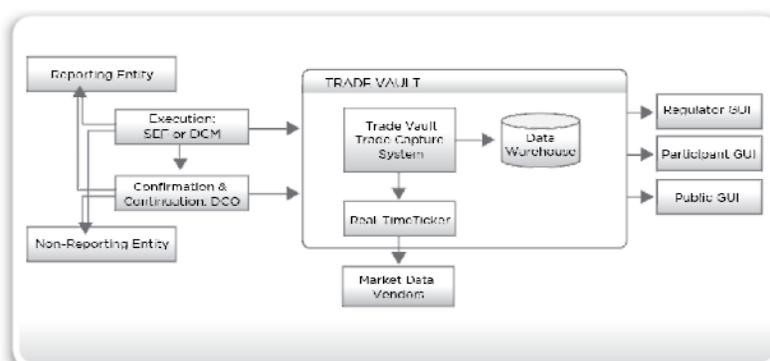
A potential adjustment, subject to final rule-making, is to exclusively require DCOs to report valuation data for cleared swaps. In this event, reporting counterparties should not have to report valuation data for any cleared swap and would only have to report for non-cleared swaps. In all circumstances, Trade Vault will attempt to ease the burden on reporting counterparties by directly receiving valuation data from DCOs and applying those valuations as needed.

ICE has identified the following four dominant trade flow scenarios which will be processed by the SDR. The majority of trading volume is associated with scenarios one and four. Taking this into account, this White Paper focuses on these two scenarios.

1. Trades executed on-platform and cleared;
2. Trades executed on-platform and not cleared;
3. Trades executed off-platform and cleared; and
4. Trades executed off-platform and not cleared.

Trades Executed On-Platform & Cleared

Regulations mandate that all clearable swaps be cleared and exchange traded. Following the proposed rules, ICE estimates over 90% of OTC trading volume will be on-platform and cleared. The reporting burden for these trades should fall onto SEFs/DCMs for initial reporting and DCOs for confirmation, continuation and valuation reporting. The following graphic shows the potential trade data flow in this case. This design takes into account that the SEF/DCM will assign unique identifiers while the DCO will process lifecycle events and publish valuation data.

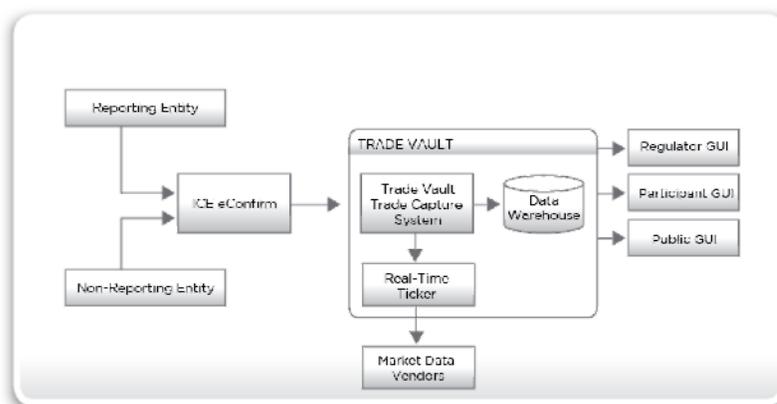


Trades Executed Off-Platform & Not Cleared³

Trades that are either eligible for the End-User Exception or are not mandated for clearing and traded off-platform, fall under scenario four listed above. The reporting burden on these trades is on participants for initial reporting, confirmation, continuation and valuation. Participants electing to use End-User Exception, however, must submit additional data to the SDR to meet compliance, and their confirmations should be completed in a time-sensitive manner.

Most confirmations will need to be electronically processed to meet this mandate. By electronically confirming trades on ICE eConfirm, which will be fully integrated to Trade Vault, participants can satisfy their requirement to submit to a SDR in an automated manner. The following graphic show the potential trade data flow in this case and assumes assignment of the unique identifier processing of lifecycle events via the ICE eConfirm:

Off-Platform & Not Cleared Reporting



Exotic Trades

Based on ICE’s previous experience with bespoke and structured transactions, or exotic trades, this trade data is not easily accommodated by electronic submission. Therefore, ICE intends to gather feedback on the appropriate method for capturing exotic and non-standard trade data from working groups, though it has several proposed data schemes that will accommodate these transactions.

³ “...swap dealers and major swap participants entering into swap transactions with counterparties that are not swap dealers or major swap participants would be required to send an acknowledgment for each swap on the same calendar day as execution (i.e., no later than T+0). Swap dealers and major swap participants would then have policies and procedures in place to confirm the swap with financial entities as defined in proposed Sec. 23.500 {13} on the same calendar day as execution and with all other entities not later than the next business day following execution. In the case of an uncleared swap, the proposed regulations would require the reporting counterparty to report required confirmation data electronically, making such a report promptly following confirmation, but in no event later than:

- 15 minutes after confirmation of a swap for which confirmation occurs electronically; or
- In the case of a swap for which confirmation was done manually rather than electronically, within a time to be determined by the Commission prior to promulgation of its final data reporting regulations.” (Dodd-Frank Act)

Trade Continuation Data⁴

As proposed by the CFTC, commodities market participants will be required to use the “snapshot” approach for submission of swap continuation data. This approach requires a daily update of the current state of the swap which incorporates all of the changes that have happened to the swap since the previous snapshot. As a consequence, reporting entities are required to submit swap continuation data to an SDR on a daily basis throughout the life of the swap.

By contrast, the life cycle approach, which is proposed by the CFTC for all non-commodity asset classes, requires a recording of individual post-trade events (e.g., novation and early termination) as they occur. ICE anticipates the CFTC’s mandate for the commodities asset class to use the snapshot approach may be changed to a lifecycle approach in the final rule because of unnecessary reporting burden incumbent in the latter process.

Should the lifecycle option become part of the final rule, ICE will engage working groups to design a series of standardized life cycle events to be adopted by the reporting entities. This working group would build upon the messaging protocols and framework from other asset classes and utilize any existing industry standards (e.g., ICE eConfirm data schemas and API queries). ICE believes that the initial implementation tasks needed to establish the life cycle approach will be worth the costs in the long term given the burdensome and costly nature of the snapshot approach.

Unique Identifiers⁵

Industry standards are an essential component of ICE Services and the Dodd-Frank Act seeks to have a range of market participants coalesce around unique identifiers for products, transactions, and market participants. ICE has a strong record of working with trade groups and standard-making bodies to create and implement solutions. Trade Vault will continue this effort as it relates to development of unique identifiers. Examples of industry collaboration include:

- **International Swaps and Derivatives Association:** 2005 Commodity Definitions, NYMEX December 2008 Option Expiration and U.S. Crude Oil & Refined Petroleum Products Annex
- **Leadership for Energy Automated Processing:** Created and designed the XML schema for physical crude oil & refined products, Master Agreement for Purchasing and Selling Refined Petroleum Products & Crude Oil

⁴ “...the Commission believes that it is important to fulfilling the purposes of Dodd-Frank to ensure that complete data concerning swaps is maintained in SDRs and available to regulators. This requires reporting of data from the continuation of a swap over its existence from the time it is created until its final termination or expiration.” (Dodd-Frank Act)

⁵ ‘ Over the course of the last decade, virtually all stakeholders in the financial sector have come to recognize the need for universal, accurate, and trusted methods of identifying particular financial transactions, the legal entities that are parties to financial transactions, and the product type involved in particular financial transactions. Such identifiers will be crucial tools for financial regulators tasked with measuring and monitoring systemic risk, preventing fraud and market manipulation, conducting market and trade practice surveillance, enforcing position limits, and exercising resolution authority. Without such unique identifiers, and the ability to aggregate data across multiple markets, entities, and transactions that they would provide, the enhanced monitoring of systemic risk and greater market transparency that are fundamental goals of Dodd-Frank cannot be fully achieved.’ (Dodd-Frank Act)

- **Edison Electric Institute:** NP15 & SP15 Product Definitions, ERCOT Product Definitions to address rezoning, Master MRTU Amendment relating to certain electricity transactions that reference prices at SP15 & NP15 as reported by ICE

The CFTC prescribes creation of unique identifiers (Unique Swap Identifiers, Unique Product Identifiers, and Unique Counterparty Identifiers) that are based on open standards that can be internationally adopted. Regulations state Unique Swap Identifiers (“USIs”) shall be assigned to a trade at the venue of execution. For on-platform trades (cleared and bilateral), this will place responsibility of assigning USIs on SEFs\DCMs. For off-platform trades that are cleared, Trade Vault envisions that DCOs will issue USIs. For off-platform trades that are bilateral, ICE eConfirm will create and assign USIs upon submission of trades for reporting purposes.

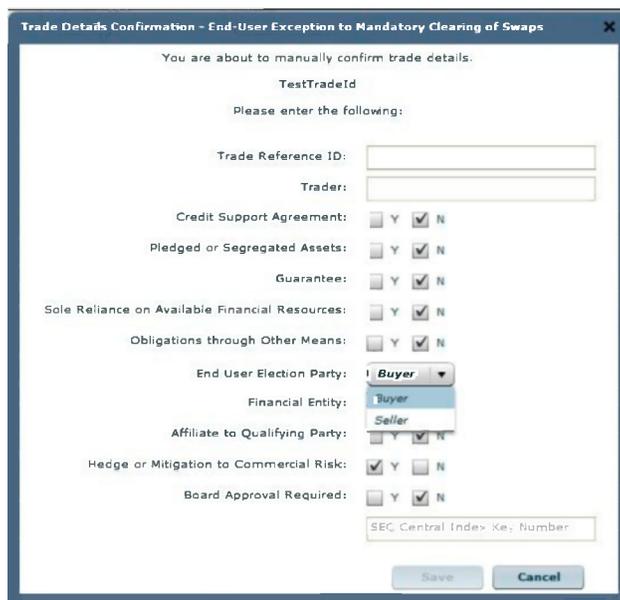
The creation of UPIs will simplify trade processing and reporting for the asset class. The commodity and energy asset class is dynamic and innovative in respect to product development. Central coordination is necessary to prevent duplication of UPIs. Trade Vault will engage participants to create a taxonomy for UPIs. Trade Vault will issue UPIs, maintain reference data representation of each commodity product, including schema definitions and disseminate the representation to participants. In order for Trade Vault to provide End-User Exception Reports, products offered by DCOs shall be identified to support the clearing mandate of regulations. As the aggregator and disseminator of a Real-Time Ticker, Trade Vault will utilize the applicable codes to consolidate and publish the data in a consistent and timely manner.

Limited System Development

ICE has an unparalleled record of integrating trade capture systems, both vendor and proprietary, to enable the submission and download of trade data. As described above, ICE’s trading and clearinghouse platforms will support reporting requirements for cleared swaps within Trade Vault. For bilateral trades, Trade Vault participants will utilize ICE eConfirm to submit data to the SDR. Trade capture system integration is not required to utilize ICE eConfirm; however, most participants choose this option to take advantage of auto-matching capabilities of the service.

For participants with limited IT resources, ICE eConfirm accepts manual trade data input. A manual trade entry screen provides participants with an electronic form containing dropdowns and fill-in boxes. In instances where only one participant to a trade is able to upload trade data, the system provides electronic affirmation (“Click & Confirm”).

Manual trade entry screens and Click & Confirm functionality will assist End-Users to comply with regulations. Participants will be able to set up default values for many fields to reduce the number of entries to report transactions. Below is an example of the Click & Confirm screen for an End-User Exception transaction:



Trade Details Confirmation - End-User Exception to Mandatory Clearing of Swaps

You are about to manually confirm trade details.

TestTradeId

Please enter the following:

Trade Reference ID:

Trader:

Credit Support Agreement: Y N

Pledged or Segregated Assets: Y N

Guarantee: Y N

Sole Reliance on Available Financial Resources: Y N

Obligations through Other Means: Y N

End User Election Party:

Financial Entity:

Affiliate to Qualifying Party: Y N

Hedge or Mitigation to Commercial Risk: Y N

Board Approval Required: Y N

SEC Central Index Key Number:

Access Controls

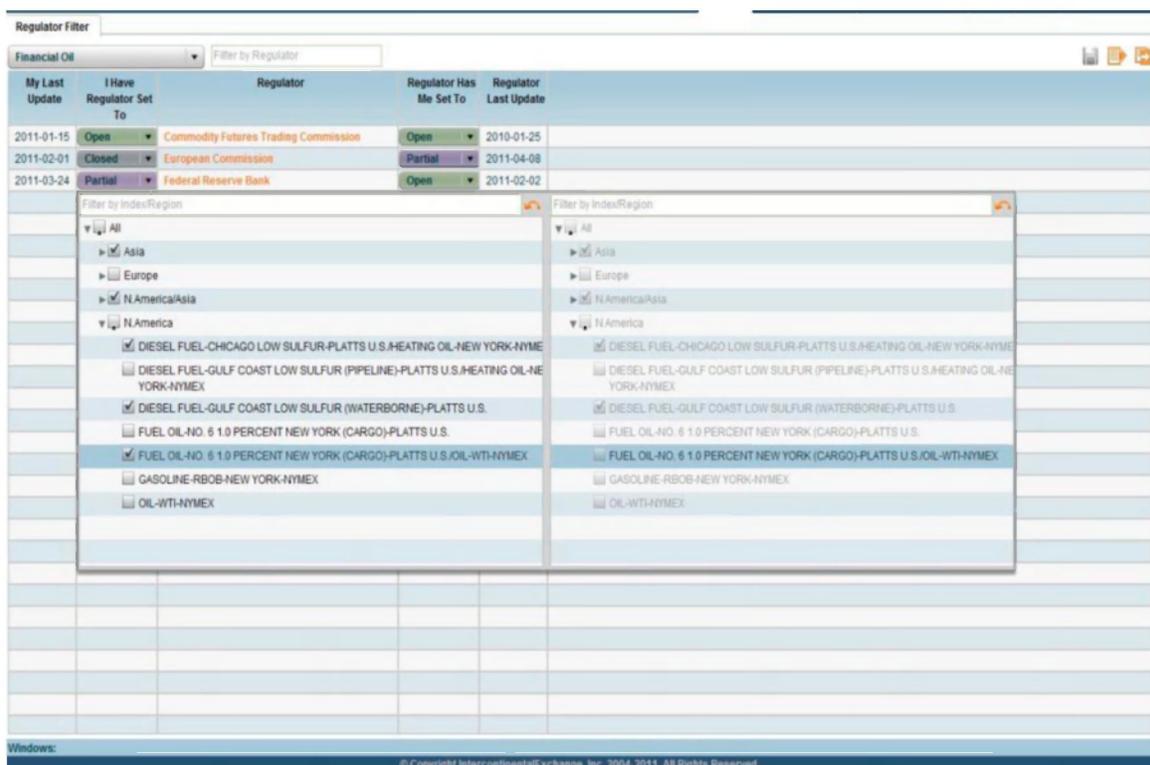
Trade Vault will offer company set-up and user authorization functionality, including an administrator’s component. Each entity will be classified by registered type: SEF, DCM, DCO, or Participant. Participants will be cataloged per regulator and market type as to their classification (e.g., CFTC/US Financial Power: MSP).

Access to Trade Vault will be strictly limited to users with valid credentials. Password standards will comply with appropriate security policies. Upon enrollment into Trade Vault, a participant firm will designate a master user (“Administrator”).

Trade Vault will have a robust User Permission Screen for managing user IDs and access, similar to other ICE systems. The Administrator will create and permission all subsequent user IDs for a firm. ICE personnel will not create nor manage Trade Vault user IDs beyond the initial one for the Administrator. This will ensure Trade Vault access will be granted by a trusted individual at the participant firm who is closest to and has the most knowledge of those in the firm that require access.

Once a user ID is created by the Administrator, company level access shall be granted. Access to multiple companies will be possible for the same user ID as long as the underlying companies are associated via a parent/child relationship within Trade Vault. Access will be restricted to unrelated firms. Trade data access will be strictly limited in accordance to the company level access granted to a particular user ID.

Permissions for user IDs will also be granted per market type (e.g., Financial Oil, Financial Natural Gas and Financial Power) and address the needs of operations departments that divide workload by market type, which is common practice in the asset class. In addition, participants will be able to manage oversight access via a robust Regulator Filter. To manage the Regulator Filter, participants will “open” a regulatory agency to allow access. These filter settings will exist at a granular level (e.g., settings by trading region, market type, product and index filters) to provide participants with the greatest flexibility and control to permission regulators. An example of the Regulator Filter screen is below:



My Last Update	I Have Regulator Set To	Regulator	Regulator Has Me Set To	Regulator Last Update
2011-01-15	Open	Commodity Futures Trading Commission	Open	2010-01-25
2011-02-01	Closed	European Commission	Partial	2011-04-08
2011-03-24	Partial	Federal Reserve Bank	Open	2011-02-02

Reporting Capabilities

Trade Vault will feature a data warehouse and reporting platform modeled on the high-volume system that ICE currently uses to support its own compliance reporting needs. The warehouse and platform, combined with business intelligence tools, will allow Trade Vault to deliver a suite of reports tailored for participants and regulators. These reports will include:

- End-User Clearing Exception Reporting
- Position Reporting
- Valuation Reporting

In addition, Trade Vault will provide reports specifically tailored for regulators only. In anticipation of regulators' request for new reports, Trade Vault will build an electronic request system. An audit log of these requests will be provided to participants and regulators. If a request is participant-specific, only the participant and regulator will have access to view the request. These reports will include:

- Position Limit Reporting
- Large Trader Reporting

Regulations prescribe a framework for distribution to the public, which includes a Real-Time Ticker for the public reporting of swap transactions. Trade Vault will offer a Real-Time Ticker Reporting Service to SEFs /DCMs for immediately reporting trade data following execution to satisfy recordkeeping obligations. Trade Vault will then extract the real-time reporting fields to disseminate trade data to the public. This will allow SEFs/DCMs to meet both requirements with a single submission.

For trades executed off-platform, the reporting party is obligated to report the real-time data to a SDR which publicly disseminates data. Trade Vault will provide Real-Time Ticker data to third-party distributors. Trade Vault will offer historical data views via its website while strictly adhering to the Commission's rules on which data elements are part of the public record.

Trade Vault also anticipates that the public reports are likely to include the following:

- Minimum Block Size Reporting
- Commitment of Traders Reports
- Other Summary Reporting

Conclusion

Given the critical importance of complying with Dodd-Frank Act regulatory requirements, ICE will establish Trade Vault to serve the Swap Data Repository requirements of participants in the commodity and energy asset class. Trade Vault will build on ICE's successful track record of working with customers to develop innovative trading platforms, data-reporting tools, and risk management services.

Trade Vault is planning a first quarter 2012 launch date focused on the global financial oil, natural gas, electricity, and natural gas liquids markets. ICE is undertaking significant research and analysis to ensure Trade Vault will provide a simple and cost-effective solution for its customers, one that is dynamic and adaptable as regulatory rules are finalized.

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REGIS-TR

EUROPEAN TRADE REPOSITORY



clearstream

DEUTSCHE BÖRSE
GROUP

iberclear





1. REGIS-TR – responding to regulatory demand

- Market Environment and changing Regulatory Framework
- Introduction to REGIS-TR – The European Trade Repository for OTC Derivatives

2. High-level product scope and functional offering

3. Product developments



Proposed European Regulation

Key components in respect to trade repositories are:

- The risk mitigation goals impact financial and non-financial (i.e. corporate) market participants
- Clearing: Clearing to be mandatory also for non-financial market participants beyond a certain activity threshold
- Reporting: non-standardised, non-clearable contracts should be electronically confirmed with an auditable monitoring process for all participants – no threshold applies (currently)
- Timing: A reporting obligation for OTC derivatives positions no later than trade date plus 1 to record and report contracts with ESMA-registered trade repositories
- ESMA to define the technical standards for reporting by June 2012
- The new regulations apply from end-2012

Two European market infrastructures cooperate to provide a sophisticated trade repository responding to regulatory requirements

REGIS-TR

June 2011



■ **Shareholders:**

- Two well known European Market Infrastructures
- Providing exchange trading, clearing, settlement and custody services

■ **European based (Luxembourg) entity with global reach**

■ **Open governance structure**

■ **To be ESMA regulated and looking for compliance with non-European regulators across the globe**

■ **Service covering all OTC derivative products (one-stop-shop) before regulation materialises**

■ **Servicing all types of market participants and respective activity profiles in the OTC derivative space**



- 1. REGIS-TR – responding to regulatory demand**
- 2. High-level product scope and functional offering**
 - Core Service offering
 - Participation and account structure
 - Access and connectivity
 - Fee Structure
- 3. Product developments**



Registration

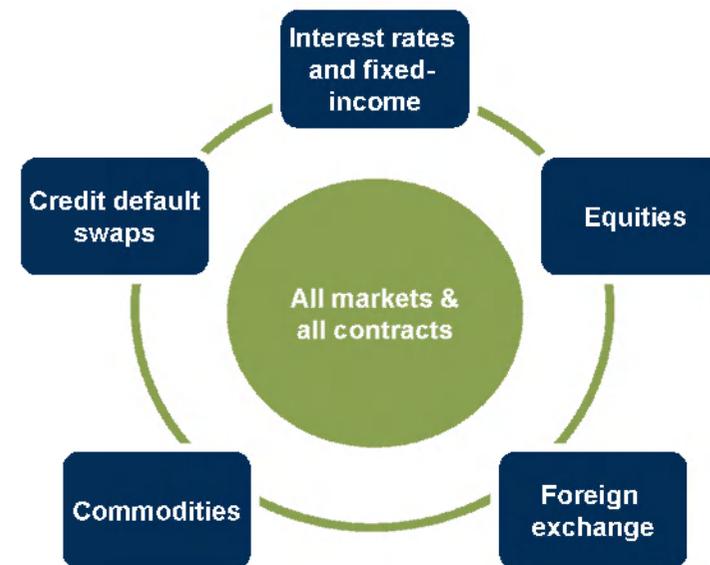
- Registry Stamp
- Informative Stamp

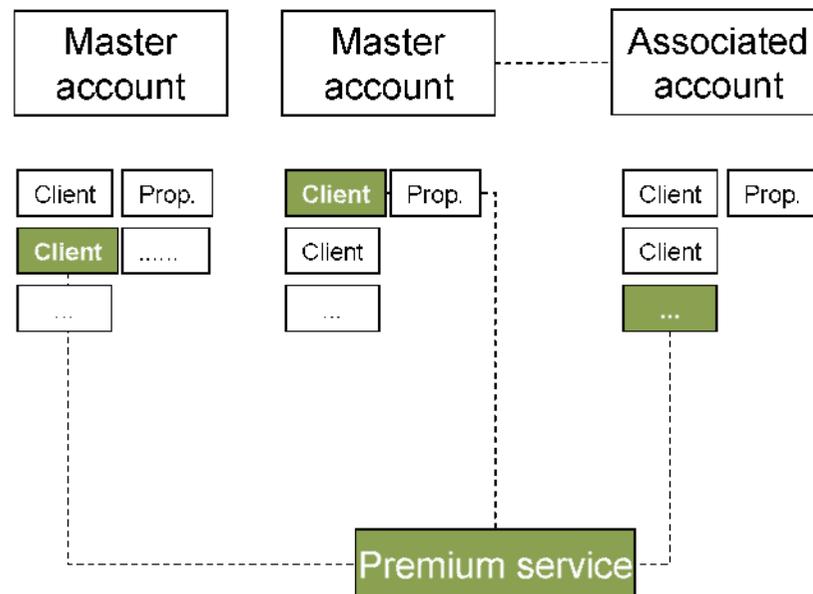
Administration

- Communication
- Matching
- Affirmation
- Reconciliation
- Consolidation

Reporting

- Regulators
- Participants
- Markets





- **Master accounts** – set-up in the system for direct participants of REGIS-TR, allowing to link n sub-accounts containing the registered contracts (m prop and n client accounts)
- **Associated accounts** – same rights and duties as a regular master accounts but allowing to delegate operation and communication to another Master account holder (PoA)
- **Sub-accounts** – Identified as prop or client account (n/m number of accounts)
 - Prop accounts – reflecting the contracts of the participant’s direct activities
 - Client accounts– reflecting the registered positions with clients not holding own master accounts in REGIS-TR
 - Users of client accounts will be limited in operational activity, only being able to respond to alleged operations (e.g. confirming alleged contracts)
- **Premium services** – Consolidation of transaction and other relevant data for clients accessing REGIS-TR via multiple sub-accounts, possibly via multiple master account holders
- **Participant and client identification:**
 - Participants are identified by BIC/BIE plus tax identifier (the latter is also very suitable for non-financials)
 - Clients identified via flexible 11-digit ID type



System Access and communication between participants and REGIS-TR:

- Use of web-based application
- Manual input/queries with secured Internet access. Web access, exportable to CSV files
- Mass upload/download of XML files through secured Internet access
- Automatic transfer of XML files through a SWIFTNet FileAct file transfer connection between REGIS-TR and the participant
- Customer Service and English speaking helpdesk
 - 5 people available on Target2 calendar from 8:30 to 18:30



- 1. REGIS-TR – responding to regulatory demand**
- 2. High-level product scope and functional offering**
- 3. Product developments**
 - Near-future product and service enhancements



- Leveraging of BME IT department, with more than 200 professionals, specialised in development, systems and communications and security in the business of market infrastructures and financial services
- Developments jointly agreed with customer committee participants
- Development costs borne by REGIS-TR and recovered by usage fees
- No up-front investment risk for the industry – usage commitment necessary

	Q4/ 2010	Q1/ 2011	Q2/ 2011	Q3/ 2011	Q4/ 2011	Q1/ 2012	Q2/ 2012	Q3/ 2012	Q4/ 2012
<i>Launch – Interest rate derivatives</i>	★								
<i>Release 2 – Forex derivatives</i>									
<i>Release 3 – Equities and Commodity</i>									
<i>Release 4 – Credit derivatives</i>									



Value-added Services

Transaction reporting:

- Offering of transaction reporting for OTC derivatives in accordance with MiFiD II

Exposure valuation:

- Inclusion of pricing and valuation data:
 - Directly by the participant – bilateral exposure agreements
 - Independent third-party exposure valuation

Collateral Management:

- Existing international or domestic collateral pools for collateralisation of exposures in OTC derivatives



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REGIS-TR

EUROPEAN TRADE REPOSITORY

Executive Summary

All information contained herein is confidential information regarding REGIS-TR. By receiving such information, the recipient agrees to keep it strictly confidential, and to disclose it exclusively to those of its directors, officers, employees and representatives that may need it for the only purpose of evaluating REGIS-TR services and who will be bound by the same confidentiality obligations. The recipient will not divulge any such information to any other party. Any reproduction, distribution, publication, display or copy of such information, in whole or in part, is prohibited without the prior written permission of REGIS-TR.

REGIS-TR disclaims any and all liability as to the information set forth herein, and as to any errors or omissions, including without limitation any express or implied representation or warranty with respect to the completeness and accuracy of such information.



REGIS-TR S.A. is a fully operational provider of Trade Repository services for OTC derivatives with a global scope, with the main objective of becoming a flexible one-stop-shop solution to register OTC derivatives trades in all asset classes by any participant type and activity profile as well as under any applicable jurisdiction. The company, founded on 9th December 2010, is a société anonyme, incorporated under the laws of the Grand Duchy of Luxembourg and is registered with the Trade and Companies Register of Luxembourg under registration number B. 157650.

Two well known neutral Securities Services Infrastructures, Clearstream Banking S.A., (I)CSD, and Iberclear, the Spanish CSD, are equal shareholders in the Company. Both have a long history and extensive track records as financial market infrastructures. Between both shareholding companies, well over 4,000 employees are employed globally; with offices in Europe, the USA as well as Asia, serving almost 3,000 customers in over 110 countries. Both shareholding entities provide operational, IT, legal, risk, compliance, commercial, auditing and accounting experts to ensure an orderly and compliant operation of REGIS-TR according to international standards and following CPSS-IOSCO principles for financial market infrastructures.

REGIS-TR provides services primarily in the following areas:

- Registration of OTC derivatives trades in all asset classes (Interest Rates are live since December 2010). FX, equities and commodities are envisaged within 2011 and CDSs in 2012.
- Registration of standardised and customised contracts: Includes the possibility of attaching contracts in PDF format which are also electronically managed and confirmed. Reconciliation facilities and contract custody services are included.
- Compliance with any transparency and regulatory reporting requirement derived from future position reporting regulation in Europe and the USA for all registered contracts. Transaction reporting (under MiFID) will also be complied with when applicable.
- Electronic matching and electronic confirmation of contracts inputted in REGIS-TR.
- Legal certainty: The electronic registration and confirmation in REGIS-TR offers a means of evidence of the existence of the contract and its terms as agreed between the parties, and it may replace, if so agreed between the parties, the physical signature and paperwork related to hard copy contracts.
- Reporting to Market Authorities and publication of aggregated data.



- Archive: A minimum of 10 years after maturity or termination is guaranteed.

The technical architecture, run and operated on the IT environment of the Spanish Stock Exchange benefits the same quality standards as all the platforms developed and maintained under BME market infrastructure in terms of security and reliability. Furthermore, the REGIS-TR database is fully scalable, so it can be easily adapted to suit its capacity needs.

REGIS-TR is currently in conversations with different CSDs, Exchanges and Monetary Authorities in regions such as Asia-Pacific, Africa as well as Central and South America where similar legislations on OTC derivatives registration obligations are in discussion or under development. These market infrastructures are significantly interested in leveraging on REGIS-TR's trade repository's system and REGIS-TR is willing to offer white labelling trade repository services to these markets, allowing for the establishment of national domestic trade repositories in the mentioned markets.

REGIS-TR receives and processes creation, confirmation and continuation data from participants. This data can be communicated through standard XML files sent via SWIFTNet FileAct, standard XML files uploaded via secure Internet access or manual input. The XML files have been designed using standard industry language, taking into account FpML flow definitions and schemes, ensuring that the automation of the feed between the participant's back office applications and REGIS-TR is easy to develop and implement.

REGIS-TR will be deployed in three different steps. The first one is already live, providing the core trade repository functionality and allowing registration, matching and confirmation of interest rate derivatives. The same functionality will be available for FX derivatives with their delivery committed to November 2011. This same release will equally permit access to the information registered in REGIS-TR by regulators at entity level. The third release, scheduled to be delivered before March 2012 will allow for registration of equity and commodity derivatives.

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Role of Eurex Clearing as CCP: The Future of Clearing

OTC Derivatives Regulator's Forum
Federal Reserve Bank of New York

05 October 2011

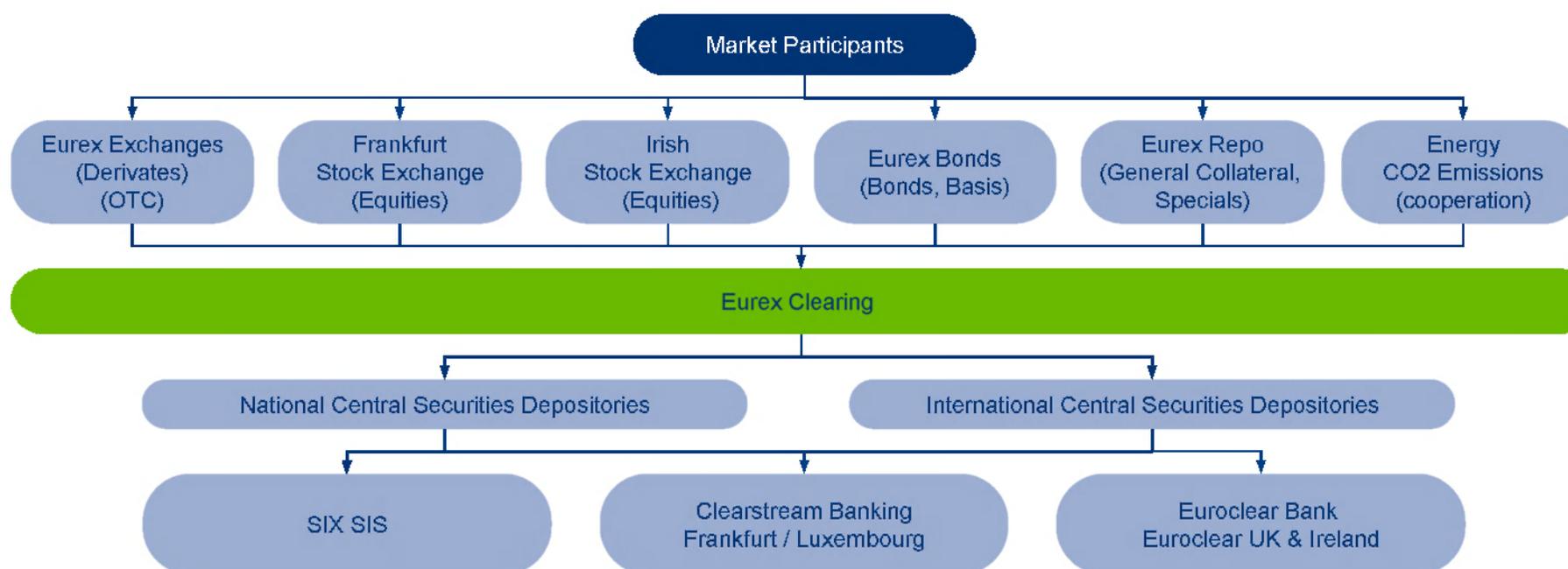


Eurex Clearing is one of largest CCPs globally

Eurex Clearing ...

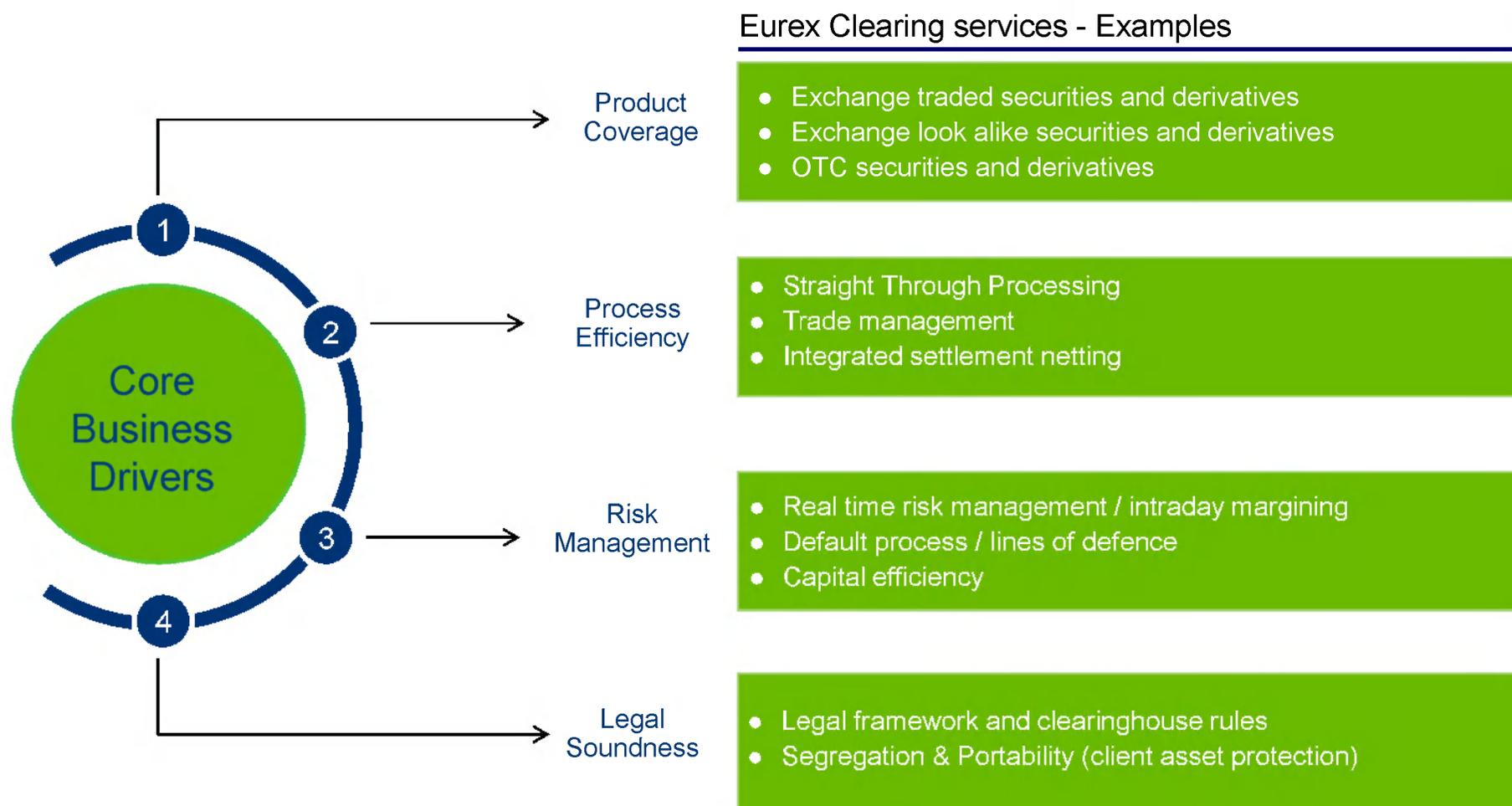
- is the clearinghouse within Deutsche Börse Group
- offers fully automated and straight-through post trade services for derivatives, equities, repo (sale and repurchase agreement), energy and fixed income transactions
- acts as a central counterparty for its cleared markets – becomes a buyer to all sellers and a seller to all buyers thereby minimizing counterparty risk and improving operational efficiency
- offers flexible trade management functions, advanced risk management services, efficient collateral and delivery management tools
- is a company incorporated in Germany and licensed as a credit institution under supervision of the Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin) pursuant to the Banking Act (Gesetz für das Kreditwesen).
- the Financial Services Authority (FSA) has granted Eurex Clearing status as a Recognised Overseas Clearing House (ROCH) in the United Kingdom

Eurex Clearing Offers Central Counterparty Services for Multiple Asset Classes Across Multiple Markets

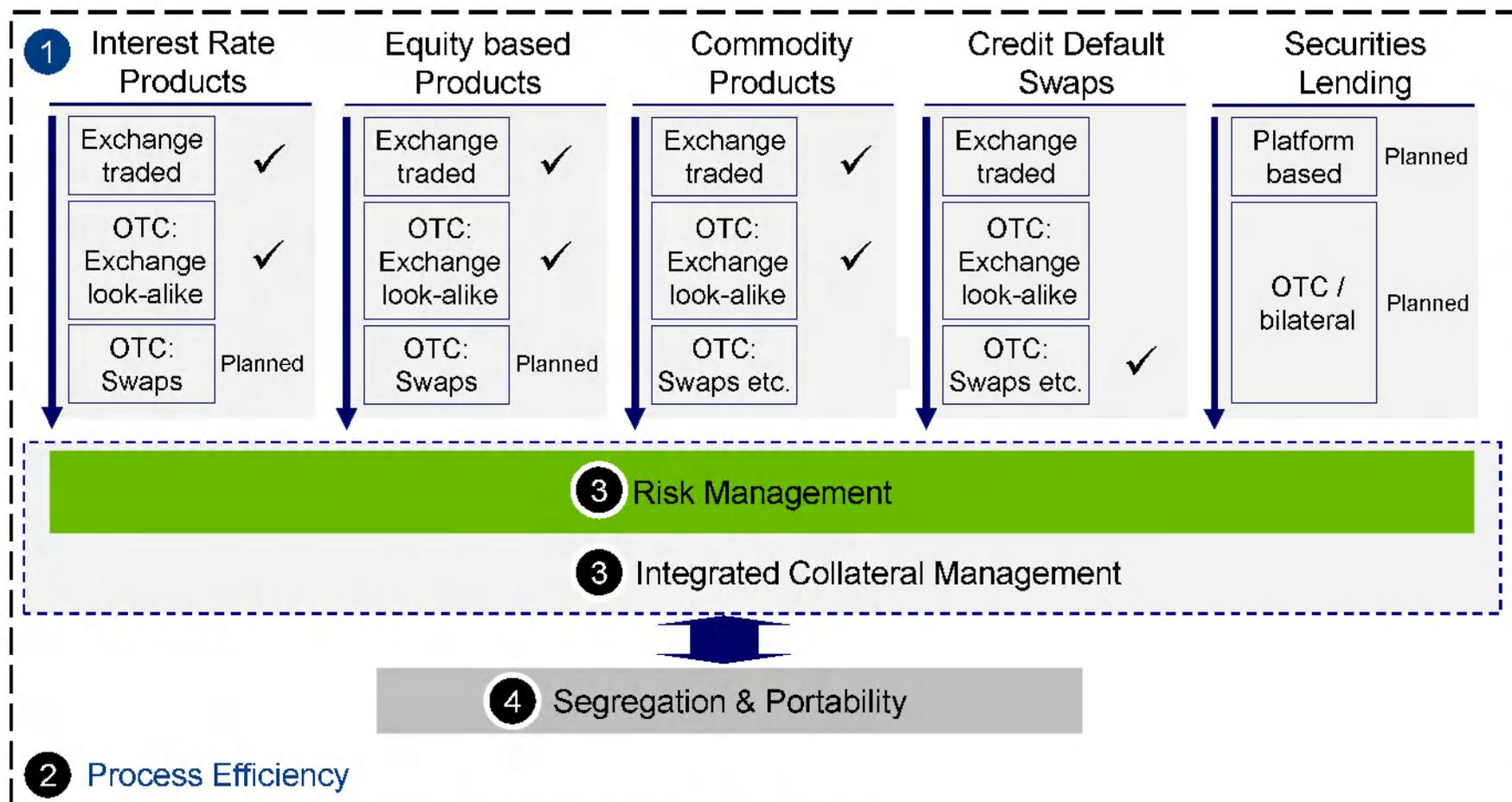


For the Frankfurt Stock Exchange (FWB®), the Irish Stock Exchange and the European Energy Exchange Eurex Clearing is Central Counterparty only for CCP eligible trades.

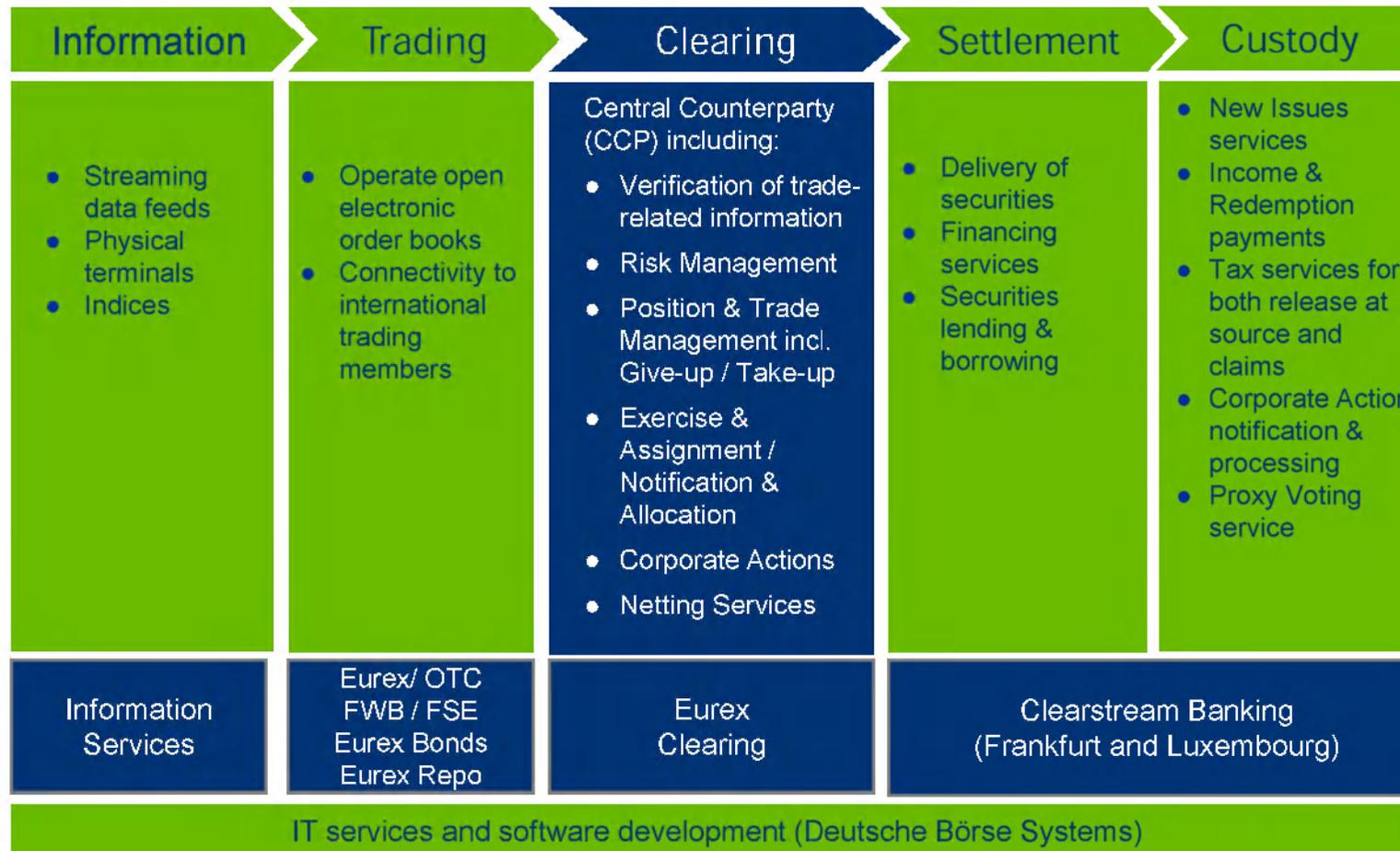
Core business drivers for CCPs will be four factors



Eurex Clearing is the leading European CCP and committed to provide industry leading clearing solutions



Eurex Clearing is an Integral Part of the Deutsche Börse Value Chain



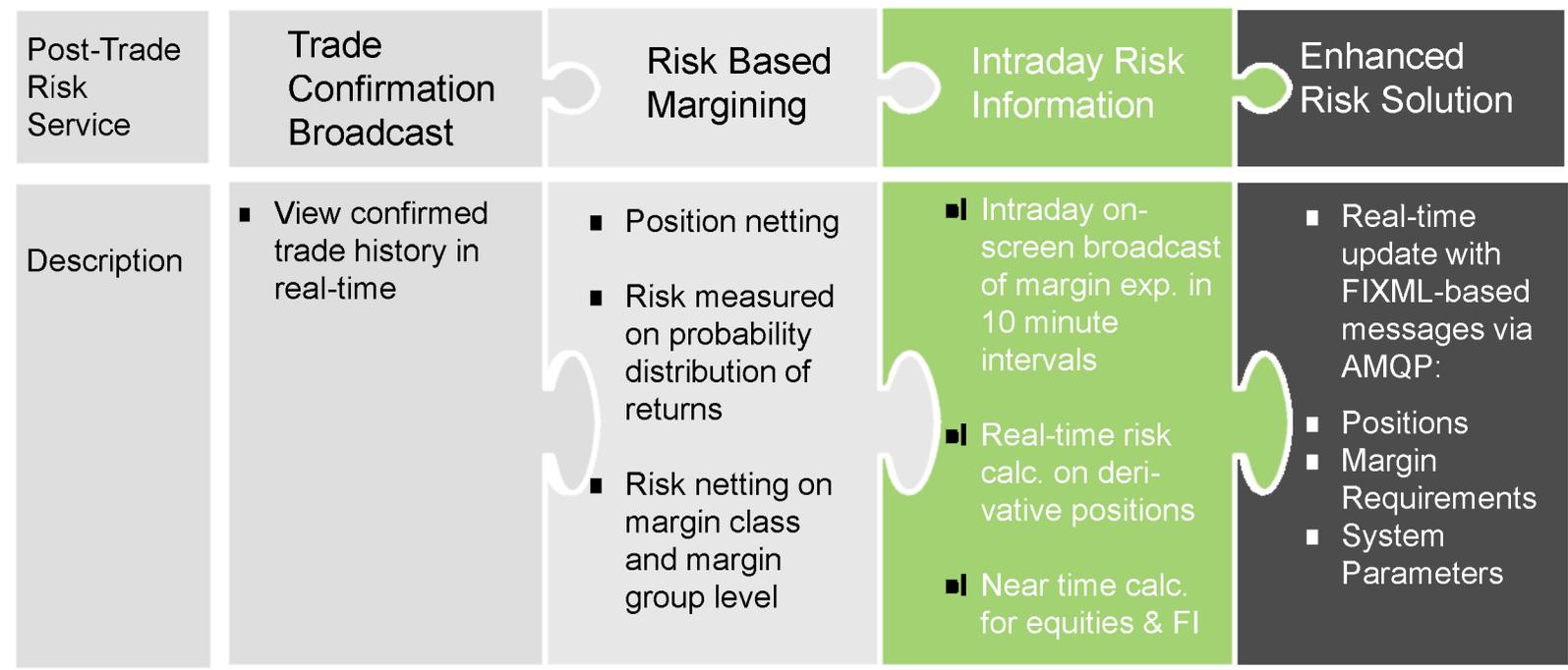
Substantial changes in trading patterns lead to the extension of the range of Pre-Trade Risk Services by Eurex Clearing

Eurex Clearing’s Pre-Trade Risk Services provide efficient toolbox to address risk management requirements arising out of algorithmic trading, but applicable to several parts of the Trading & Clearing members business.

Pre-Trade Risk Service	Pre-Trade Limit System *	Intraday Theoretical Price files	Order Confirmation Broadcast *	Stop Button *
Description	<ul style="list-style-type: none"> CMs are able to limit the trading activities of their traders and NCM already pre-trade Limit System is able to address size and frequency of trading 	<ul style="list-style-type: none"> Interested parties can retrieve from the Eurex Clearing Website 4 times per day updated intraday theoretical pricefile 	<ul style="list-style-type: none"> Clearing Member and NCM are continuously informed about the status of their open orders 	<ul style="list-style-type: none"> Stop Button allows quick reaction of CMs in emergency situations to prevent any further risk increase Stop Button can be used by NCMs as well

... which is already complemented by a comprehensive range of Post-Trade Risk Services

Eurex Clearing's Post-Trade Risk Services provide real-time information for optimized intraday risk management once a trade has been executed*



* Derivatives, Equities and Fixed Income

Eurex Clearing ensures highest protection by providing segregation and timely portability

Introduction

- We have introduced a further dimension to our proven clearing service by addressing segregation and portability needs that will benefit both Clearing Members and their clients
- Since the unprecedented example from 2008, there has been a growing demand from clients for mechanisms to effectively address the requirements for Client Asset Protection
- Our solution has been designed with a view to ensure compliance with regulatory initiatives that will be implemented during 2012

Benefits

- Our Client Asset Protection service has been designed to deliver
 - Maximum protection for clients under a proven legal construct
 - Segregation of client margin collateral mitigating the impact on clients in the event of a Clearing Member's (CM's) default
 - Portability of positions enabling continued trading in the event of their CM's default
 - Portability of client margin collateral in the event of a CM's default
 - Unique client segregation offering a higher level of protection with the Individual Clearing Model
 - Further capital efficiencies with upcoming regulations



Cleared for Public Release



OTC Derivatives Regulators Forum

ICE Clear Credit & ICE Clear Europe Overview

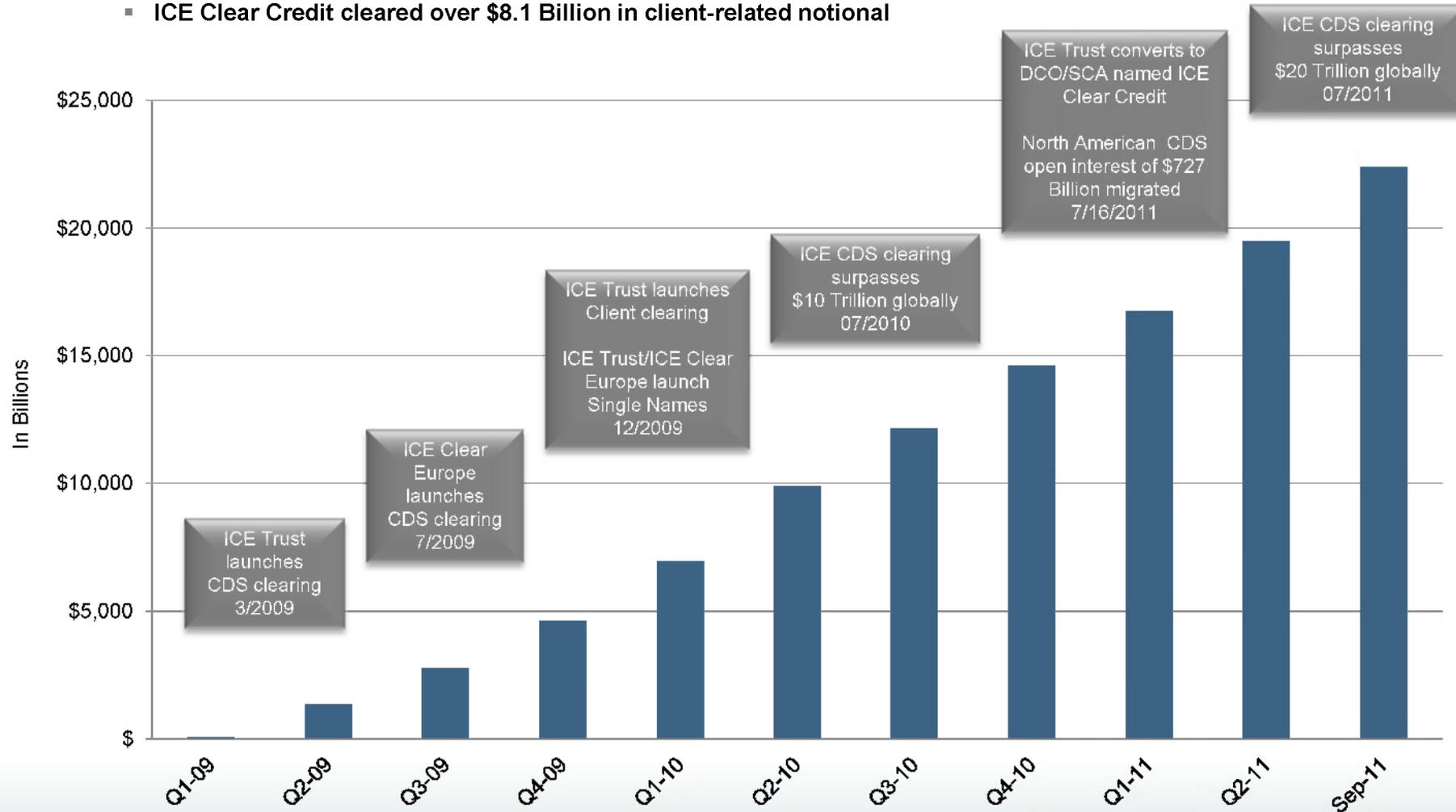
Christopher S. Edmonds, Paul Swann

October 5, 2011

ICE CDS Milestones and Volume Cleared

Global Cumulative Volume

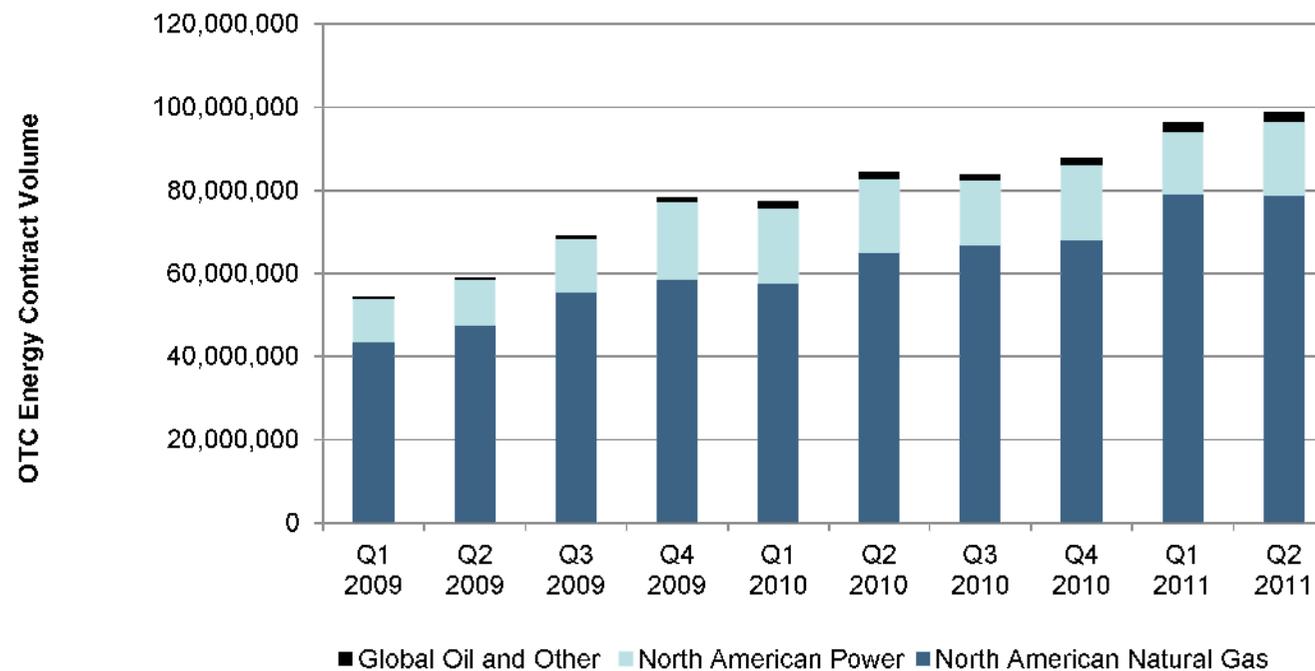
- Over \$22.6 Trillion notional cleared globally
- ICE Clear Credit cleared over \$8.1 Billion in client-related notional



As of September 16, 2011

ICE OTC Energy Volume Cleared

ICE operates the leading global OTC marketplace for natural gas, power, refined oil products and natural gas liquids



Energy Products

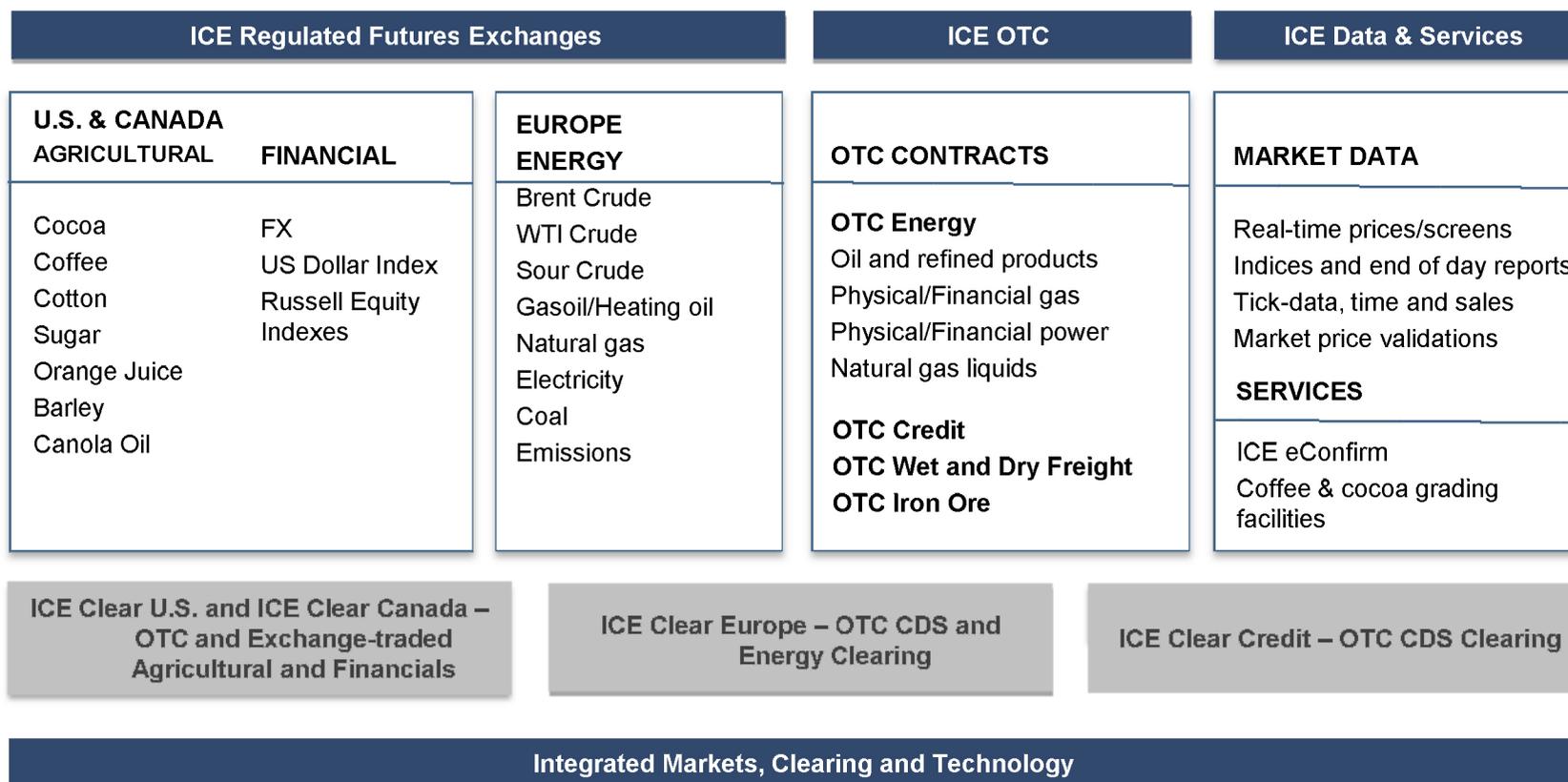
- Over 500 cleared energy products
- Brokered and electronic markets

Energy Customers

- Commercial energy companies ~51%
- Banks/Financial institution ~24%
- Liquidity providers ~25%

Listing of ICE Clear Europe Energy Membership can be found at https://www.theice.com/clear_europe_membership.jhtml

ICE Overview



ICE Global CDS Products and Clearing Participants

80 Indices

North America (CDX)		Europe (iTraxx)	
IG	S8 – S17	Main	S7 – S16
HY	S8 – S16	XO	S9 – S16
HVOL	S8 – S16	HVOL	S7 – S16

249 Single Names

Sector	North America	Europe
Consumer Services	30	22
Industrials	18	15
Consumer Goods	15	19
Utilities	6	16
Financials	22	15
Basic Materials	7	14
Telecommunications	3	13
Healthcare	9	2
Oil & Gas	9	4
Technology	9	1

Listing of clearing eligible instruments can be found at:

[ICE Clear Credit](#)
[ICE Clear Europe](#)

As of September 20, 2011

Clearing Participant (CP)	ICE Clear Credit	ICE Clear Europe
Bank of America	✓	✓
Barclays	✓	✓
BNP Paribas	✓	✓
Citibank	✓	✓
Credit Suisse	✓	✓
Deutsche Bank	✓	✓
Goldman Sachs	✓	✓
HSBC *	✓	✓
JPMorgan	✓	✓
Merrill Lynch	✓	✓
Morgan Stanley	✓	✓
Nomura	✓	✓
RBS *	✓	✓
Société Générale *	✓	✓
UBS	✓	✓
Unicredit AG	-	✓

*HSBC, RBS and Societe Generale are self-clearing participants only for ICE Credit

Listing of Clearing Participants can be found at:

[ICE Clear Credit](#)
[ICE Clear Europe](#)

Features of ICE CDS Clearing

Expertise & Depth

- Over 320 cleared CDS products globally
- 41 Clearing Participants globally
- Managed numerous Credit Events, Succession Events and Matured Contracts
- Leading market connectivity processing thousands of trades daily

Customer Protection

- Segregation of gross margin at the clearing house
- Robust default protection and legal framework
- Pre and post default portability of positions and collateral supported

Risk Management

- World class risk management designed specifically for CDS
- Guaranty fund covers simultaneous default of 2 largest Clearing Participants
- Transparent and replicable margin requirements
- EOD settlement process based on prices subject to execution

Ease of Doing Business

- Open access: supporting multiple platforms
- Trades cleared intra-day, on a near real-time basis
- Support for all trade life cycle events: backloading, netting, credit events
- Allows users to leverage existing infrastructure – no costly technology build

2011 Global Accomplishments

Dodd-Frank Compliance

- Successfully converted ICE Trust to DCO/SCA and renamed ICE Clear Credit
- Migrated \$727 Billion in open interest
- ICE Clear Europe deemed SCA

Expanded Product / Members

- Cleared global volume of \$23 trillion
- Launched 47 single names globally
- Added 12 additional Clearing Participants
- Operationally ready to clear Latin American sovereigns in ICE Clear Credit
- Operationally ready to clear Western European sovereigns in ICE Clear Europe

Pricing & Risk Management

- Successfully conducted two default management exercises
- Developed capabilities to support strategic restructuring process and successfully participated in industry-wide test in Europe

Process Improvements

- Adapted operations and technology in ICE Clear Credit to accommodate both FCM/BD and self-clearing workflows
- Launched CP-CP trade date clearing

Cleared for Public Release

Japan Securities Clearing Corporation Outline of service and future plans

October 5, 2011

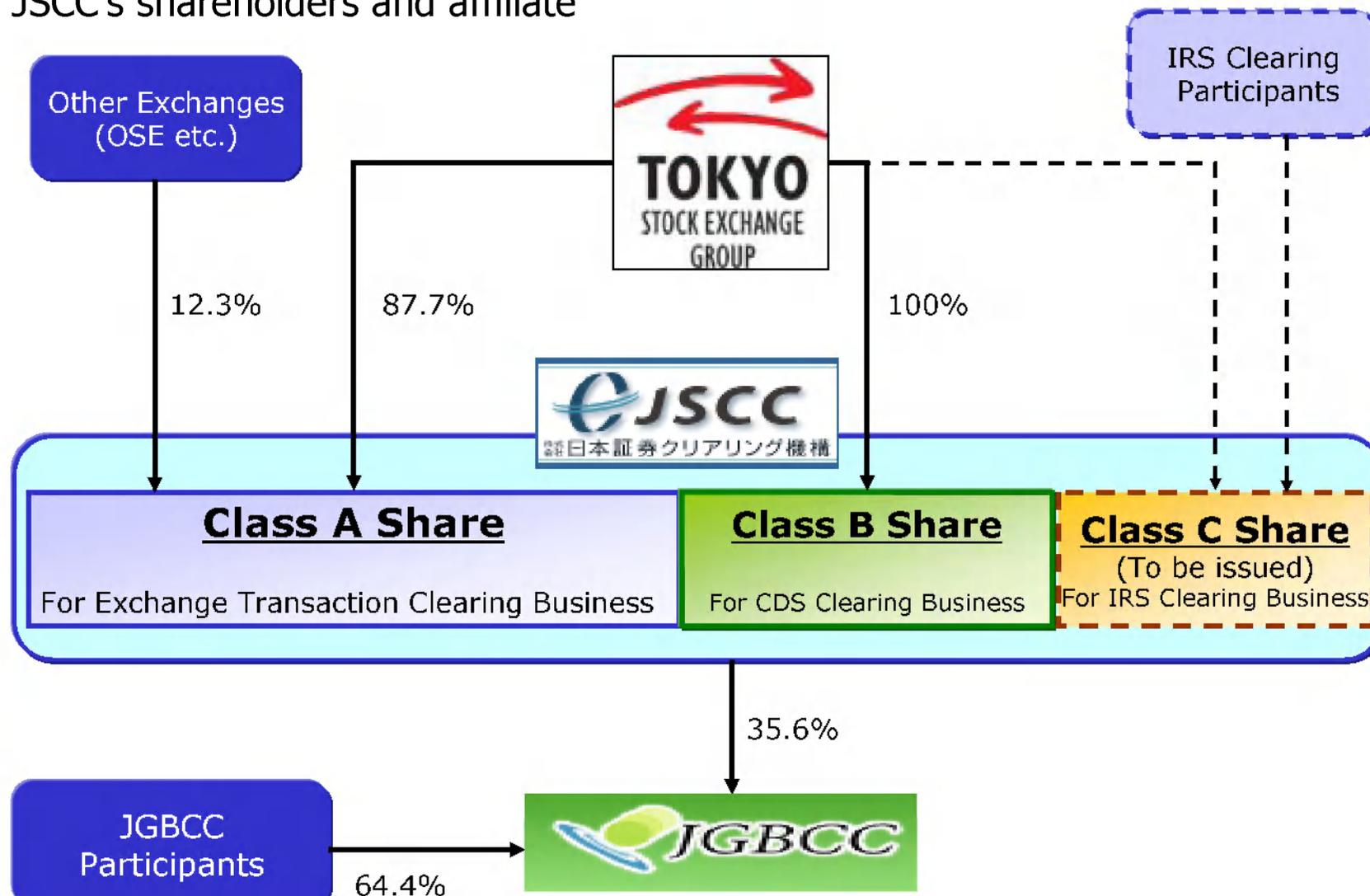
Japan Securities Clearing Corporation
Prepared for OTC Derivatives Regulators Forum

1. Overview of Japan Securities Clearing Corporation (JSCC)

■ Corporate history and its structure

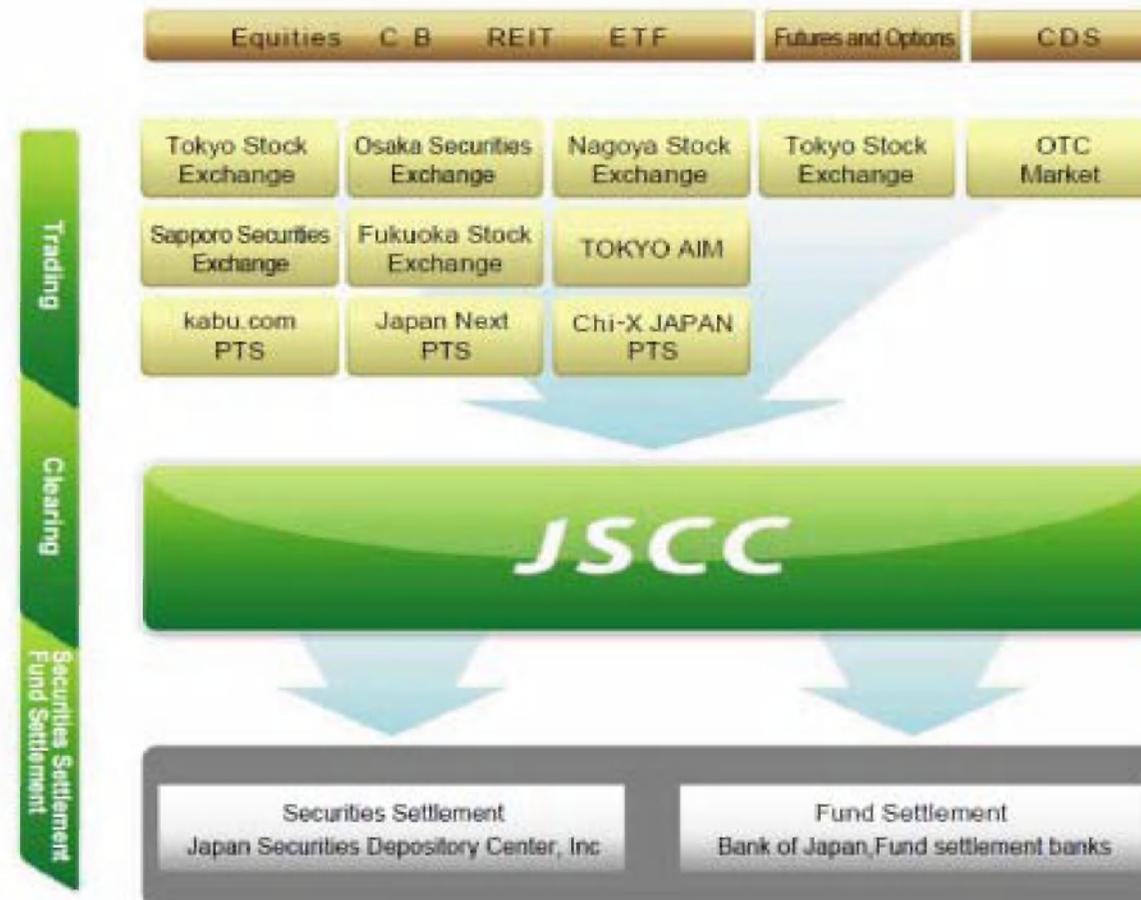
- Established by 5 Japanese Stock Exchanges and Japan Securities Dealers Associations (Jul. 2002)
- Implemented clearing of exchange listed cash transactions in Jan. 2003 and exchange derivative transactions listed on Tokyo Stock Exchange ("TSE") in Feb. 2004
- Clearing volume (in USD value on average per day for FY2010)
 - Cash products: USD25bil.
 - Exchange listed derivative products: USD 45bil.
- Clearing Participants
 - 152 participants for listed transaction (As of Mar. 2011)
- Capital amount and shareholders
 - Capital amount : JPY 9.25 billion (Capital: JPY 4.85 billion, Capital Reserve: JPY 4.4 billion)
 - Class A share (for listed trade clearing service); TSE (87.7%), OSE (11.5%), other exchanges (0.7%)
 - Class B share (for CDS clearing service); TSE (100%)
- Affiliate CCP; Japan Government Bond Clearing Corporation ("JGBCC") in which JSCC owns 35.6% of JGBCC's stake. JGBCC clears OTC trades of JGB and its daily average clearing volume in FY2010 was 940 bil. in USD value.

JSCC's shareholders and affiliate

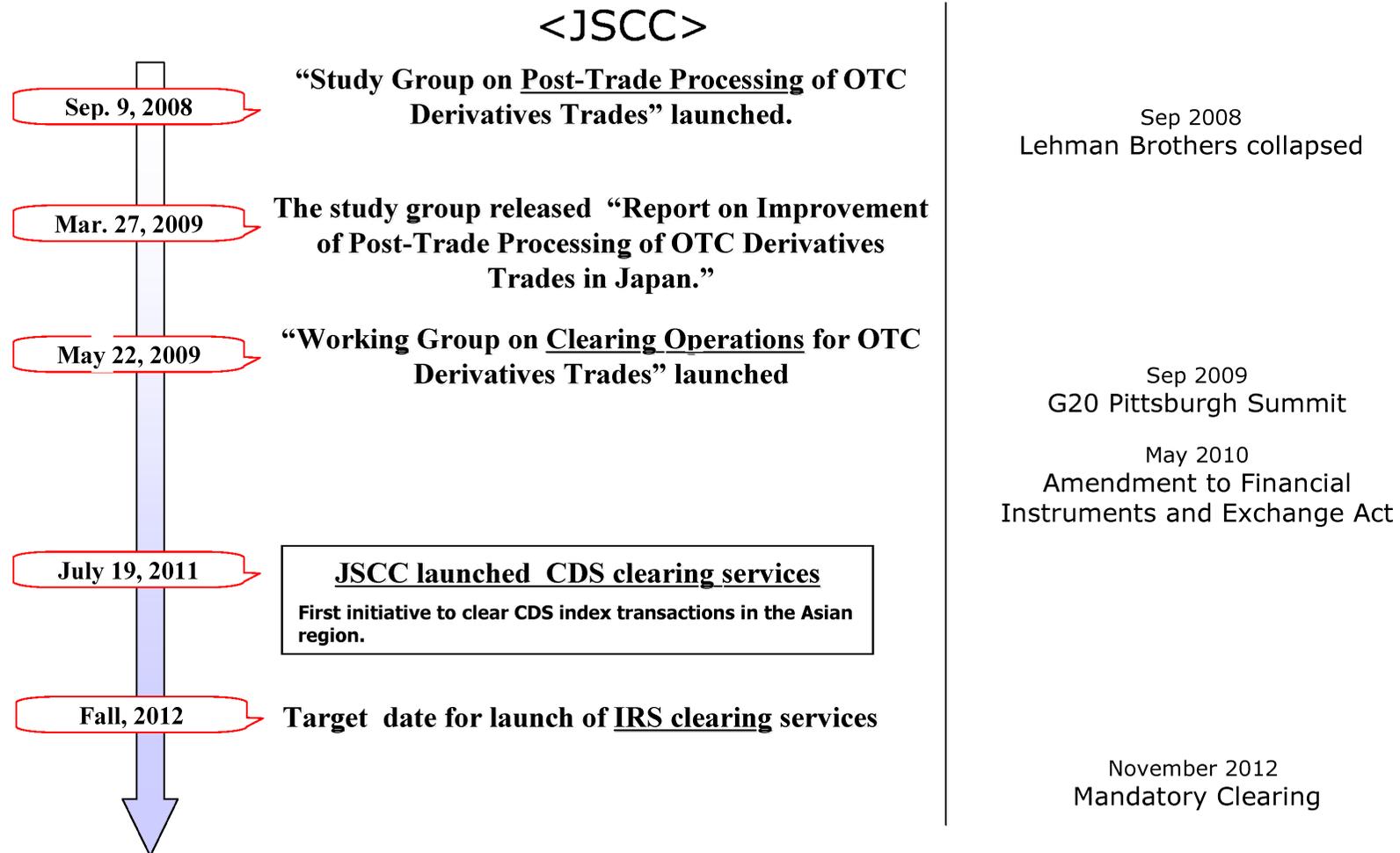


1. Overview of Japan Securities Clearing Corporation (JSCC)

- Service coverage by JSCC



2. Milestones, Initiatives for OTC Derivatives Clearing

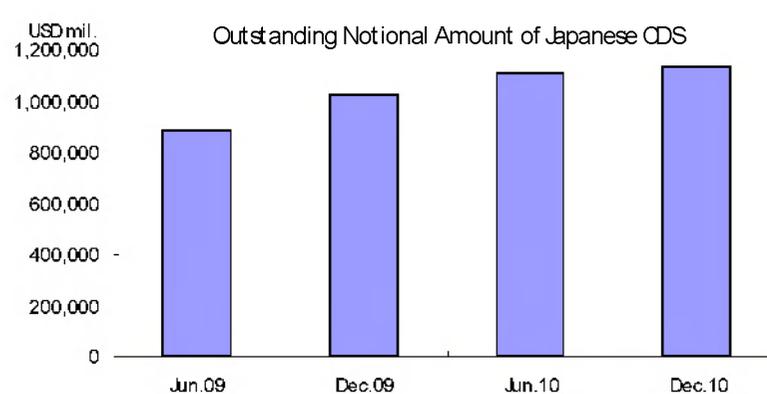


3. Overview of CDS Clearing Service

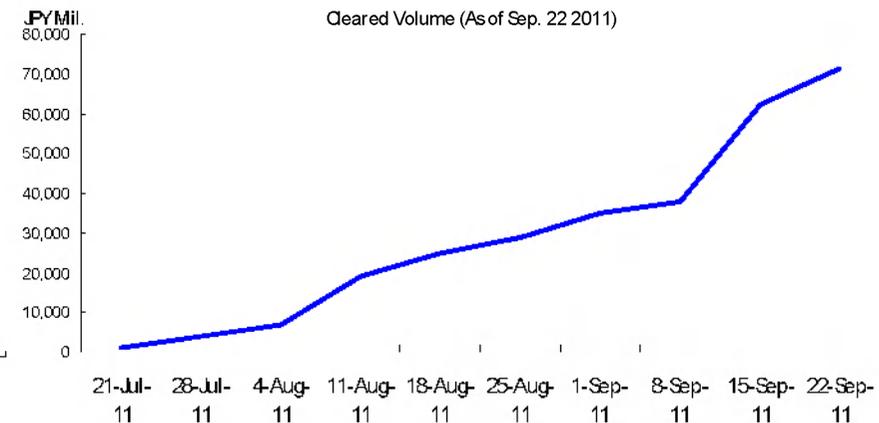
■ CDS index clearing in Japan

Scope of Clearing	iTraxx Japan Series	- The scope will expand to include single name CDS as early as by fall 2012
Clearing Cycle	Weekly	- Risk Monitoring is conducted on a daily basis.
Participants	5 participants (As of Jul.2011)	- More dealers are expected to participate in a timely manner.
Margin	99% ETL	- Also include short charge and bid-offer spread charge, etc.

■ Track record of CDS clearing at JSCC

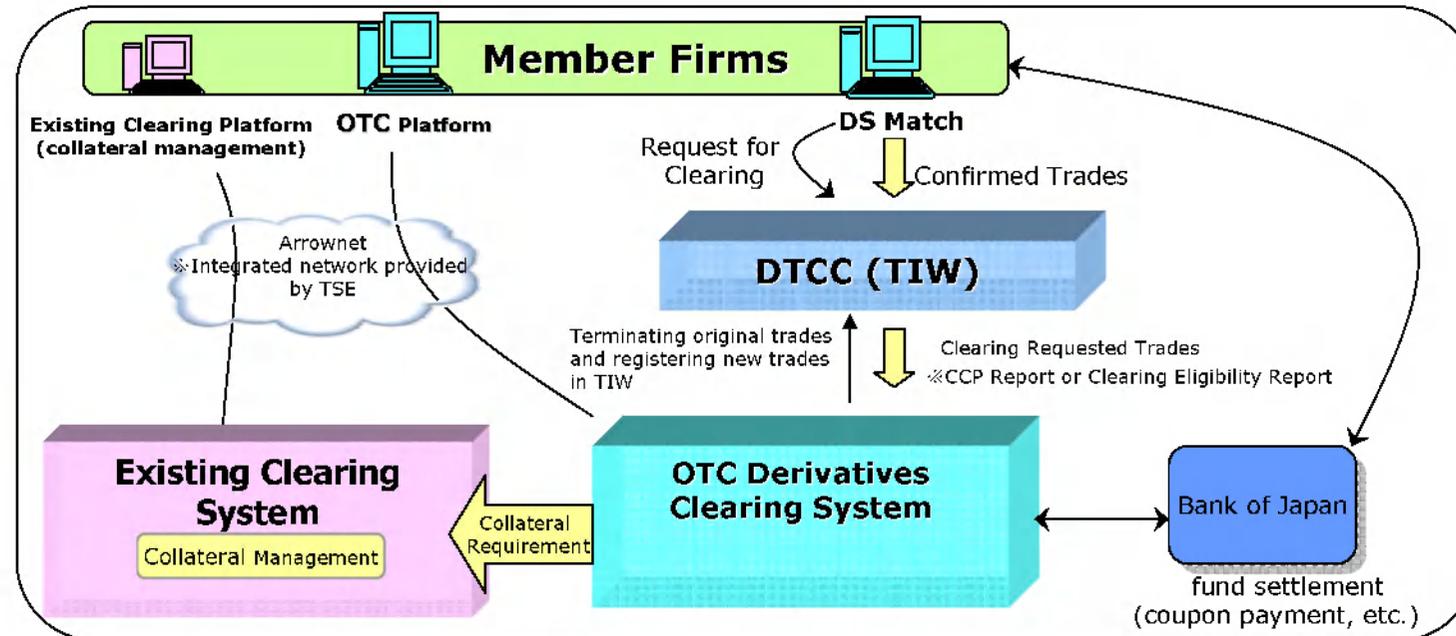


Source: Bank of Japan



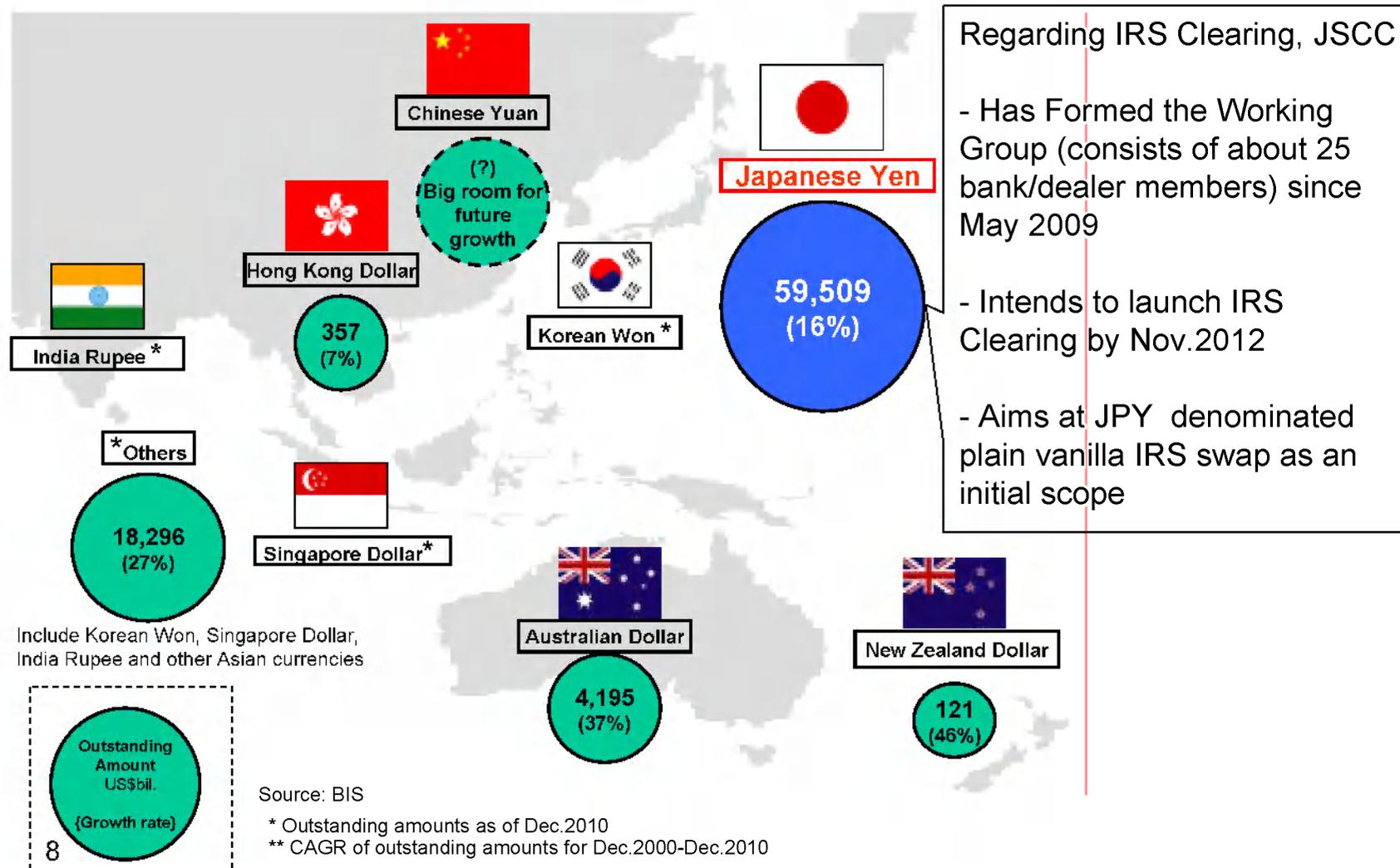
- Total Obligation Assumption Values: JPY 71,284 mil. (As of Sep.22 2011)
- Total Number of cleared Trades: 51

4. CDS Clearing Workflow



- Member firms request for clearing through DS Match. DTCC sends trades data to JSCC on a daily basis.
- After checking clearing conditions, JSCC will terminate original trades and register new trades (between a member firm and JSCC), without forcing member firms to operate with DTCC.
- JSCC will provide member firms with various data and info related to cleared trades, margin requirement, fund settlement, settlement price, etc. via OTC Platform (web-based).
- Collateral management will be handled in the existing clearing system and platform.
- Fund settlement will take place in Bank of Japan, while cash as collateral in commercial banks in Japan.

5. Overview of the IRS market in the Asia-Pacific Region and JSCC's IRS Clearing Initiatives



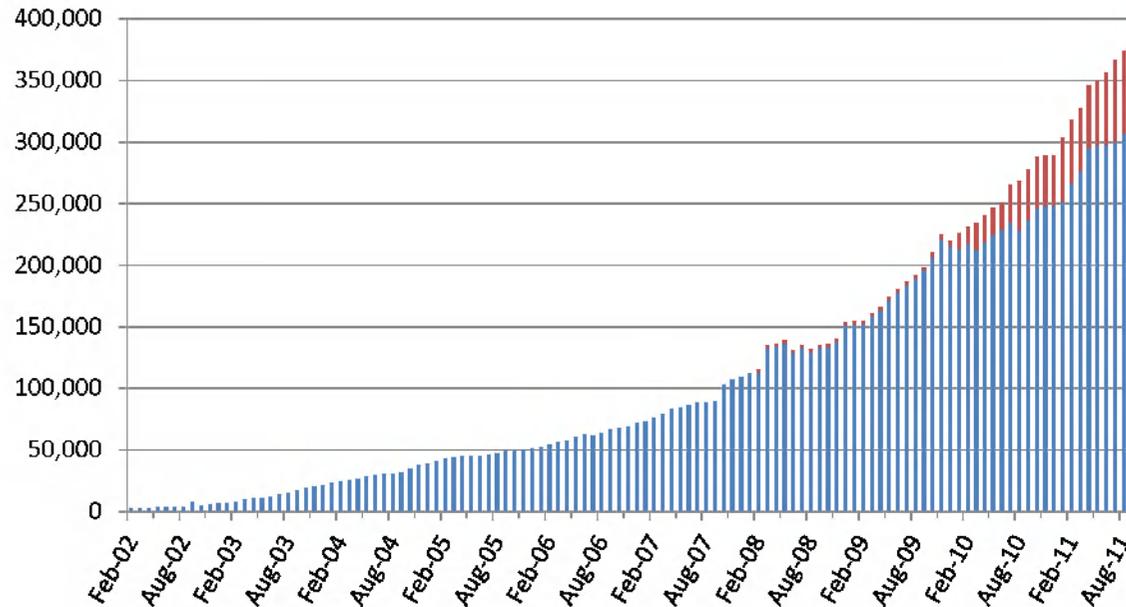
Cleared for Public Release

SwapClear: Summary Statistics & Service Overview



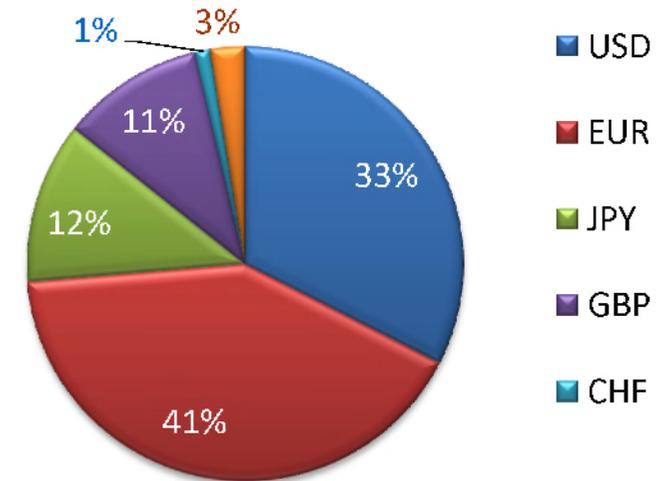
- 1. Service Statistics
- 2. Service Participation & Membership Criteria
- 3. Default Management Process & Experience
- 4. Product Eligibility
- 5. Product & Service Enhancements 2011
- 6. SwapClear Client Clearing Objectives
- 7. ForexClear

SwapClear Notional Outstanding (USD bn)



- SwapClear Notional Outstanding (USD bn sides)
- Cumulative TriReduce Notional Reduction (USD bn sides)

Notional Distribution by Currency



SwapClear Full terminations by Currency since February 2008

Currency	Trade Count (sides)
EUR	279,350
GBP	93,750
JPY	14,638
USD	219,216
Total Sides:	606,954

SwapClear Participation Statistics

- Number of clearing members
- Number of dealers
- Number of members offering client clearing
- Number of live client accounts

31-Aug-11

30-Jun-10

58

28

90

40

36

58

Clearing Member Eligibility

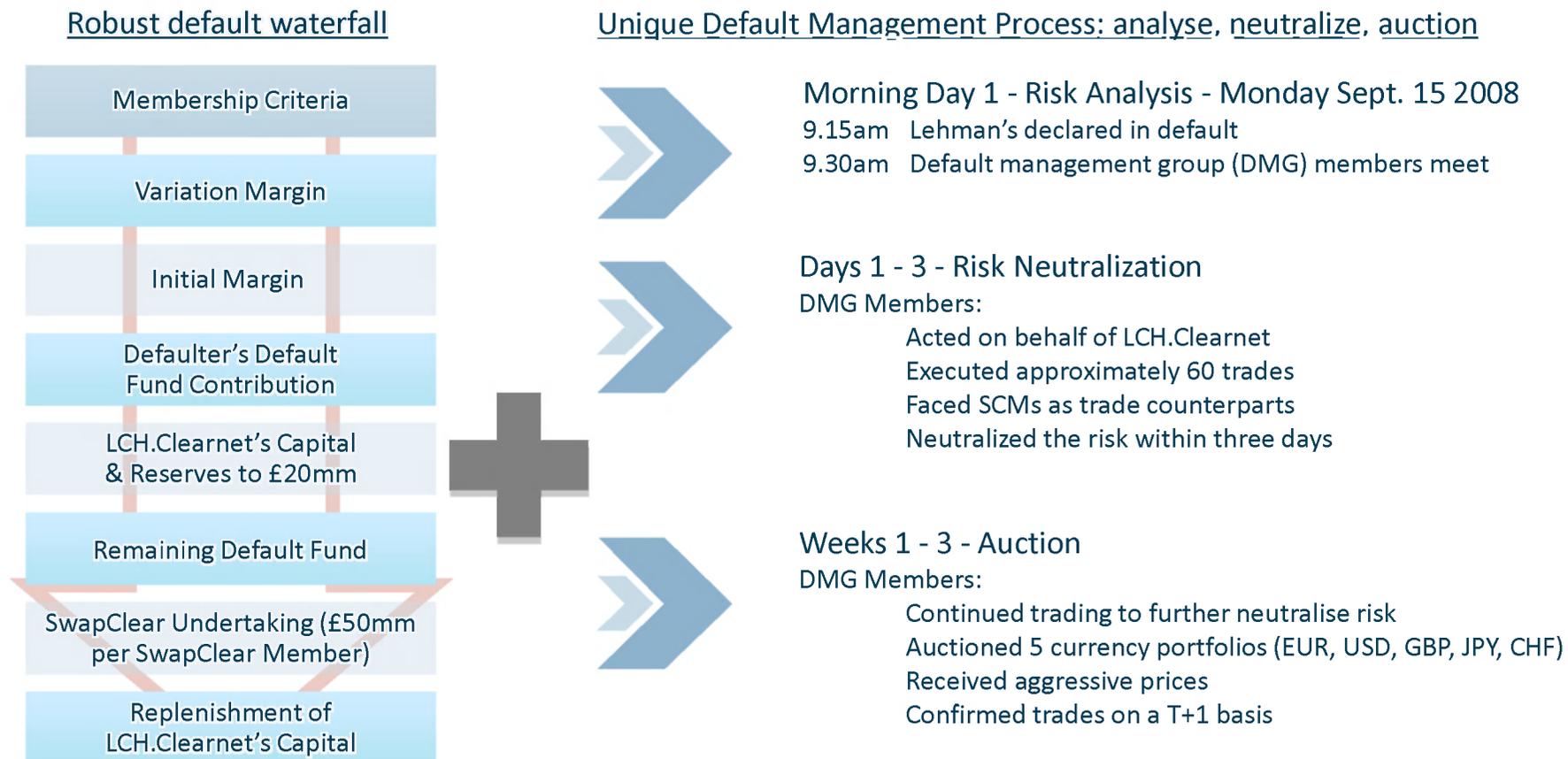
- Membership of SwapClear is based on stringent criteria designed to protect both LCH.Clearnet and other members
- *Only* clearing members may clear trades directly with LCH.Clearnet
- Other firms can benefit from clearing by using an LCH.Clearnet member to access the clearing service

Current Membership Criteria

All SwapClear members must meet the following minimum criteria of eligibility:

- Swap portfolio - Minimum size \$ 1 trillion
- Capital - Minimum \$ 5 billion in clearing member or parent providing guarantee (FCM: \$1 billion)
- Credit rating - Single A or better
- Margin multipliers - Applied if an existing member is downgraded below A
- Default management process - Compulsory participation
- Entry "firedrill" for new members

- SwapClear default managed Lehman's \$9 trillion book (66,390 trades in 5 currencies)
- Only 35% of Lehman's Initial Margin was used across all assets cleared in LCH.Clearnet



SwapClear-eligible OTC Interest Rate Derivatives Product Characteristics			
Currency	IRS	Up to 50 years	USD, EUR, GBP
		Up to 30 years	JPY, CHF, AUD, CAD, SEK
		Up to 10 years	CZK, DKK, HKD, HUF, NOK, NZD, PLN, SGD, ZAR
	OIS	Up to 2 years	USD, EUR, GBP, CHF
Leg type	IRS	FXD vs FLT, FLT vs FLT, Zero Coupon (FXD and/or FLT), Compounding	
	OIS	FXD vs FLT	
Notional Amount	Denomination	No denominations: users are free to customise contract size	
	Schedule	Constant notional amount	
Fixed Leg	Daycount	30/360, 30E/360, ACT/360, ACT/365.FIXED, ACT/ACT.ISDA, 30E/360.ISDA	
Floating Leg	Index	Market benchmarks: LIBOR (USD, GBP, CHF, JPY...), EURIBOR, BAs, Bills	
	Daycount	As per section 6.2.(f) & (g) of ISDA 2006 Definitions	
Date Structures	Effective Date	Spot start, forward start, broken dated (front or back stub), mismatched	
	Roll Date	Monthly, quarterly, semi-annually, annually, IMM, EOM	
	Adjustments	Modified Following, Following, Preceding business day conventions	
	Centres	All major Financial Centre business day calendars	
Additional Payments		Termination fees and Novation fees	

2011 Deliveries to date

System Enhancements

- Full platform migration (risk management)
 - › Customised extension of 3rd party risk management system
 - › Increased capacity and performance
 - › Enables quicker future product roll out
 - › Enhanced Ops, Risk and Default Management tools
 - › Full end-to-end firedrill (default simulation) completed Jun11

Product Extensions

- New currencies: HUF, CZK and SGD IRS out to 10yrs
- Unadjusted fixed and final period end dates
- Multiple financial calendars for fixings

Service Enhancements

- US FCM Client clearing model
- Extension to include US agency debt & CAD cash as margin collateral
- SMART – SwapClear margin simulator

Tri-Optima Trade Compression

- 2011 YTD TriReduce Notional Reduction (USD sides) - US\$26,530 billion
 - › **EUR** – 86,262 sides → US\$11,598 billion notional
 - › **USD** – 114,974 sides → US\$ 12,310 billion notional
 - › **GBP** – 22,658 sides → US\$1,535 billion notional
 - › **JPY** – 14,638 sides → US\$1,087 billion notional

Scheduled 2011

Strategic Initiatives

- Membership Criteria and DMPA re-strike (target delivery early 2012)

Product Extensions

- FRAs in 10 currencies (excluding FCM client activity)
- Variable Notional Swaps in USD, EUR, GBP

Risk Management Enhancements

- Further NPV refinements
 - × OIS discounting extended to JPY
 - × Short end curve fitting
 - × OIS discounting methodology

Service Enhancements

- Development of new 'ClearLink' API to enable;
 - × Direct connectivity to multiple SEF and affirmation platforms (initially Bloomberg and Tradeweb) for the purpose of receiving matched dealer-to-client trades
 - × Direct connectivity to FCMs to facilitate the 'Give up' process
- Risk Free Netting for clients clearing via FCMs
- Opening hours extended to 19:00 EST (midnight London)
- Client to Client and Affiliate activity enabled for FCM model

Tri-Optima Trade Compression

- Further 5 runs planned : EUR, USD, GBP, CHF and JPY

International model

Segregation

Client positions and margin must be segregated from House positions and margin. In addition, individual clients must be able to choose to be legally segregated from all other clients of their clearing member (individual segregated account / omnibus net segregated account).

Portability

Client positions and margin must be portable to its choice of SCM to maintain economic performance

Return of Surplus Collateral

Return of surplus collateral to the underlying client and not to the Insolvency Practitioner/Estate of Defaulted SwapClear Clearing Member.

The legal model must be enforceable along every step of the chain and on a cross border basis. LCH currently have approval in relation to UK, Dutch, French, German, Italian, Irish and Swiss SCMs.

US (FCM) model

Segregation & Portability

Customer positions and margin must be segregated from House positions and margin, and be portable en masse to a receiving FCM, selected by the CFTC / Bankruptcy judge / Bankruptcy Trustee, in compliance with the requirements of the Commodity Exchange Act and applicable CFTC Rules

- **Mandated FX products:** likely to be Options, Non Deliverable Forwards and Non Deliverable Options at 5%, 3% and <1% of market notional respectively
- **Liquidity risk in FX settlement:** market solution required prior to Regulatory approval to clear physically settling FX products
- **NDF / NDO markets:** eleven currencies against US \$ cover >85% of notional, with average duration of 30 days
- **NDF risk management :** straightforward. EMTA procedures used as back-up to Central bank fixings, with appropriate multipliers for sovereign default
- **NDO risk management complex:** average daily volumes of \$20bn, likely to be later delivery
- **FX Swaps / Forwards:** unlikely to be mandated. Some market interest to clear driven by anticipated impact of CRD IV

- **Clearing FX Options**
 - **FX Settlement** Herstatt Risk managed by CLS.
 - **Halt risk:** default during the 2 hour CLS settlement cycle. Low probability. Requires netting to mitigate
 - **Liquidity risk:** managed bilaterally. CCP management would require significantly higher cash margin balances or access to Central Bank liquidity
 - Market wide discussions underway
 - **Risk management** biggest challenges
 - Quality of data for valuation
 - Exercise expiry process
 - Market accepted risk management model

The contents of this document are a broad overview of the SwapClear service and have been provided to you for information purposes only.

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