KPMG

Derivatives reporting in the United States

CFTC Part 43, 45, and 46 reporting

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Contents

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Overview of OTC derivatives reform

The 2008-2009 financial crisis spurred policymakers in the G-20 to commit their countries to reforming domestic and international rules governing the over-the-counter (OTC) derivatives markets. In 2009, the G20 leaders agreed to reforms in the OTC derivatives market to achieve:

— Central clearing through central counterparties (CCPs) to reduce counterparty risk
— Where appropriate, exchange or electronic trading via swap execution facilities (SEFs) of standardized OTC derivatives to reduce operational risk
— Reporting of all transactions to trade repositories to increase transparency
— Higher capital as well as margin requirements for non-centrally cleared transactions to improve market integrity.

These reforms are being implemented globally through legislative and regulatory measures. Reforms in the United States are being carried out under the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) and rulemakings by U.S. agencies, including the Commodity Futures Trading Commission (CFTC), Securities and Exchange Commission (SEC), as well as prudential regulators including the Federal Reserve. The CFTC adopted final rules:

— Part 43 – Real-Time Reporting (RTR)
— Part 45 – Swap Data Recordkeeping and Reporting
— Part 46 – Historic Trade Reporting to the SDR (Swap Data Repositories)

Reporting requirements

On July 21, 2010, President Obama signed into law the Dodd-Frank Act. Title VII of the Dodd-Frank Act amended the Commodity Exchange Act (CEA) to establish a comprehensive new regulatory framework for swaps and security-based swaps. The legislation was intended to reduce risk, increase transparency, and promote market integrity within the financial system by:

i.   Providing for the registration and comprehensive regulation of swap dealers (SDs) and major swap participants (MSPs)
ii. Imposing clearing and trade execution requirements on standardized derivative products
iii. Creating robust recordkeeping and real-time reporting regimes
iv. Enhancing the Commission's rulemaking and enforcement authorities with respect to all registered entities and intermediaries subject to the Commission's oversight.

Title VII grants the CFTC regulatory authority over swaps, except for security-based swaps, which are regulated by the SEC. Under the Dodd-Frank Act, a swap includes all financially settling swaps and options, physical forwards and physical options when facing a non-commercial user, cash settling as opposed to physically delivering and commodities is not in line of their business, and physical book-outs only if they have not been confirmed during scheduling. The OTC derivatives reporting is done electronically and facilities, methods, data standards as provided or required by SDR. The SDRs are newly created central locations for data reporting and recordkeeping that intend to reduce risk through transparency. For SD registration, entities transacting derivatives swaps that exceed a total notional value of $8 billion a year are required to register as SD.

Part 43 Real-Time Reporting

RTR – is to implement a framework for the real-time public dissemination of swap transaction and pricing data, to support the efficiencies and fairness of markets, and increase transparency, which in turn improves price discovery and decreases risk such as liquidity risk. Fields reported are execution timestamp, cleared, price, block trade/large notional, and USI (Unique Swap Identifier) and does not include counterparty.

The four categories of swaps are subject to the mandatory clearing requirement, cleared at a registered derivatives clearing organization (DCO), reported to a registered SDR, and "determined to be required to be cleared" but are not cleared, i.e., uncleared. Because these categories together compose all swaps, the RTR requirements apply to all swaps, including those swaps executed on or pursuant to the rules of a registered SEF or a designated contract market (DCM), and those swaps executed bilaterally between counterparties and not pursuant to the rules of a SEF or DCM (off-facility swaps).

With regard to swaps that are subject to the mandatory clearing requirement and those that are not required to be cleared by a registered DCO but are cleared, the Commission prescribe rules that:

i.   Ensure that publicly disclosed information does not identify the participants
ii.   Specify the criteria for determining what constitutes a large notional swap transaction (block trade) for particular markets and contracts
iii. Specify the appropriate time delay for reporting large notional swap transactions (block trades) to the public
iv.   Take into account whether public disclosure will materially reduce market liquidity.

Reportable swaps for Part 43

Publicly reportable swap transaction

— Any executed swap (cleared and uncleared), that is an arms length transaction between two parties that results in a corresponding change in the market risk position between the two parties
— Price-forming continuation data may include terminations, assignments, novation, exchanges, transfers, amendments, and conveyances of extinguishing of rights that change the price of the swap.

   Exclusion:

— Internal swaps between 100 percent owned subsidiaries (affiliates) of the same parent entity, as this may create an inaccurate appearance of market depth and does not have price discovery or transparency value
— Portfolio compression exercises, as the purpose is to mitigate risk between counterparties.

   Exempt Foreign Exchange (FX) transaction:

— FX transactions that fall under the exemption from the U.S. Department of the Treasury (i.e., physically settled FX swaps and FX forwards both have fixed payment obligations, short-term instruments, and are based on settlement risk rather than counterparty risk) are not reportable.

Reporting timelines for Part 43

— Swap transaction and pricing data are generally reportable 'as soon as technologically practicable' after execution. As per industry standard, a trade is reported within 15 minutes of execution.
— Part 43 provides for time delays for the public dissemination of data of "block trades" and large notional off-facility swaps".
— The swaps pricing data is submitted to the public via DTCC (Depository Trust and Clearing Corporation) public Website as soon as technologically practicable.

Part 45 Swap Data Recordkeeping and Reporting

Part 45 – relating to swap data recordkeeping and reporting requirements for SDR, DCM, SEF, SD, MSP, and swap counterparties who are neither SD nor MSP. Part 45 recordkeeping and reporting requirements reduce systemic risk, increase transparency and market monitoring, and promote market integrity within the financial system.

"Swap creation data" - applicable to new swaps entered into on or after relevant compliance data

— Primary economic terms data (PET data) – all of the terms of a swap matched or affirmed by the counterparties in verifying the swap, including at a minimum data elements listed by the CFTC for each asset class in Appendices to the rule. Fields reported are USI, LEI (Legal Entity Identifier), and core economic details. PET is reported on block level and again after allocations are completed.

— Confirmation data – all the terms of the swap affirmed/matched by the counterparties in confirming the swap.

"Swap continuation data" – applicable to both new swaps entered into on or after relevant compliance dates and "live" swap entered into before the relevant compliance date and required to be reported

— Changes to reported data - during the life of the swap, all data for a swap in SDR to remain current and accurate including with respect to PET data. Reporting of life cycle events is reportable through life cycle event data or snapshot/state data reporting method.

— Valuation data - daily mark to market both counterparties submit for non-cleared, DCO submits for cleared transactions

Data reporting requirements timelines for Part 45

All swap data for a given swap are reportable to a single SDR, which is the SDR to which the first report of required swap creation data is made.

If an SD/MSP is the reporting party, the following applies for swap creation and swap continuation data reporting

Swap creation data (PET data) - Reportable 'as soon as technologically practicable' after execution but no later than:

— For swaps subject to mandatory clearing – 15 minutes

— For swaps not subject to mandatory clearing: credit, rates, FX, and equity – 30 minutes and commodities – 2 hours

— There are longer time periods applied if the non-reporting party is not an SD, MSP, or financial entity and verification of PET data does not occur electronically.

Swap creation data (confirmation data) – Confirmation data reportable 'as soon as technologically practicable' following confirmation but no later than - 30 minutes for electronic confirmations and 24 business hours for non-electronic (i.e., paper) confirmation.

Swap continuation data – is reportable as follows:

— Life cycle event data – same day event occurs (corporate events of the non-reporting party, no later than second business day after day on which event occurred)

— Snapshot/state data – daily and reports the "point-in-time" view of the contract or to report the trade opening. The "point-in-time" view of the contract may include any trade detail changes or updates to the position.

— Valuation data – daily

Part 46 Historic Trade Reporting

Part 46 – rules establish swap data recordkeeping and reporting requirements for pre-enactment swaps and transition swaps. Historic swap reporting rule P46 requires back-reporting of PET of swaps live after July 21, 2010 (bill signed) to February 28, 2013 (reporting go-live) to a registered SDR:

— Dead trades - Swaps already expired on go-live were reported without the concept of reporting counterparty (RCP) and with a trade reference ID

— Live trades - Swaps executed prior to go-live but still open were reported following the RCP and USI convention

Reporting details for Part 46

Reporting for pre-enactment and transition swap in **existence** on or after April 25, 2011:

A. **Initial data report** The RCP shall report electronically to the SDR (or to the Commission if no SDR for swaps in the asset class in question are available) the following:
   a. All of the minimum PET data specified in the Appendix 1 of 17CFR Part 46 rule
   b. Legal entity identifier of the RCP
   c. Internal counterparty identifier or legal entity identifier used by the RCP to identify non-reporting counterparty
   d. Internal transaction identifier used by the RCP to identify the swap
   e. Reporting of required swap continuation data
      i. For each uncleared pre-enactment or transition swap, the RCP must report all required swap continuation data, with exception that when an RCP reports changes to minimum PET
      ii. Swap continuation data reporting is not required for pre-enactment or transition swap that has been cleared by a designated clearing organization
   f. Data reporting for multi-asset swaps and mixed swaps
      i. For multi-asset swap, all data required to be reported to single SDR that accepts swaps in the asset class treated as the primary asset class involved in the swap by the RCP making the first report of required swap creation data
      ii. For mixed swap, all the data required to be reported to an SDR registered with the Commission and to a security-based SDR with the SEC

B. Reporting for pre-enactment and transition swaps **expired or terminated** prior to April 25, 2011, the RCP shall report to an SDR, information relating to the terms of the transaction as was in the RCP's possession on or after December 17, 2010.

C. **Non-duplication** of previous reporting - The initial data report not previously reported and all subsequent data reporting concerning the swap shall be made to the same SDR to which data concerning the swap was first reported prior to the compliance date.

D. **Reporting of error and omission** in previous data
   a. Corrections of errors or omission shall be reported as soon 'as technologically practicable' after discovery of any such error or omission, and the requirement is to report correction in the next daily report of state data and in the same format as it reported the omitted data
   b. Each counterparty to a pre-enactment or transition swap that is not the RCP that discovers any error or omission with respect to swap data reported to an SDR shall promptly notify the RCP of each such error or omission.

E. All data reported for each pre-enactment or transition swap and all corrections of error and omissions in previously reported data for the swap shall be reported to the same SDR to which the initial data report concerning the swap is made.

F. Determination of which counterparty must report is the same as Part 43.

Reporting entities/hierarchy for Part 43, 45, and 46

— For swaps executed on SEF or DCM must report to a real-time disseminator 'as soon as technologically practicable'

— For off-facility swaps, one party to the swap (reporting party) to report data as determined by the following reporting party hierarchy (unless otherwise agreed by the parties prior to the execution of the swap):
   – If one party is an SD and other party is an MSP, SD is the reporting party
   – If no party is an SD but one party is an MSP, MSP is the reporting party
   – If both parties are SD or MSPs, parties to agree who is the reporting party
   – If neither is an SD or MSP, but one party is a financial entity, financial entity is the reporting party
   – In all other cases, parties to agree who is the reporting party

Reportable asset classes for Part 43, 45, and 46

— Interest rate (IRD), foreign exchange (FX), credit (CD), equity (EQ) and commodities (CMD) derivatives

— All asset classes have list of base products and sub-products for purposes of public dissemination e.g., IRD – cross-currency swaps, FX – options, swaps and forwards *(the Commission characterizes "currency" swap as interest rate swap based on the attributes of currency swaps that resemble the structure and operation exhibited by interest rate swaps while in FX swaps the underlying currencies are exchanged by the parties)*

OTC derivatives reporting market perspective

Since 2012, global regulatory reform within the OTC derivatives markets has required the financial services firm to report OTC derivatives transactions to multiple regulators in order to improve transparency and enable regulators to monitor systemic risk in the derivatives market. The financial services firms are under increasing pressure by the regulators to effectively manage risk associated with reporting obligation by reporting in a timely, accurate and complete manner, the highest volume being reported to the CFTC under the Dodd Frank ruling. And their operations, IT, legal, and compliance departments are bearing the brunt of ensuring that regulatory requirements and restrictions are properly addressed and reported.

Implementation: When the reporting of a jurisdiction goes live, these firms report to DTCC all message types as per their respective reporting obligations. For a new reporting jurisdiction, a financial institution conducts strategic implementation, drives industry advocacy in across organization discussion, and provides rule interpretation and guidance on Q&A and functional requirements. Each jurisdiction has different SDR requirements. The reporting requirements include counterparty, position level, trade, desk ID, execution agent, broker details and timeliness, CFTC requires market participants to report swap information upon execution or shortly thereafter to an SDR, which is then responsible for disseminating a portion of that information to the public and regulators. Financial products Markup language Regulatory Reporting Working Group (FpML RPTWG) analyzes reporting requirements and continues to enhance the reporting framework to provide global consistency and publishes a regulatory reporting mapping spreadsheet comparing FpML coverage to the reporting requirements in various jurisdictions. The DTCC Global Trade Repository (GTR) is the industry's provider of choice for global OTC derivatives reporting. The GTR holds detailed data on OTC derivatives transactions globally and is an essential tool for managing systemic risk and providing regulators with unprecedented transparency into this $650 trillion market. The GTR enables users to meet their regulatory reporting obligations wherever they are located, in an open, cost effective and efficient manner via a single platform.

Eligibility business logic: The reporting infrastructure has a business logic that includes eligibility for entity, product, life cycle events of a trade, reporting party, etc., implemented to make a trade eligible for reporting. As the rules and regulations are updated, the reporting logic is updated to reflect these changes. On an ongoing basis, when the reporting logic is changed or not strategically updated, it could impact other areas and this could result in over/underreporting issues. The CFTC has a single-sided reporting party concept, i.e., reporting party of the trade will report to DTCC. DTCC will send acknowledge (ACK) messages to the reporting/submitting party of the trade and negative acknowledgement (NACK) messages that were incorrectly received. DTCC also sends warning (WACK) messages to the RCP with an error reason and error code.

SDR reporting

Derivatives trades are reported electronically to DTCC GTR. Financial institutions use a complex infrastructure/architecture platform that uses multiple systems for derivatives trade reporting. It could be a combination of factories and the trade reporting flows/trade flows through gateway systems like Trace, and gets reported to the DTCC GTR. The trades are booked using front office booking platforms like Trayport, Tap, Liberty, MarkitWire etc. Gateway manages the flow of information between trade systems and DTCC based trade repositories. Some financial firms use a strategic processing system that converts all trade messages to a standard FpML format and sends it to a database to report via gateway to DTCC. Financial institutions use controls framework to ensure global derivatives reporting is complete, accurate, timely, and compliant.

High-level SDR architecture
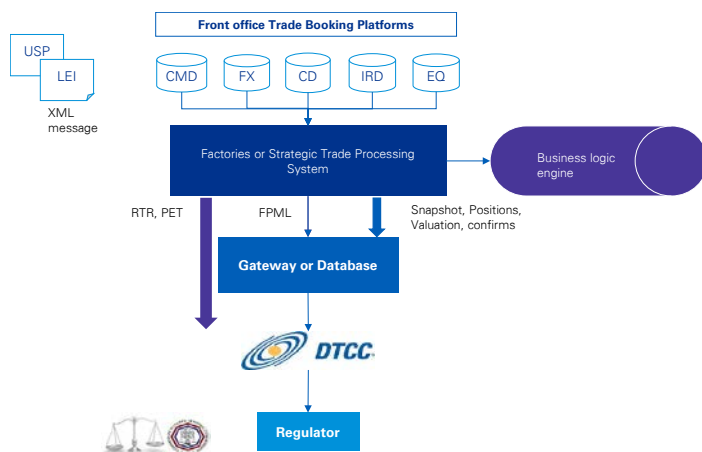
Challenges faced by firms

There are several challenges faced by financial services firms for OTC derivatives trade reporting as follows:

1. Reporting complexity/frequency and timeliness:
   i. **Overreporting** – It could be due to changes in legal advice on product being put in or out of scope after the initial implementation, gap between the rule and interpretation of it that the business requirements have not captured and incomplete testing scenarios during implementation, etc. An example is corporate action on optional dividends may be interpreted as a basic corporate action event and over reported.
   ii. **Underreporting** – It could be due to incorrect understanding of a reportable trade or events on a trade. An example is an FX option exercise to a forward contract to be reported.
   iii. **Incorrect reporting** – This may be due to complexity in rules interpretation or due to the way logic is built in the system, a firm can be incorrectly reporting a trade. An example is RCP logic in a situation where both the counterparties have the same hierarchical status in executing a swap transaction so a complex CFTC product level tiebreaker logic is used to determine RCP.
   iv. **Late reporting** – It may be due to a breakdown in a firm's internal reporting infrastructure or as a result of logic issues, there can be a delay in trade reporting. An example, is an error encountered in the complex infrastructure at a factory level where messages get blocked and not passed on to Gateway, which eventually reports to DTCC.
2. Challenges during implementation of a jurisdiction for OTC derivative reporting:
   i. **Scope creep** – Scope of a particular obligation could be broad and convoluted.
   ii. **Complex products** – Tradables eligible for reporting change as the rule and legal advice changes on reportability of a product from out of scope to in scope or vice versa. The reporting for tradables booked in a structure is complex.
   iii. **Reporting rule exemptions** – Entities (counterparty) have some exceptions to reporting, for example, OTC derivatives contract with a commercial counterparty is out of scope for CFTC reporting.
   iv. **Trade booking complexity** – It occurs, for example, when a block trade is placed and not all client account allocations are known. This results in a suspense account being used and trades booked to suspense account are not reported. Another example is when a commodities (trade option) volumetric contract with variable quantities includes several other factors that make a trade reportable, but all front office trade booking platforms may or may not have the optionality to record this detailed information systematically and make the trade eligible for reporting.
   v. **Transformation errors** – These occur during submission of one or more messages by a user to the system for processing, transmission, generation of reports or for other purposes. There are errors due to moving from customized format to standardized format accepted by DTCC. For example, the integration system could result in error of decimal point when a firm use 10th decimal places instead of industry standard of 6th. A firm may establish incorrect record descriptions message format for submitting records to the system. This is due to improperly formatting or a message containing data elements not conforming to DTCC, resulting in rejection by DTCC.
   vi. **FpML version update** – FpML provides a technical framework for global regulatory reporting requirements. It is an industry standard that reduces costs, increases efficiencies, leads to better data quality and facilitates data aggregation. The current standard, FpML 5.9 Trial Recommendation (June 13, 2016 - Build 5), is used for confirming the details of contracts and post-trade business events. The firms are facing challenges in updating their system with the latest version of FpML used for reporting due to the technology and operations resources needed for change management.
   vii. **User acceptance testing (UAT)** – UAT gets delayed due to environmental or functional (code change) issues and this could impact the tight timeline of implementation. Firms also face limitation in creating testing scenarios and testing data due to several constraints such as time, knowledge, and availability of database for testing scenarios.
   viii. **Data quality/mapping/validation** – Business rule or logic must be revaluated to align with the proposed and final rule. Obtaining daily feeds to certain data sources is a significant operational challenge.
3. **Dynamic nature of regulations** – Regulations can be complicated to understand as rules are frequently amended and rule interpretation of requirements may be reported incorrectly. There are rule uncertainties when the jurisdiction is going first-time live for reporting.
4. **Change management** – Projects will be competing for the same resources and frequent revisions/amendments to the rules results in outdated business requirements.
5. **Business requirements and testing scenarios** – Both are not always complete and accurate due to a number of reasons such as time, knowledge, experience of the business analyst gathering the requirements, and preparing testing scenarios.
6. **Automation limitations for UAT** – Limitations result from a lack of technology resources, inefficient tools, limited test library, and difficulty in finding production examples for a specific testing scenario.
7. **Reference data** – It stores client and product information from client on boarding, Master Agreement, rule reference, and product taxonomy. There are several flags (prime IDs for products, right indicator for compression trades) stored in reference data and when these flags do not flow to downstream systems, it results in inaccurate reporting.
8. **Exception management** – When there are issues in the system, reporting logic, or implementation of rules, a firm could be receiving several NACKs and WACKs messages. Lack of proper tools to monitor the exceptions can lead to large regulatory fines on trade reporting data.

How KPMG can help

KPMG LLP (KPMG) offers a range of services and tools to assist firms with several aspects of OTC derivatives trade reporting. As per KPMG's experience, the right approach could benefit in the following areas:

— **Business requirements and testing framework** – The firm offers a few tools like K-Agile that can enhance capturing requirements, accelerate delivery, increase quality, and reduce delivery risk. The K-Agile tool can visualize and validate requirements using a working model with production data to provide transparency, identify gaps/dependencies, and eliminate miscommunication. K-Agile has the capability of an early issue/defect identification in the testing life cycle by leveraging an expected results model and automated testing of the system in smaller sprints.

— **Business rule engine** – The firm provides a business rule engine that manages regulatory decision processes using pre-defined logic to determine outcomes. As the regulatory rules frequently change this requires logic changes. We can help firms avoid significant fines and penalties for being noncompliant. The leading practice to keep decision logic outside the code as a simple rule change (e.g., product in scope for reporting) can take months of programming to implement, especially when multiple systems must be coordinated, multiple teams deployed in the effort, and testing the code. Derivatives trade eligibility decision logic can be maintained outside the code using various tools KPMG offers like K-Agile, and the firm teams with third-party vendors services such as DROIT, a financial technology firm focused on providing enterprise solutions for OTC derivatives trading processes and provides a platform for compliant pre-trade decision making and post trade compliance reporting.

— **Business decision management and decision logic modeling** – The firm teams with third-party vendors like Signavio to provide clients business decision modeling and decision logic modeling services that can help in making sure the requirements are tested before the code changes have been made. We can assist clients in transforming business through enhanced processes and decisions to successfully implement changes like CFTC regulatory reporting rules. Business decision management helps in rule analysis, successful compliance management, and a firm focus on high-impact decisions, reducing risks, and improving business operations in the long term.

— **Automation of test cases** – KPMG has tools like K-Agile that execute test cases faster, in hours versus days, using automation allowing for a more effective and timely triage. The tools use production data and creates a reusable and sustainable automated test suite for regression.

— **FpML upgrade support for CFTC** – We can facilitate use of FpML by review of implementation to evaluate how FpML compliant a firm is, advise on how to get started (specification) with FpML, support to upgrade to current recommended industry version of FpML, assist with mapping between front-office systems and FpML for across asset classes, and provide training on processing and validating FpML.

— **Project management office (PMO)** – KPMG has PMO experience that can provide project governance, implementation support across products, future phase planning, knowledge management, and traceability. The firm has a subject matter professional (SMP) driven program office with change management capabilities as and when financial rules and regulations are amended and/ or new rules are introduced.

— **Tested methodologies to meet regulatory timeliness** – The firm prepares a project plan, defines project scope, conducts gap analysis study, projects impact assessment, prepares target state design, implements (data feeds, stand up infrastructure, UAT, reports), and monitors and sustains daily reporting as well as data validation.

— **Supporting business and technology transformation** – The firm provides support through all the stages: analysis and design (involves defining scope, preparing business requirements, and design strategy), implementation, and go-live of code changes in the system for business and technology transformation.

— **Eye on regulation** (mapping regulation to business requirements) – We can provide rule decomposition and mapping, requirements gathering, requirements prioritization, change, and release management.

— **Business process reengineering** – KPMG develops new processes and procedures for users to operate in a new environment efficiently. The firm can conduct gap analysis, mapping exercise [e.g., tradable mapping to the International Swaps and Derivatives Association (ISDA) product taxonomy], process development, facilitation of pilot runs, and implementation of those processes and procedures.

— **Delivering a methodology that balances cost, effort, and compliance** – The firm performs quality assurance on requirements and design validation, tests traceability, tests outcome tracking, and releases validation (post production checkouts). We provide testing management strategy by offering end to end (E2E) support as a part of test execution for system integration testing (SIT) and UAT across products and developing the Traceability Matrix tool to streamline the effort. Quality assurance work performed by KPMG can result in reduced compliance cost for clients.

— **Risk mitigation and controls framework** – Proper implementation logic used in the reporting infrastructure can help protect an organization's brand. Enforcement of policy and use of third-party management along with increased support for compliance with industry regulations or laws can also help mitigate risks. The firm can maintain a controls framework to monitor reporting as per the regulations and assist with exception management.

References

Source: CFTC official Website, CFTC Final Rule:

— 17 CFR Part 43 Real-Time Public Reporting of Swap Transaction Data (Federal Register/Vol.77 No.5 Monday, January 9, 2012)

— 17 CFR Part 45 Swap Data Recordkeeping and Reporting Requirements (Federal Register/Vol.77 No.9 Friday, January 13, 2012)

— 17 CFR Part 46 Swap Data Recordkeeping and Reporting Requirements: Pre – Enactment and Transition Swaps (Federal Register Vol.77, No.113 Tuesday, June 12, 2012)

Source: ISDA Conference Material on Fundamentals of Derivative Operations and Trade Processing (October 2015)

Source: CFTC official Website under Law and Regulation, Dodd-Frank Act

Source: CFTC official Website, Regulations of Swap Market (page. 293)

Source: ISDA official Website under functional areas, data reporting, ISDA Reporting Counterparty hierarchy

Source: ISDA official Website under functional areas, data reporting and FpML, identifiers, UPI and taxonomies, ISDA Product Taxonomy

Source: DTCC GTR official Website, DTCC learning GTR

Source: FpML official Website

Source: DROIT official Website

Source: Signavio official Websitetp://www.signa

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