

The DTCC logo is displayed in a bold, white, sans-serif font in the upper right corner of the page. The background of the entire page is a long-exposure photograph of a road at night, with light trails from vehicles creating a sense of motion and depth. The sky is dark with some clouds, and the road curves into the distance towards a bright light source.

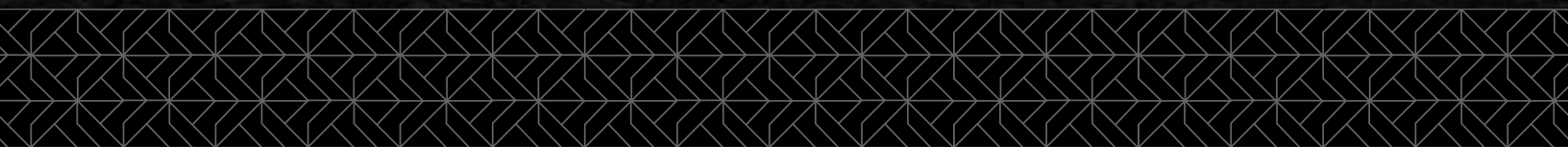
DTCC

Securing Today. Shaping Tomorrow.®

APRIL 2019

A ROADMAP TO AUTOMATION:

HOW AN SSI UTILITY BENEFITS ALL PARTICIPANTS



SSI FAILURE IMPACTS

Both acute and broad:

\$\$\$\$ Opportunity costs

\$\$\$\$ Tied-up capital

\$\$\$ Cash liquidity

\$\$\$ Counterparty risks

\$\$\$ Price dilution

\$\$ Market liquidity

\$\$ Inventory shortages

\$\$ Settlement penalties

\$\$ Fines

\$ Data reconciliation

Transforming the capital markets through automation

Technological change is widespread in the capital markets. The evidence is everywhere on both the sell-side—where capital and cost impediments are driving change—and the buy-side, increasingly influenced by pre- and post-trade data analytics. Even as the trade-lifecycle has trended toward automation, settlement, clearance, and custody have eluded the spotlight. According to McKinsey, around 45% of global finance can be automated using current technology, with an additional 13% likely to automate in the near future by technologies under development.¹ Regulation continues to be a catalyst. But as costs are wrung out of systems upstream and regulators demand shortened settlement cycles with increased penalties for non-compliance, settlement processes are finally attracting the attention they deserve.

Addressing cybersecurity is inextricably also bound with technological evolution. As threats mount, financial services companies are expected to spend \$43B on cybersecurity annually by 2023.² In the settlement space, where manual processes still use email to communicate settlement instructions, vulnerabilities can be easily addressed by the use of automated messaging over secure connections.

Closing the loop to no-touch settlement

For many in the industry, settlement processes are “out of sight and out of mind”—until something goes wrong. Trade failures are surprisingly costly when all factors are taken into account. The stock may have been borrowed, incurring additional interest costs and the fail may have to be funded in cash. If it’s near the month’s end, it could impact the balance sheet with commensurate effects on regulatory requirements. On top of all this is the time spent by staff addressing the claims, penalties, cancel and correct fees and manual verification. Global Custodian reports that a global failure rate of just 2% is estimated to result in costs and losses up to \$3 billion.³

One of the biggest pain points for back and middle offices dealing with trade exceptions is missing or incomplete Standing Settlement Instructions (SSIs).⁴ SSIs cause a significant proportion of overall trade exceptions and failures. In a study conducted by the TABB Group across a broad range of investment managers, SSIs accounted for 18.7% of all fails.⁵ In fact, it is estimated that mid-sized

¹ Capital Markets Infrastructure: How the Industry is Reinventing Itself, McKinsey, 2017

² BizTech Magazine <https://biztechmagazine.com/article/2018/09/financial-services-firms-face-increasingly-high-rate-cyberattacks>

³ Global Custodian: <https://www.globalcustodian.com/dtcc-launches-online-post-trade-exceptions-platform/>

⁴ The Industry View on Trade Exceptions, DTCC, 2017, <http://www.dtcc.com/exceptions>

⁵ Standing Together: An Instruction to the investment community, TABB Group, 2016

THE HUMAN ERROR TOLL

Manual SSIs create downstream exceptions that are not always immediately visible. These include fines, regulatory impacts and opportunity costs, interest on borrowed stock and time to address claims and penalties. Plus the added issue of a failing buy causing the chain effect of a failing sell.

≈**100%** firms have trade fails due to incorrect SSI info

18.7% average fails due to SSI issues

3-4% electronic trade confirmation fails due to missing SSIs

\$3B estimated costs and losses from **2%** global fail rate

\$1-2M avoidable costs in exception-handling time (for mid-sized IM)

2020 CSDR live in Europe: Brings daily fail penalties and mandates buy-ins

investment managers could alleviate between \$1M to \$2M annually in exception handling overhead through automation.⁶

Not only is human error a factor in causing an SSI-related fail, manual processes exacerbate the cost of remedying the situation. These manual processes create increased risk exposure, even when trades don't fail, with most communication still occurring via email instead of through secure networks. The number of possible manual touch points relating to SSIs during the settlement process is staggering. Trade data is handled by numerous disparate systems from matching engines to counterparties and settlement organizations, while flowing across an array of market infrastructure facilitators.

Where we are now

Increasingly, market participants are focusing on their core offerings that generate value and are looking to shared utilities to mitigate costs and improve processes. PWC reports that more than 40 such cooperative efforts to address common needs have arisen in the past several years.⁷ These utilities facilitate a range of activities from client services and on-boarding to cash and collateral management. In the settlement space, the industry's SSI utility is the **ALERT** platform, harboring "golden copy" SSI data, communicated via trusted protocols.

While the solution for effective SSI management has been widely embraced, with over 60% coverage by a variety of market participants on all sides of the industry (custodians, broker-dealers, prime brokers and investment managers), it's effectiveness will only be cemented by full-scale adoption.

Even though the **ALERT** platform has become the industry's SSI standard, there is still work to be done to achieve the ultimate goal of 100% straight-through processing (STP) in the post-trade space. For many organizations, priorities are revenue drivers and regulatory demands; surpassing operational risk reduction and process optimization in their middle and back offices. Achieving a no-touch workflow while juggling limited technology resources seems out of reach. Also, for some investment managers, the incentives to fully automate are not readily perceived; and there is misalignment between their obligation to provide and maintain the data with their ultimate responsibility for it, which they believe resides with their prime broker or global custodian.

⁵ Standing Together: An Instruction to the investment community, TABB Group, 2016

⁶ Standing Together: An Instruction to the investment community, TABB Group, 2016

⁷ Market Utilities in Financial Services: What role will you play?, PWC, 2016

THE ALERT ADVANTAGE

The industry's SSI utility for sharing accurate data with the entire global institutional investment community, **ALERT** has:

8.1 million SSIs

All major asset classes

6,000 community members

Over 1.1 million SSIs managed by custodians and prime brokers

99% SSI compliance rate

Multi factor data authentication available on all SSI updates

The Benefits of Automation

When the SSI workflow is automated, the most immediately noticeable improvement—beyond cost savings and security—is data quality. The consistency and standardization that comes from automation means valuable time isn't spent scrubbing data and submitting files manually.

The second benefit is timeliness. With automation via a centralized SSI utility, investment managers no longer need to contact their custodial bank or broker dealer to request SSI information and manually distribute it out to multiple global counterparties. In fact, automated SSIs can even be sourced just-in-time to enrich in-flight trade agreements. With reliable data and negligible human involvement, replicating instructions that need to be distributed to multiple global counterparties happens almost instantaneously.

For the buy side, the reduction in effort and processing risk plus the increase in data quality and timeliness offered by the automation of SSIs is irrefutable.

“When you on-board a new account—rather than trying to open 50 or 60 markets manually—you can create an automated version of a file and have that data out to broker-dealers as soon as you start trading.”

—Cihan Kasikara, Head of Global Trade Services, Franklin Templeton Investments

Clearing the path—the obstacles have already been tackled

Achievement of full SSI automation throughout the industry is very much a community effort, as everyone ultimately benefits. However, there are participants across the industry who remain unaware of the tools and help available for them to start and complete the journey.

For investment managers who aren't yet subscribing to the **ALERT** service, there is help available through DTCC's free **ASSIST** (Automating Standing Settlement Instructions Together) initiative. This program enables buy-side clients to leverage DTCC to maintain their instructions within the **ALERT** platform for them, helping to streamline internal workflows and processes. It's also simple for sell-side broker-dealers to invite their manual buy-side clients to participate.



THE ROADMAP

Move from **manual to automated** and from **automated to custodian-managed**.

ASSIsT—Buy-side clients can use this program to leverage DTCC to maintain their instructions within the **ALERT** platform. And with some of the largest prime brokers using **ALERT ASSIsT**, hedge funds who choose to leverage the program are able to establish a direct link to their SSI details.

ALERT—Subscribe to the **ALERT** platform, the industry's largest and most compliant online global database for the maintenance and communication of account and standing settlement instructions (SSI). An **ALERT** subscription enables full access to a community of investment managers, brokers/dealers and custodian banks to share accurate account and SSIs automatically worldwide.

GC Direct—Automates the exchange of SSIs between a custodian's central repository and the **ALERT** host. This enables the global custodian/prime broker to own and manage the SSI data, effectively creating the "golden copy" within the **ALERT** platform.

8 of the world's largest global custodians are on **GC Direct**

For custodians, cumbersome processes—such as using internal databases to access client SSIs and providing them in customized reports sent through unsecure means—are eliminated through automation. The tipping point has been reached and the benefits of standardization are attracting formerly hesitant players.

“We've seen instances of about a 50% fail reduction. We're dealing with over 500,000 SSIs, so if any of our professionals are spending even a minute on those 500,000 SSIs, that's 8,000 hours saved. That's a tremendous efficiency boost.”

—Joe Liguori, Managing Director, Strategy and Business Solution Group
Securities Processing, JP Morgan Chase

The final destination: The custodian-managed model

One of the challenges noted by the buy-side community has been the ability to maintain the accuracy and completeness of their SSIs in a timely manner. To address this, DTCC has developed **ALERT's Global Custodian Direct** (GC Direct) workflow providing custodian banks and prime brokers the ability to administer settlement instructions directly for their buy-side clients using industry standard ISO 20022 compliant messages.

As the owner and manager of SSIs, the global custodian or prime broker effectively creates the “golden copy” within the **ALERT** platform. Early adopters of this optimal custodian-managed model have already witnessed significant benefits. Upon initial conversion to GC Direct, the client bases of two custodians using the platform report reductions in SSI-related fails of between 40-50%.

“Across our top six clients, we've seen a 39% reduction in fails due specifically to incomplete or unmatched SSI data. For our largest client on GC Direct, we've seen a 54% reduction in fails.*”

—Bob Stewart, Senior Vice President, Head of Global Custody Product,
Brown Brothers Harriman

*Numbers based off the initial 6 month time-frame for the top six clients utilizing GC Direct.

THE ULTIMATE AUTOMATION GOAL



Reduce fails and other
settlement risks



Eliminate data input errors



Enhance security



Process trades faster and
more efficiently



Lower operational costs

The rewards of participation

When the middle and back offices are fully automated, the prevalence of clean, reliable settlement data reduces risk, enhances operations, frees personnel to perform more valuable tasks, and creates significant cost savings.

Participating in a custodial managed model is more than conforming to an industry “best practice.” Eliminating SSI-related trade fails not only benefits both sides of the trade but enhances the overall functioning of the marketplace. It is self evident that utilizing only the highest quality data throughout the entire trade lifecycle is the best path forward.

FOR MORE INFORMATION, visit www.dtcc.com/SSIRoadmap today.

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