T+1 – A race against time

In 2024, the US together with Canada will shorten their respective equity trade settlement cycles from the T+2 (trade date plus 2 days) model to T+1, a transformation which is likely to have major ramifications across the industry for both buy and sell side institutions. The implementation of T+1 could potentially be quite complicated, as it will force market participants into making material adjustments to their existing operating models and underlying technology systems. With T+1's deadline rapidly approaching in the US, the window for preparations is getting narrower.

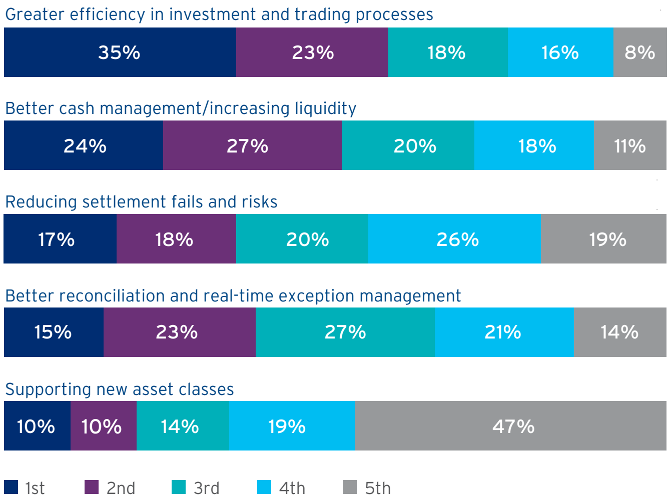
Accepting the need for T+1 in the US

It was the market instability, unleashed initially by COVID-19 and then the meme stock trading frenzy, that prompted the Depository Trust & Clearing Corporation (DTCC) along with a number of other industry players and trade bodies, into recommending to the Securities and Exchange Commission (SEC) that the US equity trade settlement cycle be condensed from two days to one. This came just four years after the US shortened its settlement cycle from T+3 to T+2.

A shorter settlement cycle offers a number of strategic benefits for investors. Firstly, it could help facilitate greater efficiency in the investment and trading process, a point made by 35% of respondents to **Citi's 2022 Securities Services Evolution** whitepaper[1]. By eliminating an entire day between trade execution and trade settlement, it will also be possible to reduce systemic, counterparty and operational risk in the settlement process. This could prove especially vital during bouts of market volatility.

Additionally, the adoption of T+1 could help financial institutions strengthen their cash management. According to the DTCC, the volatility component of the National Securities Clearing Corporation could fall by up to 41% by moving to T+1[2]. Through cash optimization, financial firms will be able to better manage their internal cash balances – thereby driving up market liquidity. This is echoed in the Citi whitepaper, which found that 24% of respondents believed a shorter settlement cycle would help improve cash management and increase liquidity.

Why do we need to shorten our settlement cycles?



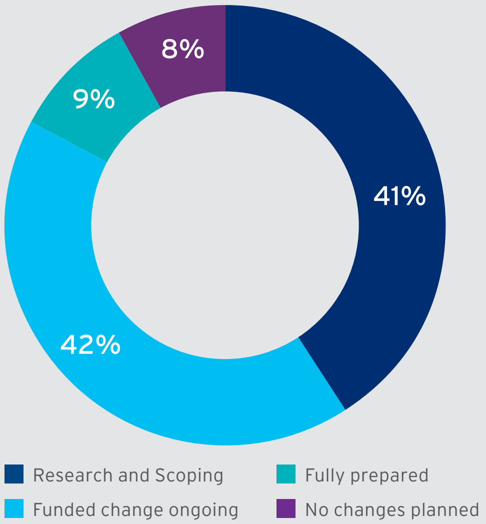
Source: Citi – Securities Services Evolution 2022

Industry preparations reveal a growing chasm

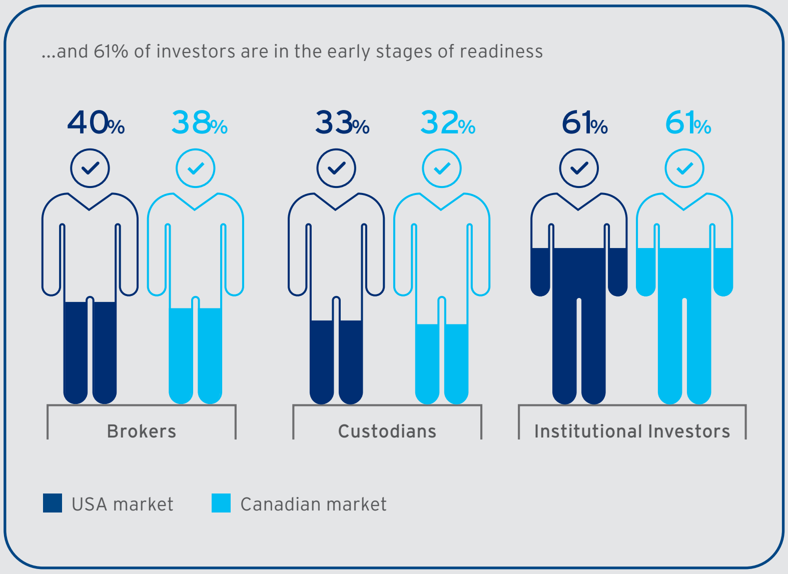
In February 2023, the SEC confirmed that T+1 would go live on May 28, 2024. The SEC initially proposed March 31, 2024 as the implementation date for T+1, while the industry had recommended the switchover take place on Labor Day Weekend at the beginning of September. With the implementation date now finalized, market participant firms are actively working towards readiness though the levels of preparation among financial institutions appears to be quite varied.

Preparation for T+1 is a core issue

Stage of T+1 readiness, broken down by % of respondents



Source: ValueExchange – Operationalizing T+1 Survey



"The move to a T+1 settlement cycle has been an ongoing industry effort for more than two years now. However, we still see people in different pockets, namely those who are very prepared and ahead of the game, versus those who are much further behind, and are not yet thinking about the changes," said Michele Hillery, Global Manager of Equity Clearing and DTC Settlement Service at DTCC.

For instance, the **ValueExchange – Operationalizing T+1 survey** found that 41% of the market still has not yet started planning for T+1. The survey further highlighted that institutional investors appear to be more advanced in their T+1 preparations compared to brokers and custodians[3].

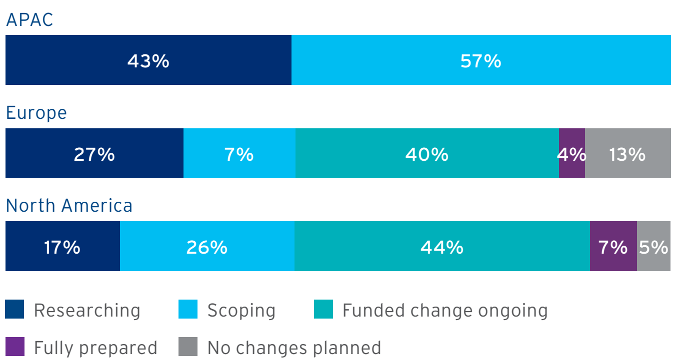
An institution's size is also a decisive factor determining their levels of T+1 planning. "A large broker dealer for instance, is more likely to be compliant with the rules, having already embarked on the T+1 change journey. In contrast, a small broker dealer – which is still reliant on conducting their operations through fax – will probably have a bit more work to do. Budgetary constraints at smaller financial institutions may also be hampering their T+1 efforts," explained Michele Pitts, Head of NAM Custody Product Management Strategic Initiatives at Citi.

Lou Rosato, Director of Global Investment Operations at BlackRock, shared that the $10 trillion asset manager is currently in the later stages of its T+1 planning. "We have a deep understanding and alignment on the changes that need to happen and have identified key focus areas for a firmwide and unified project with our custodians and brokers. Our formal engagement and planning began in 2022 and it is now ramping up this year," noted Rosato.

"The most significant impact is likely to be felt at buy and sell-side firms in Asia and Europe. They will need to make substantial changes to their operating, treasury and client service models to support their client trading in a compressed settlement environment. They will experience the most significant impact, but in many respects are the least prepared and have the most work still to do."

Bryan Murphy, Global Head of Banks Sales, Securities Services, Citi

Preparation of T+1 Across Geographies



Source: ValueExchange – Operationalizing T+1 Survey

> *"The biggest challenge with the implementation of T+1 comes in the form of the condensed processing schedule. Right now, we have the night of trade date and the day of trade date plus one to get things done between trade execution and settlement. All of this is being compressed under the T+1 model. Under T+1, all of these activities now have to happen on trade date, which could be challenging for some firms in the US and even more so for those which are based outside of the US."*
>
> Michele Hillery, Global Manager of Equity Clearing and DTC Settlement Service, DTCC

Although major institutions with substantial operations in the US understand the full implications of the T+1 move, many outside of North America are still digesting the potential changes.

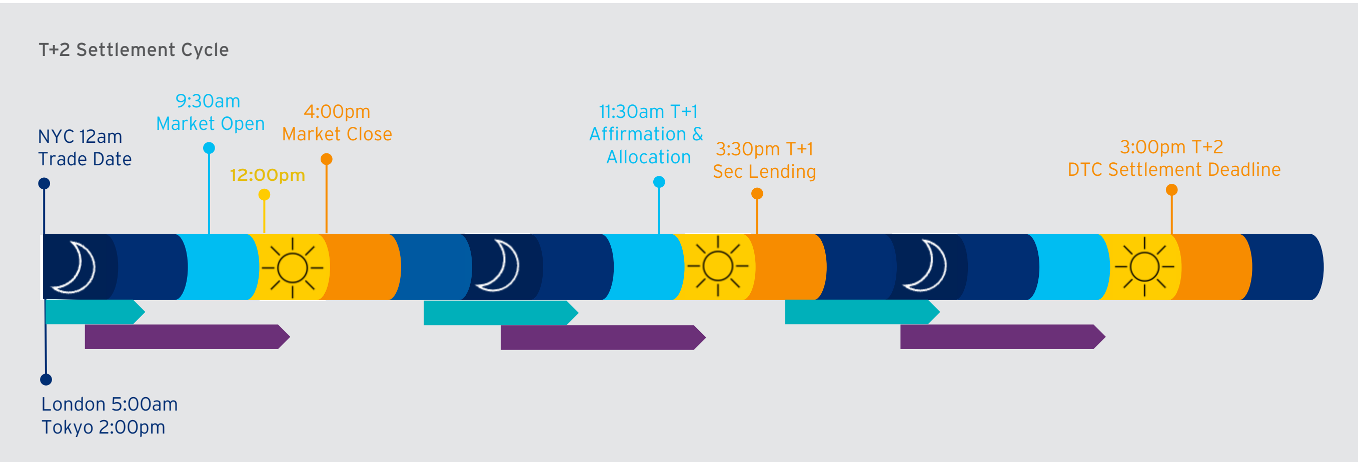
For instance, the ValueExchange study found that not a single Asia-Pacific based financial institution was executing their T+1 plans, nor had anyone in the region even developed a concrete T+1 project funding request[4]. The study also revealed that 43% of Asia-Pacific based financial institutions were still in the research and information gathering stages of their T+1 planning efforts, versus 27% of those in Europe and 17% in the US[5].

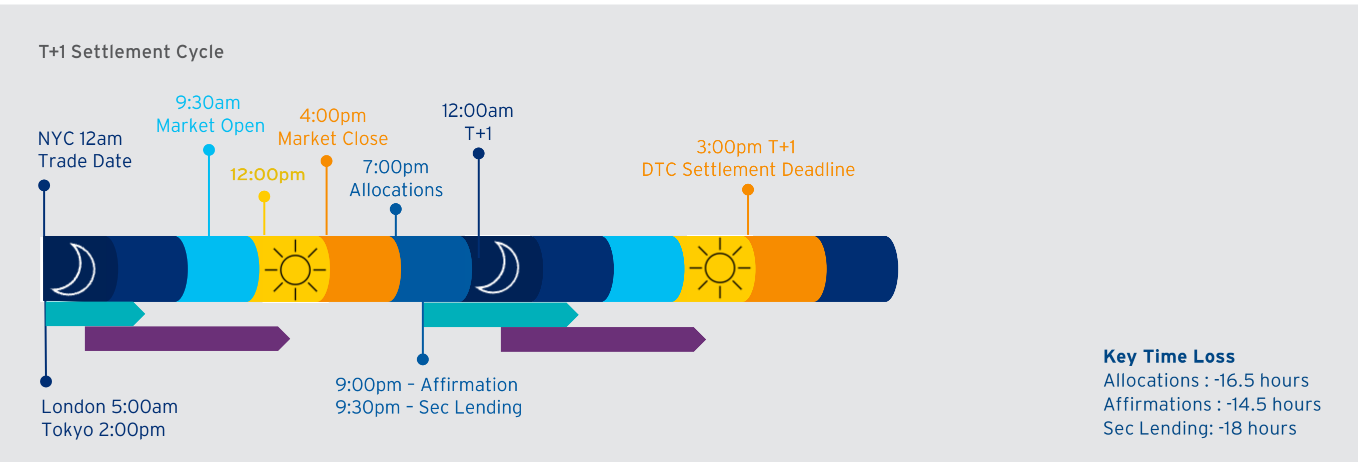
Bracing for operational challenges

By shortening the settlement cycle from T+2 to T+1, market participants trading US equities will have much less time between trading and the start of the settlement cycle to perform post-trade processing[6]. As things currently stand under the T+2 model in the US, the trade allocation and affirmation process takes place at 1130AM Eastern Time (ET) on T+1. Following the introduction of T+1, trade allocations will be brought forward to 0700PM ET on trade date, with a 0900PM ET on trade date cut-off for affirmations (See diagram below).

The diagram also highlights the timing challenges facing financial institutions operating in Europe and Asia-Pacific as it relates to allocations, affirmations and securities lending transactions. As the diagram shows, implementation of T+1 will mean financial institutions will have 16.5 hours less time to process allocations; 14.5 hours less time to process

Global Timing Impact





APAC US hours EMEA US hours

Source: Citi

affirmations; and 18 hours less time to process securities lending transactions.

According to the Association for Financial Markets in Europe (AFME), losing one day in the settlement cycle does not simply mean having 50% less post-trade processing time, adding it is closer to 83%[7]. AFME noted that trade settlement teams will only have two core business hours between the end of the trading window and the start of the settlement window compared to 12 core business hours in a T+2 environment[8].

Compounding matters further is that the transition to T+1 is not happening at a global level. "A number of markets may not move in tandem with the US and Canada which will be an area firms need to focus on as they modify their business processes and platforms to manage different settlement cycles across asset classes and regions. While these differences exist today, they will be more pronouced until other markets move to T+1," added Rosato.

The ability to manage FX effectively in a T+1 environment is widely considered to be one of the bigger obstacles facing institutions, especially those operating in different time-zones.

"The impact of settlement compression on FX will be felt most acutely in European and Asian markets, where there is a significant time-zone difference with the US. Instead of carrying out FX execution on the current T+2 basis, financial institutions will need to shift to either T or T+1."

Sylvain Lamouille, Managing Director, Financial Institutions Group, UBP

This raises the likelihood that some firms may have to pre-fund their FX transactions if they want to trade US equities.

"By having to pre-fund, there is a possibility that clients will be unable to deploy capital for trading purposes, which could result in missed opportunities. There is also a risk that some firms do not pre-fund enough. This is by far the biggest issue facing non-US clients."

Michele Pitts, Head of NAM Custody Product Management Strategic Initiatives, Citi

Another knock-on effect is that T+1 could result in fewer trades successfully settling, leading to cash penalties. An increase in fails could also usher in higher Basel III risk weighted capital requirements for financial institutions. AFME has warned that reduced credit, market and counterparty risk could easily be replaced with increased regulatory, settlement, capital and financial risk, ultimately increasing costs for investors[9].

The transition to T+1 could create complexities for securities lending transactions too, as it shortens the time market participants have to identify and recall securities. Pitts noted that recalls currently take place on a T+1 basis, but this will move to T-date at the point when T+1 takes effect. "If a financial institution is looking to recall a thinly traded security, then there could be challenges with getting those shares from the borrower. This could potentially result in more fails happening," commented Pitts.

Transactions involving certain asset classes and financial instruments – namely exchange traded funds (ETFs), American Depository Receipts (ADRs), dual listed equity securities and securities based derivatives – are also at risk of being adversely affected by the shift to T+1. ETFs comprise of baskets of underlying securities, which are often traded in multiple jurisdictions beyond the US. Furthermore, ADRs are also traded outside of the US. A T+1 settlement cycle in the US could exacerbate some of the complications which exist already with the cross-border settlement of ETFs and ADRs.

"Settlement compression has an impact on the creation and redemption process for ETFs. This applies specifically to where the underlying component of the ETF is non-US and potentially has a different settlement date versus the ETF itself. From a DTCC perspective, the ETF creation and redemption process takes place in batches, but may move to real time under T+1. A similar time settlement time mismatch is expected to emerge with ADRs," said Hillery.

Experts are also trying to determine if dual listed securities – namely securities which are listed in the US and in a third country – could face repercussions because of T+1. "We are investigating the potential implications for trades involving US securities that take place outside of the US. There is a very active market, for example, in Germany for US securities, which is currently aligned with the US on T+2. If the US moves to T+1 and Europe stays on T+2, then what will happen to securities listed in both jurisdictions? We are leveraging our experiences we acquired during the previous transition from T+3 to T+2 preparing for this," said Dirk Loscher, Head of Custody & Investor Solutions at Clearstream.

Elsewhere, AFME warned securities-based derivatives could be affected by the T+1 move, highlighting that further assessment is required to identify impacts to the swap life-cycle, such as margining calculation and collection[10].

T+1 will force changes on corporate action processing as well. "Corporate actions and asset servicing will be key areas to consider when advancing business process and platform changes in the move to T+1. We recognize settlement activity crosses over multiple post-trade and asset servicing activities which are linked through an investment and settlement lifecycle. This provides greater opportunities to increase the speed and precision throughout the lifecycle," said Rosato. SIFMA noted income distributions could be affected by T+1 as it will result in the ex-dividend date moving from the day before record date under T+2, to the day of record date after the event[11]. Furthermore, other activities – including voluntary corporate action events – such as tender offers, exchange offers and rights subscriptions, are expected to be affected by the T+1 switch[12]. David Kirby, Executive Director Americas Relationship Management & Global Account Management at DTCC noted however, that facilitating corporate actions under T+1 should not be a major concern given current custody processes.

Ancillary activities like taxation services could also become more challenging in a T+1 ecosystem, a point made by Lamouille. "We have a full framework of accounts with different taxation rates. When the day is over, we actually pull the securities from a market account, which is the account where we settle the transactions on DVP [delivery versus payment]. We then put the securities into the right taxation account. This is because some clients might be taxed at 10% whereas others are taxed at 15% and this is done after the night batch. Under T+1, the instruction to pull securities into an account or repatriate securities into a market account now needs to be done on a live basis. This is one of the biggest challenges we are facing with T+1," said Lamouille.

Exacerbating some of these problems is that many buy and sell side institutions still operate off legacy technologies and analogue processes. "When the US transitioned from T+3 to T+2, firms were able to rely on manual systems simply by throwing bodies as part of the solution. This will not be possible when we move to T+1, as the transition will require a certain level of automation in place," noted Pitts.

It is clear the migration to T+1 will create some complexities for institutions across the spectrum. The question now is what are firms doing to ensure they can cope with this sea of change.

Financial institutions navigate the T+1 gauntlet

Financial institutions acknowledge that substantial investments into technology and automation will be required to improve both settlement discipline and to make T+1 a success.

"We see T+1 as an opportunity to modernize our business processes, platforms and connectivity, namely by developing real-time processing capabilities and improving workflow linkage and data quality. We have been very focused on developing our real-time processing capabilities well ahead of the US and global marketplace's move to shorter settlement cycles. However, it is critical that all capital markets participants – including global and sub-custodians, broker dealers, market utilities such as central securities depositories [CSDs] and fund accountants invest in their technology to support real-time processing ahead of T+1."

Lou Rosato, Director of Investment Operations, BlackRock

In particular, Asia-Pacific and Europe-based clients will need to make significant changes to their technology infrastructure due to the time-zone differences with the US, a point made by Alex Lee of the Korea Securities Depository (KSD).

"We anticipate that we will need to run our IT systems 24 hours a day. We will also be making improvements to our IT systems, including our gateway systems to SWIFT."

Alex Lee, Head of Global Deposit & Settlement Team, KSD

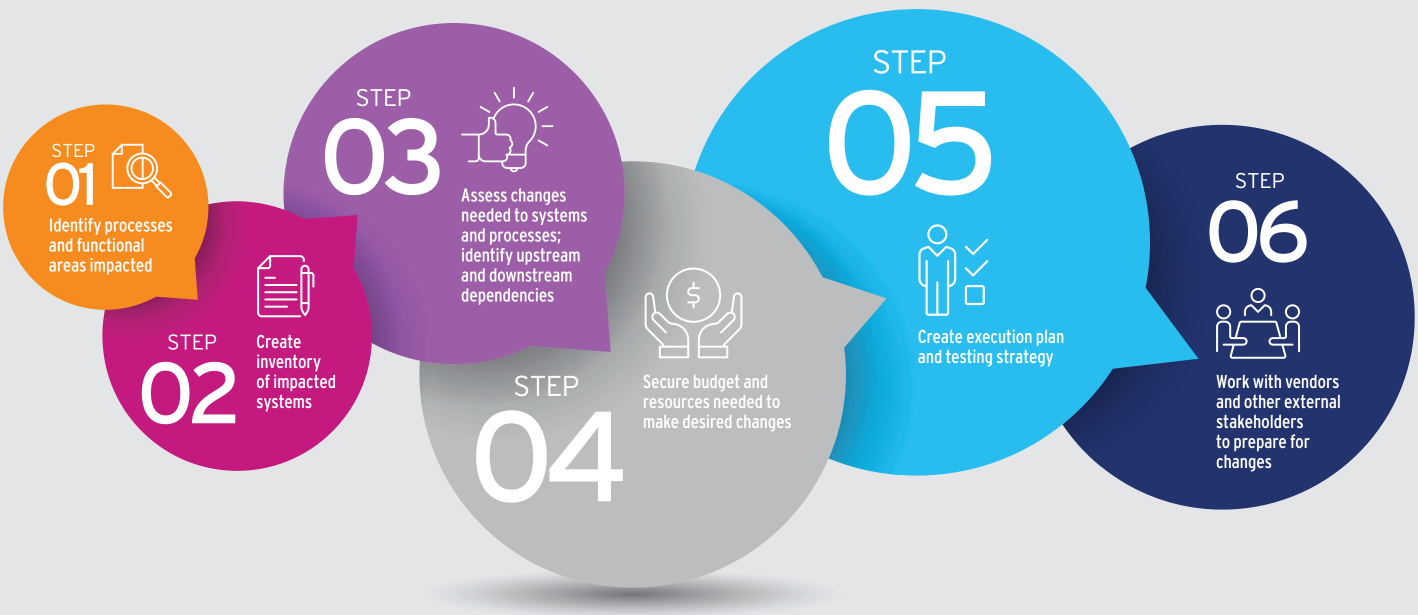
Some firms are leaning on their service providers – including custodians and financial market infrastructures (FMIs) – for support with automation in the lead up to the T+1 transition. "We are working with SWIFT, a number of gateway providers and market participants; and will also be organizing a reference group consisting of securities companies, asset management companies and banks," said Lee. BlackRock's Rosato concurred – "We are continually working with our external partners to build better and more robust workflows so as to ensure timely settlement."

While 55% of the Securities Based Lending (SBL) market seems to be still unclear about their T+1 operating model[13], one senior executive involved in securities lending at a global bank who wished to remain anonymous added: "We are looking to obtain sale information from our custodians sooner than we do today, and we are working with clients and our custodians to achieve this. In particular, we are working with our custodians on the affirmation process so that we can receive the recalls on a more timely basis. While we have not yet made systems changes ahead of T+1, I anticipate we will need to ask our vendors to pick up instructions in real-time, as opposed to batch."

Industry solutions are being rolled out to help financial institutions automate their systems ahead of T+1. For example, the DTCC's Central Trade Matching Platform offers A Match to Instruct (M2i) tool, which automatically triggers trade affirmation and delivery to the Depository Trust Company (DTC) for settlement when a centrally matched trade between a fund manager and executing broker occurs[14]. "The DTCC has talked extensively about its M2i solution, and we are currently assessing how this will benefit us," shared the securities lending executive. According to the DTCC, the no-touch workflow processing offered by solutions such as M2i facilitate affirmation rates of close to 98% on T+0 in T+2[15]. This could prove critical in helping financial institutions automate their systems in advance of T+1.

As with any major system upgrade or wholesale infrastructure change, testing ahead of implementation will be critical if errors and risks are to be minimized. The transition to T+1 is no exception. "From what we hear, most market participants have used 2022 as the year to prepare for T+1, so they are conducting evaluations and gap analysis, and securing budget.

T+1 Readiness Best Practices



2023 will be the year in which firms build and internally test their systems, and 2024 will be the year for industry testing and hopefully implementation," highlighted Hillery.

Financial institutions must, however, take a thoughtful approach towards testing. The DTCC recently published a guide – "T+1 Test Approach: Detailed Testing Framework" – which provides comprehensive information to enable firms to test with the DTCC (plus its subsidiaries – ITP, NSCC, DTC) and other FMIs – including Nasdaq, the Options Clearing Corporation and the Chicago Board Options Exchange[16] – ahead of T+1's rollout.

"Before firms test their systems, they should conduct an impact assessment on what areas of their businesses – whether it is areas such as securities lending or FX – will be affected by T+1. Once they have established an inventory of the processes which will be affected, then they can come up with a testing programme."

David Kirby, Executive Director Americas Relationship Management & Global Account Management, DTCC

Global staff resourcing arrangements will also need to be recalibrated so that financial institutions can perform matching and allocation processing on an intra-daily basis. This will be felt disproportionately by Asia-Pacific based firms. "In preparation for T+1, we will be changing our global staffing resources and will also require some of our staff to start working night shifts," said KSD's Lee.

Elsewhere, international clients are increasingly embracing the "follow the sun" model, whereby personnel are deployed to multiple post-trade locations across the world. In this instance, some global firms are seconding staff to the US ahead of T+1. The DTCC's Kirby shared that a growing number of European buy-side firms are sending operations teams to New York, while one Canadian provider had shifted some of its operations personnel from Toronto to Vancouver so it can support Asia-Pacific based clients in a more time-zone friendly way.

Engagement and participation in T+1 working groups – such as the Industry Working Group (IWG)- will be key if financial institutions are to effectively navigate the T+1 move. "We were a part of the IWG, which brought key industry players together to map out the changes required. The IWG helped build the T+1 implementation playbook, which was published at the end of 2022. BlackRock had previously participated in working groups during the US's transition from T+3 to T+2," said Rosato. Equally, other firms are partaking in forums and webinars organized by the DTCC. "We have attended a number of the T+1 meetings and forums organized by the DTCC and other industry bodies," said the securities lending executive.

Impacted organizations are also consulting UST1.org, a website which provides an exhaustive check-list of what firms should be doing ahead of T+1's go-live date. "Within UST1.org, we post executive summaries, industry playbooks and go into the details about the various testing requirements," highlighted Hillery.

Just as financial institutions are preparing for the introduction of T+1 in the US, many are closely monitoring developments that are happening elsewhere. Although no new markets have yet to formally announce they will adopt T+1, many financial institutions believe it is only a matter of time. "We expect more markets globally will gradually follow the US example and establish T+1," said Lee. Beyond the US and Canada (and India, which successfully phased in T+1 for equities at the beginning of 2023), other markets including Chile, Mexico and the UK are scoping out the benefits of adopting T+1.

The UK recently established a Treasury Taskforce for Accelerated Settlements, which is investigating the merits of T+1, the initial findings of which will be published by December 2023, with a full report and recommendations to follow by December 2024[17]. Although it is anticipated the EU will eventually embrace T+1, the situation is more complicated in that region for several reasons. Firstly, T+1 could precipitate in a jump in trade settlement fails, which will result in investors with exposures to securities settling on EU CSDs, paying more fines for fails under the Central Securities Depositories Regulation's (CSDR) Settlement Discipline Regime (SDR). It could also lead to firms responsible for failed trades facing mandatory buy-ins, assuming the EU goes ahead with this proposal.

"There does seem to be limited appetite of market participants in the EU for T+1 as regulators have only just gotten through CSDR's SDR, which imposes cash penalties for settlement fails. It seems unlikely that the EU will move to T+1 until it has better settlement discipline in place. In this region however, I believe that the UK is most likely to follow in the footsteps of the US, Canada and India and adopt T+1."

Dirk Loscher, Head of Custody & Investor Solutions, Clearstream

T+1 will also face obstacles in the EU because of the sheer number of FMIs in its 27 member states. There are north of 30 CSDs in the EU, whereas the US and Canada have just one CSD each. These challenges however have not deterred AFME from establishing a new industry taskforce examining whether the EU should follow the US and adopt T+1.

A handful of emerging economies are also having exploratory conversations about moving to T+1, although Murphy cautioned this could be challenging especially as some of these countries have highly illiquid FX markets. Financial institutions will most likely look to onboard the lessons obtained from transitioning to T+1 in the US, and apply them to other markets as and when they shorten their settlement cycles.

The march towards May 2024

A large number of institutions spent a good part of 2022 preparing for T+1 by conducting gap analysis and impact assessments across multiple business lines, including middle and back office, securities lending and FX management. The emphasis is now shifting to testing, budgeting and implementation.

Institutions are now starting to invest in new technologies to facilitate automation, and many are turning to their service providers for support. Simultaneously, organizations especially those in different time zones are thinking seriously about how they allocate staff resources in a T+1 ecosystem — either by introducing night shifts or adopting a 'follow the sun' model — so that trade allocations and matching can happen on an expedited basis. It is very likely that more markets will embrace T+1 in the near future, so participants should use their US T+1 playbooks as and when these changes occur.

With the SEC having confirmed that T+1 will be introduced from May 2024, those institutions who have yet to make adequate preparations, need to do so, and urgently.

1 Citi – Securities Services Evolution 2022
2 DTCC – FAQs
3 ValueExchange – Operationalizing T+1
4 ValueExchange – Operationalizing T+1
5 ValueExchange – Operationalizing T+1
6 AFME – September 2022 – T+1 Settlement in Europe: Potential benefits and challenges
7 AFME – September 2022 – T+1 Settlement in Europe: Potential benefits and challenges
8 AFME – September 2022 – T+1 Settlement in Europe: Potential benefits and challenges
9 AFME – September 2022 – T+1 Settlement in Europe: Potential benefits and challenges
10 AFME – September 2022 – T+1 Settlement in Europe: Potential benefits and challenges
11 SIFMA – December 1, 2021 – Accelerating the US Securities Settlement Cycle to T+1
12 SIFMA – December 1, 2021 – Accelerating the US Securities Settlement Cycle to T+1
13 ValueExchange – Operationalizing T+1
14 DTCC – March 21, 2022 – The results are in: automated institutional trade processing required to achieve T+1
15 DTCC – October 5, 2022 – US Transitioning to T+1: The learning journey for Asia
16 DTCC – January 23, 2023 – DTCC ramps up industry T+1 testing
17 Global Custodian – January 26, 2023 – UK Treasury Taskforce gears up for accelerated settlement exploration with new appointment

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