

Industry Update on the Consolidated Audit Trail

An industry update on the progress of the Consolidated Audit Trail National Market System Plan presented by the CAT NMS, LLC Operating Committee



April 13, 2017

Agenda

Industry Update

CAT Governance Structure

Thesys as the Plan Processor

CAT Reporting Requirements

Clock Synchronization

Technical Specifications

CAT Reporter Billing

Preparation for Compliance

Industry Outreach and CAT Website

Upcoming Events

Q&A

Industry Update

- On November 17, 2016, the SEC approved the CAT NMS Plan effective on the same date
- On January 17, 2017, the SROs selected Thesys as the Plan Processor. Thesys has begun the process of implementing the CAT. The SRO's and Thesys have come to agreement on commercial terms and have signed the Plan Processor Agreement
- The SROs have formed an Operating Committee (OC) as the governing body of the CAT NMS, LLC
- The SROs selected an industry Advisory Committee (AC) to provide industry input on the decision making processes and operations of the CAT

Overview of the CAT Operating Committee

The Operating Committee and its 8 Member SRO Groups as defined by the CAT NMS Plan:

- serves as the governing body of the CAT
- independently approves all decisions as well as provides review, guidance, and oversight for the overall operations of the CAT
- is responsible for implementing and overseeing the CAT and setting required policies and procedures (security, funding, support, etc.)



BOXSM
O P T I O N S



Overview of the CAT Advisory Committee

The Advisory Committee is comprised of 14 Members and is defined by the CAT NMS Plan as follows:

- serves in an advisory role as representative of the industry to the Operating Committee and attends meetings of the Operating Committee
- advises on the implementation, operation, and administration of the CAT, including items such as technical specifications, reporting functionality, and the possible expansion of the CAT to other securities

Advisory Committee Members:

Bonnie Wachtel – Wachtel & Wachtel

Judy McDonald – SIG

Ronald Veith – JPMorgan Chase

Gregg Berman – Citadel

Casey McMahon – Wolverine Execution Services

Jim Draddy – Jump Trading

John Lassen – TD Ameritrade

Mary Lou Von Kaenel

Professor Larry Harris – USC

Allan Goldstein – Trade Informatics

Brian Frambes – Fidelity

Mehmet Kinak – T. Rowe Price Group

Manisha Kimmel* – Thomson Reuters

Jess Haberman – Fidessa

*Advisory Committee Chair

Introduction to Thesys

- Thesys Technologies, LLC is a market structure technology firm based in New York City and Charleston, SC. We provide high performance trading technology and big data solutions to financial institutions such as broker dealers, exchanges, and regulators
- Thesys has significant expertise in the market, including regulatory applications, big data tools, and high-performance trading
- Among other systems, Thesys built and operates the MIDAS platform, an SEC market data surveillance system

Introduction to Thesys CAT

- Thesys CAT LLC is a wholly owned subsidiary of Thesys which will be acting as the Plan Processor for the CAT system
- Thesys CAT is partnering with IBM to provide network, infrastructure and operational services. Latham & Watkins will act as general counsel for Thesys CAT
- Thesys's vision that drove its CAT bid
 - **Easy** to Report
 - **Useful** for Regulators
 - **Secure** for the Industry

Upcoming Milestones of the CAT

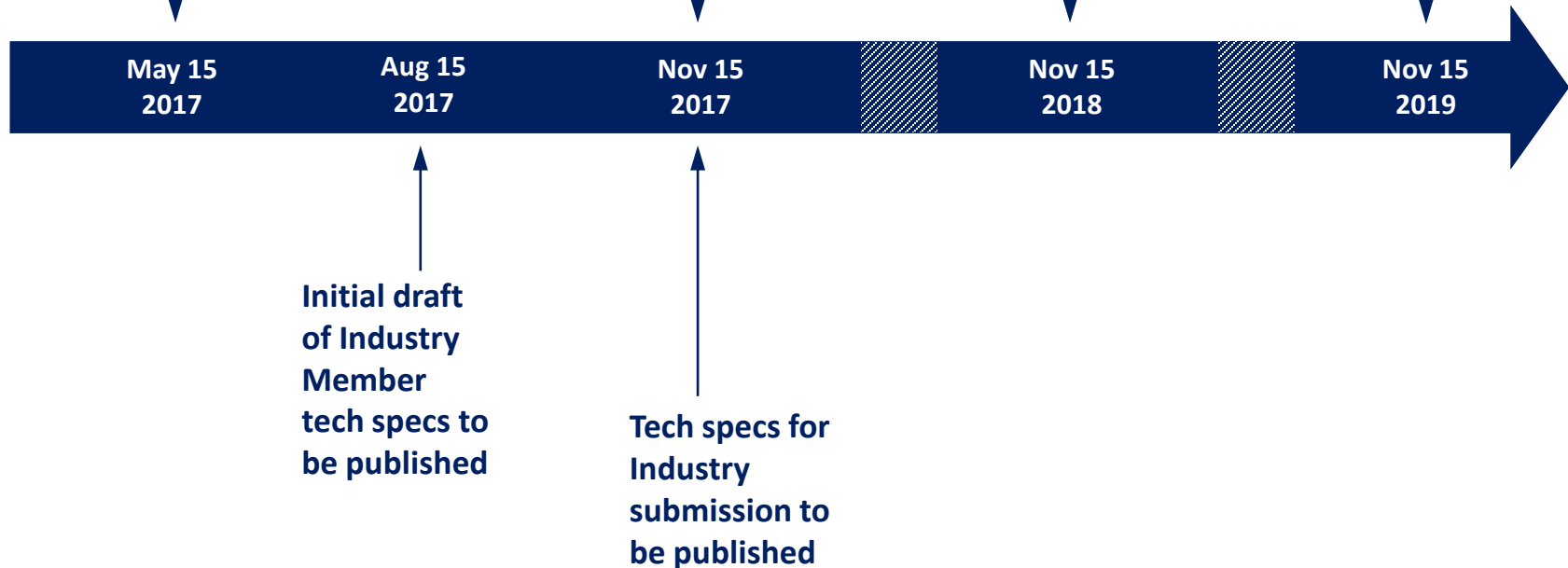
Participants submit to SEC:

- Expansion Document related to additional products
- Assessment of the Clock Sync Standard
- Retirement of Duplicative Systems Filings

Participants begin reporting to the CAT

Large broker-dealers begin reporting to the CAT

Small broker-dealers begin reporting to the CAT



CAT Reporting Requirements

General Requirements

- Equities and Options order life cycle events will be required to be reported at finer granularities than current requirements
- Reporting firms will have to provide internal identifiers for these records to support CAT linkage processes
- Customer-identifying information must be included, which will require reporting firms to locate customer “golden source” data

Reportable Events

- CAT Reportable Events will include:
 - Receipt or origination of an order
 - Routing of an order to another market participant
 - Routing of an order between desks or departments
 - Modifications
 - Cancellations
 - Executions
 - Allocations

Customer Information

- CAT requires the reporting of "Customer Information", which includes the following:
 - Firm Designated ID
 - Account number
 - Account type
 - Customer name, address, and type
 - Customer SSN or TIN
 - Date account opened
 - Large Trader ID (if applicable)
 - Legal Entity Identifier (if available)

Clock Synchronization

Industry Member Requirements

Synchronize respective Business Clocks at a minimum to within fifty (50) milliseconds of the time maintained by the National Institute of Standards and Technology*	March 2017
Synchronize Business Clocks every business day before market open, and check synchronization at pre-determined intervals throughout the business day	Daily
Certify periodically that Business Clocks meet the requirements of the Compliance Rule	Annually
Report to the Plan Processor any violation of the Compliance Rule	Ongoing
Document and maintain synchronization procedures and keep a log of Business Clock synchronizations and the results of the synchronization process	Ongoing

A survey is currently being conducted on behalf of the Participants of the CAT NMS Plan in order to prepare a one-time written assessment of the clock synchronization standards currently in use in the industry. The survey will be available on www.catnmsplan.com.

The SROs greatly appreciate your participation.

Technical Specifications Development

- Initial draft SRO tech specs developed and working sessions with SROs are being conducted
- Industry tech specs will be developed in an iterative process, incorporating feedback from the industry



CAT Reporter Fees and Billing

Funding Model

- Broker-dealer CAT Reporters will be placed into one of nine tiers based on message traffic, and will pay a fixed fee based on their respective tiers
- Execution Venues, including exchanges and ATs, will be placed into one of two tiers each for equities and options based on market share of share volume, and will pay a fixed fee based on their respective tiers
- Fee details will be available in the 19b-4 Fee Filing

Timing and Manner of Payment

Timing	Approx. Q3 2017*
Frequency	Quarterly electronic invoices Terms: Net 30 days
Payment Type	ACH or check

*Dependent on approval of Fee filing

Preparation for CAT Reporting

Broker-dealers should start to:

- Understand the impact the CAT reporting requirements will have on their trading, reference data, and reporting environments
- Define readiness and planning efforts
- Determine budgets
- Establish CAT Reporting governance structures
- Consider compliance strategy (tactical versus strategic)

Industry Outreach Program

Industry Outreach Program:

- Informational webcasts and updates
- In-person events
- Publishing of FAQs
- Newsletters
- Helpdesk up by May '17
- For questions please reach out to catnmsio@deloitte.com

CAT NMS Plan Website:

- CAT NMS public website (www.catnmsplan.com) features:
 - Contact information
 - User guides and reporting guidance
 - Status updates
 - Email alerts and RSS feeds
 - Onboarding procedures*
 - Technical specifications*
 - Security components*

*Content to be included in future phase of the website

Upcoming Events

- SIFMA Operations Conference and Exhibition: **May 8-11, 2017**
- Next CAT Industry Call and WebEx: **July, 2017**

Questions?