

OFR-FSOC Conference

Panel on Data Challenges

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Mandate on Data Issues

CFTC-SEC 719(b) Study

CFTC Technology Advisory Committee (TAC)

CFTC TAC Subcommittee on Data Standardization

Working Group One: Entity/Product ID

Working Group Two: Machine-readable Legal Docs

Working Group Three: Semantics and Ontology

Working Group Four: Storage and Retrieval

Regulatory – Industry – Technology Solutions to implement DFA

Reports and preliminary recommendations to be presented
in a public meeting of the CFTC TAC on **December 13, 2011**

Working Group One: Entity ID

- A tactical plan is needed so that the industry can prepare for the upcoming required regulatory reporting to the CFTC
 - Deliver 50,000 legal entity identification records that have been cleansed and validated by DTCC/Avox by June 2012
 - Assign Reporting IDs
 - These IDs should be 20 characters in length structured as 18 alpha-numeric characters with 2 check digits
 - Phased assignment of IDs (two or three phases)
 - The Reporting IDs should be assigned following the principles set forth by the industry and regulators – unique, no embedded intelligence, persistent, scalable, free from assignment limitations
- Testing time is needed in advance of implementation of required reporting
 - Recommend that testing should begin at least six months prior to the anticipated reporting implementation date
 - Recommend structuring the testing to have a beta phase, then a live implementation period with a definitive compliance date

WG1: Proposed Testing Approach

- The three stages that underpin this phasing approach are as follows:



- Build/Implementation of Industry Components:

- Connectivity Setup
- Data Standardization and protocols
- Product Definition
- Documentation and Remediation
- Provide 2K Records via FTP Download for Purposes of Initialization

- Mandatory for certain activities/participants. A more formalized, rigorous testing period with appropriate safe harbors. Potential phasing 'tools' are:

- Market Participant Type
- Asset Class
- Price Discovery Contract vs. Risk Management Contracts
- Products within Asset Class
- Timeliness Requirements
- Support CFTC reporting requirements via the creation of a self-registration portal
- Testing period for full implementation

- Full mandatory enforcement (retaining limited safe harbors as necessary/appropriate)
- Implement full infrastructure and operational support

Advantages to Regulatory Bodies

- Satisfies systemic risk objective through enabling earlier implementation for key participants*
- Early insight into potential need for safe harbors*
- Define criteria for stable progression through levels of mandatory compliance*

Advantages To Market Participants

- Appropriate time for markets to build & test key infrastructure components*
- Appropriate time for participants to amend business processes/create new documentation relationships etc*

Working Group Two: Machine-readable Legal Documents

Portfolio Legal Agreements

Requirements Analysis

- Ascertain regulatory intentions.
- Determine scope:
 - of legal agreement (“Legal Agreement”) type;
 - of legal clause (“Legal Clause”) type.

Machine-Readable Representation

- Evaluate the potential of the proposed ISDA Standard Credit Support Annex (“SCSA”) to become the first machine-readable portfolio level Legal Agreement.

Current Legacy Documents

- Determine a pragmatic and progressive path to normalize and represent as data the most critical legal terms from a regulatory perspective.
- As part of a cost/benefit analysis, conduct an industry-wide survey to evaluate the feasibility of such approach and its potential benefits for participants.

Transactional Legal Agreements – Trade and Lifecycle Events

Standardized Products

- Confirm understanding and expectations as they relate to the lifecycle events and their exposure analysis implications.
- Evaluate the state of the industry as it relates to the electronic representation of the Legal Clauses in the cases where portfolio level Legal Agreements do not apply, or are over-written.

Complex and Bespoke Products

- Evaluate possible avenues for an industry-wide algorithmic representation of those products.

WG2: Portfolio Legal Agreements – Legacy Documents

- **The problem**

- Despite the existence of industry standard documentation, the prevailing bilateral negotiation process has resulted in an infinite variety of Legal Clauses that are difficult (but not impossible) to represent electronically. By way of example:

Legal Clause Text	Machine-Readable Data Representation
○ ... is downgraded below A-.	<trigger>BBB+</trigger>
○ ... ceases to be rated at least A-.	
○ ... is downgraded to BBB+ or below.	
○ ... is rated BBB+ or below.	

- **Proposed Approach**

- Evaluate the opportunity to define a progressive path to electronically represent the Legal Clause data that is of most value to regulators.
- To be successful, a pragmatic and realistic approach will need to be adopted, which also takes into consideration a thorough cost/benefit analysis for market participants.
- Initial scope should be well defined and limited. The concepts contained in Legal Clauses are multi-dimensional and involve many data points.

- **Next steps**

- Identify and prioritize a range of Legal Clauses of interest to regulators:
 - Parties – Contracting Party, Credit Support Providers and Specified Entities.
 - Events – Events of Default, Additional Termination Events (Rating/NAV dependencies).
 - Collateral – Thresholds and Eligibility (Rating/NAV dependencies).
- In conjunction with ISDA, develop an industry survey to validate data scope, priority, utility and cost/benefit.

WG3: Semantics and Ontology

- Financial Products Markup Language (FpML)
 - An XML-based **message standard** for the OTC Derivatives industry created by financial institutions and governed by ISDA
 - Based on OTC contractual structures because it is used for trade confirmation
 - ***Open question raised about the ability to use the FpML message standard for description, classification and analytical objectives for OTC transparency and extensibility beyond OTC products***
- Financial Industry Business Ontology (FIBO)
 - A financial instrument and legal entity **ontology** created by financial institutions via the EDM Council, governed by the OMG technical standard process and based on mature industry messaging standards
 - Based entirely on the underlying contract for every financial instrument type and for all legal entities
 - ***Open question on the ease of integration into existing operational infrastructures among both financial institutions and market authorities***
- Semantic Processing
 - A rapidly **emerging technology** used to descriptively represent data and business rules for advanced querying capabilities (i.e. supports inference and allows reasoning about things and relationships)
 - Based on semantic models that are easy to change when assumptions change (reducing cost and improving time to market responsiveness)
 - Extensively used by intelligence, defense, biotechnology and other industries where factors and scenarios change frequently
 - ***Not a recommendation for the OTC rule writing process but does rely on a well structured ontology***

WG3: Next Steps

1. Gap analysis to determine if FpML meets the analytical requirements needed for both regulatory oversight and business process automation. ***If gaps exist, then ...***
 2. Business analysis on augmentation of FpML or use of the Financial Industry Business Ontology (FIBO) standard to fill gaps. **If viable, then ...**
 3. Business case assessment on cost/benefit to industry on the augmentation of FpML or adoption of FIBO for regulatory reporting
- Recommendation Schedule to CFTC TAC
 - FpML gap analysis (first Winter meeting)
 - FpML/FIBO usage business analysis (first Winter meeting)
 - FpML/FIBO business case assessment (second Winter meeting)

Working Group Four: Storage and Retrieval

Source Data:

- OTC and traditional exchange traded/cleared swaps often have different data structures and different protocols
- Standard Formats for data already exist
 - FIX for exchange traded/cleared
 - FpML for most OTC products
- Exotics may need to be full confirms
- What is the best way to combine the OTC and Cleared worlds into a common format to support both, and support movement of products (such as a formerly uncleared swap becoming a cleared swap)?

Storage:

- Data will have to be stored and maintained for a very long time
 - CFTC is proposing a five year retention beyond the duration of the swap.
 - Technology will change over the life of the transaction and this may have implications for the ability to preserve original records
- Data storage methods should not be mandated to a particular technology as each SDR will need the flexibility to select the best solutions to support their current needs and to adapt over time as needs change

Retrieval:

- Public and private data requirements are very different
 - Public data will be standardized and have relatively little information beyond price and product identifier
 - Private information (regulatory data) will have full trade details and life cycle information
- Since regulators need efficient access to data and data analysis it is reasonable to require a standardized API for this retrieval

Summary

DFA Implementation

Moving from Human-readable to Machine-readable

Standards: for entity ID, product ID, messaging/reporting protocols

Adoption of best technological solutions

Innovation and technology companies