

# J.P.Morgan

# ISO 20022 Implementation for Corporate Actions

## Business Benefits

- ISO 20022 pilot program is a means of assisting J.P. Morgan's adoption of market practices and SWIFT standard message types for corporate actions.
- The adoption of market practices has led to a data quality improvement process via a feedback loop with DTCC during the pilot.
- The ISO 20022 standard messaging is able to more closely follow the lifecycle processes of a corporate action, hence a greater number of data attributes are included in the messaging.
- The increased timeliness of the data has meant that J.P. Morgan's U.S. operations are better positioned to support clients in the Asian and European regions.
- Around 15% to 20% of data provided in the new ISO 20022 messaging would not have made the nightly cut-off process in the older batch messages from DTCC.
- Elimination of the manual processes required to pull information from DTCC to enrich corporate actions records: less cost, less risk and less latency involved.

## Introduction

J.P. Morgan's participation in the ISO 20022 pilot program supports the custodian's legacy system refresh and adoption of industry standard market practices, resulting in key data quality improvements.

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Steven Sloan, Vice President, Custody Technology, J.P. Morgan Investor Services.

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J.P. Morgan is one of four financial institutions that agreed to participate in the ISO 20022 corporate actions messaging pilot program being run by the Depository Trust & Clearing Corporation (DTCC). The aim of the pilot has been to enable J.P. Morgan and other pilot firms to automatically receive standardized corporate actions announcements from DTCC in ISO 20022 messaging formats. Accordingly, J.P. Morgan was the first financial institution to go live with DTCC's new global ISO 20022 income announcement messages using DTCC's

SMART network in August 2012. DTCC offers their participants the option of connecting via SWIFT or SMART (DTCC's own proprietary network).

The pilot program is part of DTCC's overall corporate actions reengineering initiative, which will see the depository replace its 60 legacy systems with a new single platform that will allow users to manage the full lifecycle of their corporate actions. The reengineering initiative was announced back in 2009 and is expected to be completed in 2015. It represents a move away from a reliance on DTCC's own proprietary formats for messaging communications with its participants to ISO 20022 standard messaging.

Initially, the pilot has focused on corporate actions announcements and their related cancellations, however, the remaining corporate actions lifecycle processes, such as entitlements, elections and payments will be tackled in upcoming future phases.

## Motivation

J.P. Morgan felt strongly that involvement in the ISO 20022 pilot program could be a means of assisting its adoption of market practices and SWIFT standard message types for corporate actions. There was interest from the firm's key client base to adhere to these message types and improve the quality of the message data accordingly. The pilot project also fits into J.P. Morgan's overall operating system upgrade program



that will see the firm replacing its legacy systems with new systems for corporate actions processing over the next couple of years.

The second rationale behind signing up was the benefit of providing direct feedback to DTCC during the initial requirements-setting phase. "Rather than waiting for the mandatory conversion date in the future, we wanted to help set the direction of the pilot program and feed directly into the requirements," says Steven Sloan, Vice President, Custody Technology, J.P. Morgan Investor Services.

J.P. Morgan has just finished phase two of the pilot program and was the first in the group to automate all of the income and event announcements involved during the first phase, which was solely related to the announcement process. The focus of the firm in deciding to participate in the initial phases was on improving data quality more than reducing cost, whereas it is expected that the latter phases, which are concerned with automating the corporate actions elections process, are more likely to result in direct cost savings.

### Benefits Experienced During Phase One

In order to assess the full data quality and timeliness benefits of the pilot, J.P. Morgan conducted a parallel assessment process where the team compared the DTCC data from the older feeds to the pilot data directly. The firm established a parallel process using the pilot data to compare with the live messages from DTCC (data in production) and the metrics being measured and compared were related to key corporate actions workflow and processes.

One of the metrics measured by the firm was the latency of the data involved. The move from batch processes for announcement data to real-time feeds as a result of the pilot program has therefore improved the timeliness of the data received by J.P. Morgan. DTCC was previously providing income data on an hourly delivery basis but it was not available in real time. J.P. Morgan indicates that this move to a real-time cycle has been especially beneficial for its European and Asian clients, who are not now being limited by U.S.-specific timeframes.

In terms of improved timeliness, Sloan explains that there was around 15% to 20% of data that would not have made the nightly cut-off process in the older batch messages that was provided via the real-time pilot program messages. Due to this increased level of service, J.P. Morgan could be better enabled to meet service level agreements for clients in time zones other than the U.S. For example, clients in Asia that are processing U.S. events would have the capabilities to receive that data outside of U.S. operating hours.

The measurement of data quality and a comparison of the number of attributes between the live data and the pilot data allowed J.P. Morgan to check any inconsistencies and problems that could be fed back to DTCC for resolution. This resulted in overall data quality improvements and the inclusion of additional data sets that J.P. Morgan could potentially be able to take advantage of in future for operational improvement and client reporting purposes. Tax related data sets could be one such data item that the firm could benefit from using in a regulatory reporting context in future, according to Sloan.

The main measure of success of the pilot, however, was the ability of the firm to go live with the new messages in August 2012 with no detrimental impact to clients.

### Milestones, Challenges, Costs

J.P. Morgan has a team of dedicated corporate actions professionals located both onshore and offshore that have been working on the pilot program. In terms of technology-focused individuals, six were involved directly in the project's early phases, supported by around six people from the operations and product teams, including four senior team members. This number will fluctuate over the course of subsequent phases of the overall program as different business units become involved in the feedback process.

Sloan indicates that there was a high level of engagement in the program from the business side due to J.P. Morgan's future automation needs; streamlining the announcement capture flow fit into the future strategy. The ISO 20022 pilot therefore slotted into the wider task of documenting existing processes underlying corporate actions and of mapping them against any new system requirements and capabilities.

On the pilot program side of things, this work involved taking in approximately 80 scenarios for data provided by DTCC and reverse engineering them to J.P. Morgan's current processes in order to identify required changes. As a beneficial side effect, J.P. Morgan and other pilot firms were able to build data quality metrics and check DTCC's adherence to them.

The team was also required to build into the process a series of additional steps in order to check and reconcile data before straight-through processing (STP) could be enabled, including building an intermediate database to store messages before they could be uploaded to the system. This development work was factored into the cost of the overall project as it involved some technology and staffing spend on the part of the in-house team. J.P. Morgan opted not utilize a vendor solution because of concerns about future volume sensitivity and scalability of such a solution due to the incremental volume of corporate actions event data over time.

Sloan explains that DTCC had to closely examine the downstream impacts of any upstream selection processes to ensure that data was not being missed in exception reports, for example.

### Future Benefits

J.P. Morgan's own legacy upgrade program is quite substantial, but it will not prevent the firm from continuing to participate in the testing future phases. Sloan explains that the firm will go ahead with the analysis and testing involved in the ISO 20022 implementation program's next phases but may not move over fully to go live with the messages until after its own legacy system refresh has been completed in 2014.

"It has been a very valuable learning exercise for our team and all of those involved and I fully expect the same from further phases," says Sloan. "It is hard to put a price tag on it because it has been beneficial in terms of business analysis rather than direct cost savings thus far, but that may change in later phases. However, there will likely be much more operational challenges to contend with in these phases, as the processes involved become more complex further in the corporate actions lifecycle."

In terms of risk hotspots in future, there is particular sensitivity about voluntary events and the capturing of election data; hence this is a process that must be closely monitored when any changes are required, especially given the non-STP nature of this area.

### The Roles of DTCC and SWIFT

DTCC was relatively new to the world of SWIFT messaging, hence had a lot to learn during the initial phases about data flows and market practices underlying these messages, according to Sloan. "Overall, DTCC has been very helpful throughout the process and has supported some of the specific requirements we had."

SWIFT also supported the pilot firms in their messaging standards adoption efforts and acted as a central coordinator for reaching agreement across all parties in the pilot. "SWIFT was able to broker agreements across the pilot firms in difficult areas and therefore provided a key intermediary role in the program overall," says Sloan.