



CAT Implementation and Retirement Schedule

Issues and Possible Solutions

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Executive Summary

- FIF appreciates inclusion of implementation schedule details in CAT NMS Plan giving insight into SRO priorities and thinking.
- FIF believes the current CAT NMS Plan schedule is unrealistic, risky and not optimized.
- FIF has identified specific issues in the following areas: Retirement Schedule, Specifications, Development and CAT Test, Critical Dependencies. Solutions are offered for consideration.
- FIF recommends that alternatives be explored to revise schedules which respect Rule 613 milestones but with the goals of reducing risk to the industry and maximizing resource utility.
- FIF specifically requests:
 - *Acceleration* of the CAT Reporter implementation schedule to allow more time and ensure better quality for specifications, development and test.
 - Definition of acceptance criteria for incremental milestones to ensure good quality throughout implementation cycle.
 - Scheduling earlier retirement of duplicative regulatory reporting systems to result in greater consistency of surveillance data and reduced costs.
 - Validation of all CAT environments (development, test) to ensure optimal security prior to any external access and on-going.
- Additional fundamental risk mitigating strategies are suggested for consideration now or when problems arise.

Retirement Plan

Areas of Concern

- Analysis of duplicative/partially duplicative/non-duplicative systems/rules is not required to be completed until 3 years after effective date
- No target dates are included for retirement of any of these systems
- Rule 613 calls for “a timetable for .. elimination..” and phase in/out plan
- Duplicative reporting is especially burdensome and costly for CAT Reporters
- CAT Reporters answered Cost Study with assumption of earlier retirement

Recommended Solutions

- Require analysis for all high priority duplicative (e.g. OATS, EBS, Large Trader) systems/rules be completed during CAT NMS Plan comment period for input to Plan Processor and industry review
 - Participants must clearly identify “requirements” needed to allow for retirement
 - Incorporate identified requirements into initial spec and Phase 1 of CAT
- Provide adapters to translate CAT data to other regulatory reporting formats
- Require Participant testing of CAT data for regulatory reporting purposes during first 6 months of CAT reporting
- Assuming accurate reporting to CAT, allow exemptions from duplicate reporting until full retirement

CAT NMS Plan		FIF Proposal		Analysis of Duplicative, Partially Duplicative and non-duplicative Regulatory Reporting Systems/Rules
Start	End	Start	End	
	T+36 to T+42	Now	Comment period end	Documentation of all functional requirements and data elements identified that allow retirement of high priority duplicative, partially duplicative and non-duplicative regulatory reporting systems/rules
		T+24	T+30	Participants with High priority duplicative/ partially duplicative regulatory reporting systems assess CAT data for use in regulatory reporting
		T+30		Firms meeting reporting and quality criteria granted exemptions from reporting to high priority duplicative reporting systems until retirement can be approved

Specifications

Areas of Concern

- Insufficient time to develop order data spec and have 2 iterative reviews
- CAT Reporter specs developed after Participant spec and concurrent with Participant reporting will expose CAT Reporter interfaces to constraints of Participant interfaces already implemented
- CAT Reporter order data and customer info specs developed sequentially yet these two functions are inter-related

Recommended Solutions

- Start CAT Reporter specification earlier allowing concurrent development of Participant and CAT Reporter specs
- Develop CAT Reporter order data and customer info specs concurrently
- Provide a 6 month collaborative spec cycle, with 2 iterative reviews
- Expand milestone for Quote API spec, allowing a 3 month develop/publish cycle with one iterative review

CAT NMS Plan		FIF Proposal		Specifications
Start	End	Start	End	
T+2	T+6	T+2	T+6	PP produces Participant Technical Specs for order and MM quote data
T+9	T+12 (Order)	T+2	T+8	PP produces Industry Member Technical Order & Customer info Specs with 2 iterative draft reviews
	T+18 (Customer)	T+2	T+8	PP produces Industry Member Technical Order & Customer info Specs with 2 iterative draft reviews
	T+18	T+9	T+12	Participants produce Quote Protocol API spec with 1 iterative draft review

CAT Development and Test Phase

Areas of Concern

- CAT connectivity requirements published concurrent with start of CAT test allows no time to implement requirements
- CAT NMS Plan provides insufficient time to thoroughly test the software
- To accommodate 3rd party providers/service bureaus, additional time is needed with CAT test environment to allow these Data Submitters to first develop/test their services and then enable their customers to test with new services

Recommended Solutions

- Publish CAT connectivity requirements 3 months prior to CAT test start
- Accelerate availability of test environment to earlier in cycle, allowing 12 months of access to CAT 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
- Define and 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)

CAT NMS Plan		FIF Proposal		CAT Development and Test Phase
Start	End	Start	End	
	T+18 (prod)		T+9	Publish connectivity requirements for CAT test env. with production and DR to follow
		T+9	T+15	Plan Processor and Industry members develop/internal test of Customer info, Order Data and Options Quote sent time
T+18	T+24	T+12	T+24	Plan Processor test environment available for CAT Reporter testing
T+21	T+24	T+21	T+24	CAT NMS Plan – Plan Processor plans specific testing dates for Large Industry Members FIF Proposal – “Production-like” test for CAT Reporters and Plan Processor and certification testing
T+23 T+24		T+24		CAT NMS Plan – Large Industry member start reporting customer info (T+23) and order data (T+24) FIF Proposal – Large (and voluntarily Small) Industry member start reporting customer and order date (T+24)

Areas of Concern

- 3rd party vendors/service bureaus and correspondent clearing firms with large and small industry member clients must support 2 regulatory reporting procedures until all industry members start reporting to CAT
- CAT reporting linkages will be incomplete for 12 months for large industry members that transact business with small industry members

Recommended Solutions

- Allow voluntary reporting by small industry members concurrent with large industry member reporting.
- To encourage small industry members to report early, provide a 12 month grace period on compliance penalties

Areas of Concern

- Each of the milestones have dependencies on preceding and successor milestones. There is no definition of acceptance criteria within implementation schedule to ensure that one milestone completes with sufficient quality to ensure that succeeding milestones are not hampered with poor quality and not complete successfully or on time
- CAT NMS Plan Implementation Schedule does not include a milestone when CAT must have all security related protections in place and validated
- No mechanism to address implementation schedule delays

Recommended Solutions

- Define acceptance criteria for incremental milestones that establish what needs to be completed and the quality and security required at each milestone
- Define a milestone when CAT, as a Reg SCI system, will have security protections validated prior to external accessibility
- Implementation schedule should be flexible to allow changes in milestones so that corrective actions can be made when acceptance criteria have not been met, including the adjustments to the CAT NMS Plan or Rule 613 if necessary

Other Risk Mitigating Strategies

To further reduce risk, other strategies are suggested for consideration now or at a later point if difficulties are encountered with the schedule:

- Merge large and small industry member development cycles and start of reporting, potentially reducing Plan Processor workload and improving the completion date of all reporting, allowing earlier retirement of duplicative regulatory reporting systems
- Define a “Pilot Program” with volunteer CAT Reporter firms for early validation of Plan Processor readiness
- Stage implementation by asset classes (e.g., equities in Phase 1, options in Phase 2)
- Defer clock sync implementation timing to be coincident with reporting

Dependencies and Acceptance Criteria

- Monitor/enforce objective acceptance criteria for Plan Processor in managing dependent milestones to deliver a high quality, secure system

Summary of Key Points

- Acceleration of the CAT Reporter implementation schedule to allow more time and ensure better quality for specifications, development and test
- Scheduling for earlier retirement of duplicative regulatory reporting systems to result in greater consistency of surveillance data and reduced costs
- Validation of all CAT environments (development, test) to ensure optimal security, prior to any external access and on an on-going basis
- Definition of acceptance criteria for incremental milestones to ensure good quality and security throughout implementation cycle
- Flexible implementation schedule that permits adjustment to milestones based on meeting of dependencies and acceptance criteria
- FIF proposed alternative schedule, while not optimal, maintains Rule 613 milestones. Further risk reduction strategies could be explored to achieve optimal results

Appendix - Sample Alternate Schedule (1 of 2)

This schedule adheres to the Rule 613 milestones, and while not optimal, does improve on the CAT NMS Plan schedule by providing more time for Industry Member specification, development and test phases. Please note: implementation milestone dates should be contingent on successful completion of critical dependency tasks.

Date				Task
CAT NMS Plan		FIF Proposal		Shaded tasks indicate critical importance
Start	End	Start	End	
Analysis of Duplicative Regulatory Reporting Systems/Rules				
	T+36 to T+42	Now	Comment period end	Documentation of all functional requirements and data elements identified that allow retirement of high priority duplicative, partially duplicative and non-duplicative regulatory reporting systems/rules and retirement plans
Approval of CAT NMS Plan and Bidder Selection				
	T		T	Approval of CAT NMS Plan = Effective Date
	T+2		T	Selection of PP
		T+2	On-going	Build and validate a secure CAT environment
Participants – FIF makes no recommendation to alter the Participants' Schedule				
T+2	T+6	T+2	T+6	PP produces Participant Technical Specs for order and MM quote data
	T+4		T+4	Clock Synch for all (or when required for reporting)
T+12		T+12		Participants start reporting
T+14		T+14		Participants implement surveillance system using CAT data

Appendix - Sample Alternate Schedule (2 of 2)

Date				Task
CAT NMS Plan		FIF Proposal		
Start	End	Start	End	
Large Industry Members				
T+9	T+12 (Order)	T+2	T+8	PP produces Industry Member Technical Order & Customer info Specs with 2 iterative draft reviews
	T+18 (Customer)	T+2	T+8	PP produces Industry Member Technical Order & Customer info Specs with 2 iterative draft reviews
	T+18	T+9	T+12	Participants produce Quote Protocol API spec with 1 iterative draft review
	T+18		T+9	Publish connectivity requirements for CAT test env. with production and DR to follow
		T+9	T+15	Plan Processor and Industry members develop/internal test of Customer info, Order Data and Options Quote sent time
T+18	T+24	T+12	T+24	Plan Processor test environment available for CAT Reporter testing
T+21	T+24	T+21	T+24	CAT NMS Plan – Plan Processor plans specific testing dates for Large Industry Members FIF Proposal – “Production-like” test for CAT Reporters and Plan Processor
T+23		T+24		Large Industry member start reporting customer information data to CAT
T+24		T+24		Large Industry member start reporting order data to CAT Optionally – small industry members can start reporting
		T+24	T+30	Participants with High priority duplicative/ partially duplicative regulatory reporting systems assess CAT data for use in regulatory reporting
		T+30		Firms meeting reporting and quality criteria granted exemptions from reporting to high priority duplicative reporting systems until retirement can be approved
Small Industry Members – no change in schedule				

FIF Member Meeting Participants



- Erica Green, FOLIO*fn*, Inc., Vice President & General Counsel
- Viktor Grinberg, Deutsche Bank AG, Director, Compliance & Regulatory Technology
- Jess Haberman, Fidessa, Senior Vice President, Compliance
- Judy McDonald, Susquehanna International Group, Associate Director, Technology
- Maura Miller, Credit Suisse Securities, Director, Equity Sales and Trading Compliance
- John Sheehy, Fidelity Institutional Brokerage (division of NFS), Director, Compliance
- Ron Veith, JP Morgan, Executive Director, Compliance

- Tom Jordan, Financial Information Forum, Advisory Committee Chair
- Mary Lou Von Kaenel, Financial Information Forum, Managing Director