

## **MEMORANDUM**

**TO:** File No. 4-698, Notice of Filing of the National Market System Plan Governing the Consolidated Audit Trail

**FROM:** Jennifer Colihan  
Division of Trading and Markets

**DATE:** October 26, 2016

**RE:** Staff meeting with the Financial Information Forum (FIF)

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On October 5, Commission staff met with representatives of FIF and others regarding the proposed National Market System Plan Governing the Consolidated Audit Trail.

Commission staff in attendance included: from the Division of Trading and Markets, David Shillman, Associate Director, Devin Ryan, Special Counsel, Rebekah Liu, Special Counsel, Jennifer Colihan, Special Counsel, Leigh Duffy, Special Counsel, John Lee, Special Counsel, Ted Uliassi, Special Counsel, and Steven Samson, CAT Program Manager; and from the Division of Economic and Risk Analysis, Claire O'Sullivan, Attorney-Adviser. Amy Edwards, Assistant Director from the Division of Economic and Risk Analysis, participated telephonically.

FIF representatives in attendance included: Marylou Vonkaenel, Managing Director, William Herbert, Program Manager and Thomas Jordan, Advisory Committee Chair. Also in attendance were: David Emero, Goldman Sachs, Vice President; Viktor Grinberg, Deutsche Bank AG, Director, Compliance and Regulatory Technology, Jess Haberman, Fidessa, Senior Vice President, Compliance; Deborah Mittelman, UBS, Executive Director.

FIF submitted the attached document.

Attachment



# CAT NMS Plan FIF Recommendations

October 5, 2016

Financial Information Forum  
[fifinfo@fif.com](mailto:fifinfo@fif.com)

# Executive Summary



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FIF members support Reg NMS Rule 613 for Consolidated Audit Trail

- Improved oversight leads to investor confidence
- Consistent reporting requirements and elimination of various regulatory reporting systems/rules will ease compliance burden and reduce expense

FIF has fostered a collaborative partnership with the SROs through active participation in the Development Advisory Group (DAG)

- Major contributor to the content of the Exemptive Relief requests
- FIF surveys produced qualitative and quantitative data to support Plan recommendations
- Aspects of the proposed CAT NMS Plan and selection process incorporated FIF feedback

FIF members highlight key concerns in certain areas related to Plan implementation

- Some not addressed in the proposed Plan or FIF is not satisfied with the proposal
- Several require additional action on the part of the SROs or the Commission (e.g. Proposed Plan Amendments, Open/Close Indicator)

Topics for discussion today:

- Implementation Schedules
- Retirement Plans and Exemption from Duplicative Reporting
- Error Rates and Error Correction Timeframes
- Clock Synchronization
- Information Not Currently Required to be Captured by Broker-dealers
- Security
- FIF Requests for SEC Action

# SRO Agreement & Remaining FIF Concerns



## **FIF Encouraged by SROs' Response to Comments**

- SROs agree Customer Identifying Info is required on customer definition only (Exemptive Relief Requests)
- SROs recommend the SEC clarify Rule 613 that Open/Close Indicator should not apply to equities transactions, nor to options transactions in which indicator is not captured today
- SROs' Plan reflects achievable clock offset/timestamp requirements
- SROs recognize the allocation process is a manual event and "Second" timestamp requirement should apply
- SROs will monitor customer information field correction requirements to decide if prioritization is appropriate
- SROs assure the industry that appropriate support for reporters will be available
- SROs concur that a robust set of testing, validation and error correction tools for CAT Reporters is critical
- SROs commit to investigate a 24x7 test environment
- SROs will expand the Advisory Committee and include a service bureau

## **FIF Members' Key Concerns**

- Implementation Schedule not realistic, puts Rule 613 milestones at risk
- Many rules/interfaces deferred to bidder; industry will have no visibility until final specifications are published
- Exemption from duplicative reporting, retirement of redundant regulatory systems
- Establish initial targets for error rates based on measurement
- Error correction timeframe not achievable
- Reduce clock synch management overhead
- Concepts addressed in CAT Plan/Rule 613 that rely on information not currently required to be captured
- Bulk extraction by regulators represents a security risk because regulator systems housing data are not covered under CAT Plan

# FIF Concern: Implementation Plan



## ■ **Insufficient opportunity for industry input**

- Many decisions will be left to the selected Plan Processor with no plan for industry collaboration (should be broader than Advisory Committee and more transparent)
- Timeframe allotted for technical specification doesn't allow for multiple iterative review cycles

## ■ **Insufficient testing time and test tools**

- Six months is inadequate time to validate the scope of functionality included in Phase 1, especially for service bureaus/vendors which require a two stage test process
- No commitment or specificity on test tools (e.g., pre-validation tools) have been provided

## ■ **Unrealistic implementation schedule**

- Should be verified and adjusted (if needed) upon completion of technical specifications
- Industry reporting should be phased based on "OATS" / "Non-OATS" Reporters – not "Large" and "Small" Industry Members

## ■ **Accelerate specification and test phases**

- Without adjustment to schedule, checkpoints will likely be missed with no room to adjust schedules, forcing slip of Rule 613 milestones

## ■ **Risk mitigation strategies should be considered from the onset of the project**

- Progressive milestones should be tied to user acceptance criteria
- Staging of functionality



# CAT Technical Specifications



## **FIF Issues**

- CAT Reporter specs developed after Participant spec and concurrent with Participant reporting will expose CAT Reporter interfaces to constraints of Participant interfaces already implemented
- Insufficient time to develop order data and customer info specs and have 2 iterative reviews
- Customer Information Spec completed six months before Industry member reporting – insufficient time to develop and test this complex new interface and process

## **FIF Recommended Solutions**

- Start CAT Reporter specifications (both order and customer info specs) earlier, allowing concurrent development of Participant and CAT Reporter specs
- Provide a 6 month collaborative specification cycle, with 2 iterative reviews
- Assess Implementation Schedule based on Technical Specification
- Expand milestone for Quote API spec, allowing a 3 month develop/publish cycle with one iterative review

## **FIF Request for SEC Action**

- Revisit SRO-proposed Implementation Schedule – current Plan not optimal and too risky
  - Call for acceleration of technical specifications and testing windows, else checkpoints will likely be missed with no room to adjust schedules, forcing slip of Rule 613 milestones
  - Require industry input/comment prior to publication of Final Specs (major policy rules are not included in Plan but deferred to bidder)
  - Ensure development/test plan milestones can be adjusted following publication of Final Specs

# CAT Development and Test Phase



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## **FIF Issues**

- CAT connectivity requirements published concurrent with start of CAT test allows no time to prepare for testing
- Test environment not available soon enough in the development cycle
- CAT NMS Plan provides insufficient time to thoroughly test the software

## **FIF Recommended Solutions**

- Accelerate and expand Development and Test Phases
- Publish CAT connectivity requirements 3 months prior to CAT test start
- Accelerate availability of test environment, allowing 12 months' access to test environment
  - CAT functionality can be staged into test environment to accommodate earlier test start
- Define a “production-like” test in last 3 months of CAT test to allow testing of linkages by CAT Reporters with production data and define/execute a certification test during last 3 months of CAT test
- Develop test tools that will reduce CAT Reporter cost as well as ensure better quality test results during initial and regression testing (e.g., pre-validation of CAT reports)
- Phase implementation with Group 1 current OATS reporters, Group 2 current non-OATS reporters

## **FIF Request for SEC Action**

- Require risk mitigation strategies and relevant criteria for user-acceptance to be incorporated into the Plan
- Redefine Group 1 and Group 2 Industry Reporters as “OATS” / “non-OATS” reporters

# FIF Concern: Duplicative Reporting



## FIF Issues

- Analysis of duplicative systems is not required to be completed until 3 years after effective date
- No target dates are included for retirement of any of these duplicative systems
- Rule 613 calls for both “a timetable for .. elimination” and surveillance based on CAT by T+14
- ***Duplicative reporting is burdensome and costly – Cost Study assumed earlier retirement***

## FIF Recommended Solutions

- Participants must clearly identify “requirements” needed to allow for retirement and incorporate identified requirements into initial spec and Phase 1 of CAT
- Participants should test CAT data for regulatory reporting purposes during first 6 months of CAT reporting (Trial Period)
- Firms that meet Retirement Error Rates should be exempt from duplicative reporting.
- Provide tools to SROs (e.g., CAT to OATS converter for merge of CAT and OATS data during transition)

## FIF Requests for SEC Action

- Require analysis for all high priority duplicative (e.g. OATS, Large Trader, EBS) systems/rules to be completed prior to development of CAT technical specs for Industry Reporters
- Any new SRO requirements must be incorporated in CAT specs
  - Declare a moratorium on changes to existing regulatory reporting systems
- Require duplicative systems to quickly validate their systems with CAT data during Trial Period
- Allow exemptions from duplicative reporting until full retirement (subject to regulatory filings, etc.) of SRO reporting systems is possible



# FIF Concern: Error Rates and Error Correction Timeframes

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FIF supports the drive for improved error rates and reduced error correction timeframes.

## **FIF Issues**

- However, setting error rates and error correction timeframes with no demonstrated ability to meet these targets does not serve regulators' goals if not achievable
- Analyses for determining Error Rate and Error Correction Timeframe are flawed
- Given that some errors will require software changes to correct, it is unlikely that a 48 hour window can be achieved, making the process more risky
- Proposed Plan provides no specificity on tools and support that will be available to assist the CAT reporter to verify, submit and correct CAT reports

## **FIF Recommended Solutions**

- Base initial Error Rate on measurements during 6-month Trial Period
- Error Rates should be calculated on post-correction data
- Current OATS 5-day correction timeframe should be used until CAT System and CAT Reporters can demonstrate that a shortened error correction timeframe is achievable

## **FIF Requests for SEC Action**

- Require that the process to measure error rates be transparent to industry; that is, set out to reflect test results and allow industry comment
- Require similar transparent process for error correction timeframe, reduce timeframe only after it can be demonstrated that CAT Reporters can meet the targets
- Allow extended timeframe for corrections that require software changes; adherence to SDLC standards
- Limit penalties to only one system (CAT or duplicative system)

# FIF Concern: Clock Synchronization



FIF agrees with the current CAT NMS Plan's clock synchronization requirements (supported by Industry Cost Studies) which include:

- Millisecond level time stamps and 50 millisecond clock offset for electronic order events
- Second level time stamps and clock offset for manual order events (and allocations)
- The “pattern or practices” approach for compliance with clock synchronization requirements

## **FIF Issues**

- A more granular clock offset or time stamp would be impossible to implement by Feb 2017, and very costly (reduction in offset/change in granularity could take up to 3 years, need sufficient lead time)
- FINRA and CAT clock synchronization and clock management requirements should be uniform
- Managing clock synchronization requirements is costly, some will not enhance regulatory oversight

## **FIF Recommended Solutions**

- Maintain the clock offset and time stamp requirements currently set forth in proposed CAT NMS Plan
- Clarify that logging is only required for clock synch exceptions, consistent with “pattern or practice” approach; clock synch management should not be required outside of CAT Reporting hours
- Time stamps should not be used as the sole arbiter of sequencing

## **FIF Requests for SEC Action**

- Maintain the current CAT NMS Plan clock synchronization requirements; clarify logging requirements; establish times when clock synchronization management is required
- Conduct study to determine technical limits on time stamps for sequencing and develop other methodologies, including context, to assist in sequencing

# FIF Concern: Data Not Currently Required to be Captured by Broker-dealers



## **FIF Issues - Open/Close Indicator**

- SEC discussion in proposed Plan filing suggests the Open/Close Indicator was intended for all securities
- Open/Close Indicator on Equities is not captured today
- To implement, significant process changes and regulatory rule filings would be needed
  - Firms do not have access to the information required to independently identify or validate an Open/Close condition for their customers whose security positions are not maintained at the firm
  - To include this data element would involve parties other than CAT Reporters, such as OMS/EMS vendors and customers with proprietary OMS systems

## **FIF Issues – Timestamp on Allocations/Workflows**

- The point at which a time stamp must be captured for the CAT Allocation Report is not defined in the Plan and has been deferred to the bidder
  - The allocation process is not standardized across the industry
  - The only common point of processing within the different allocation flows is at point of booking the trade for the allocation
  - FIF believes that the regulatory concerns raised by the SEC will not be satisfied with capturing a time stamp at that common point
- To detect allocation fraud requires access to information flows beyond the reach of the broker/dealer

## **FIF Requests for SEC Action**

- Clarify Rule 613 so that Open/Close Indicator should not apply to equities, nor to options transactions in which the open/close indicator is not captured pursuant to current industry practice (e.g., non-market maker options transactions)
- Postpone the requirement for timestamps on allocations in CAT Phase 1 until a study can be conducted to map allocation flows and determine how best to secure the data needed for regulatory oversight



# FIF Concern: Security



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## FIF Issues

- Regulator extraction of **any and all** CAT data represents a large security exposure, primarily because security controls of Regulator systems are not included in scope of CAT NMS Plan. The Regulator systems are unlikely to follow the rigor established for CAT system in CAT NMS Plan. It represents a security exposure for industry.

## FIF Recommended Solutions

- Restrict regulator access to prevent extraction of CAT data (except to facilitate retirement of duplicative systems). Regulators can use “sandbox” in CAT for queries and analysis.

## FIF Requests for SEC Action

- Restrict regulator access from extracting CAT data until controls and oversight are established that regulator systems are protected as effectively as CAT



# FIF Requests for SEC Action



- Approve Exemptive Relief Requests as submitted with clarification on Customer Identifying Information
- Revisit SRO-proposed Implementation Schedule – current Plan not optimal and risky
  - Require industry input/comment prior to publication of Final Specs (major policy rules not included in Plan but deferred to bidder)
  - Set development/test plan milestones following publication of Final Spec
  - Require risk mitigation strategies and relevant user-acceptance criteria to be incorporated into the Plan
- Redefine Group 1 and Group 2 Industry Reporters as “OATS” / “non-OATS” reporters
- Require SROs to establish regulatory reporting requirements prior to development of technical specifications for CAT reporters
- Impose a moratorium on SRO changes to existing (duplicative) reporting systems
- Grant exemptive relief from duplicative reporting when low errors rates are met (firm-specific or industry-wide)
- Establish initial targets for error rates based on measurement, post-correction and resubmission
- Review error correction timeframes for reasonability and set achievable expectations
- Reduce clock synch management overhead, examine limitations of timestamps for sequencing
- Clarify Rule 613 to explain that Open/Close Indicator should not apply to equities transactions, nor to options transactions in cases where the indicator is not captured today
- Postpone the requirement for timestamps on allocations in CAT Phase 1 until a study can be conducted to map allocation flows and determine how best to secure the data needed for regulatory oversight
- Prevent security risks caused by SROs’ systems housing data not protected by the CAT System

# FIF Member Meeting Participants

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- David Emero, Goldman Sachs, Vice President, Regulatory Operations
- Viktor Grinberg, Deutsche Bank AG, Director, Compliance & Regulatory Technology
- Jess Haberman, Fidessa, Senior Vice President, Compliance
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