

T+1 ACCELERATED SETTLEMENT US, MEXICO & CANADA

Client Toolkit & FAQ's

Version 1 May 2024

U.S, CANADA & MEXICO T+1 SETTLEMENT CYCLE FAQ

CONTENTS

GENERAL INFORMATION
CUSTODY TRADE
U.S. CUSTODY TRADE CUT OFF TIMES7
CANADIAN CUSTODY TRADE CUT OFF TIMES8
MEXICAN CUSTODY TRADE CUT OFF TIMES8
AFFIRMATION & AFFIRMATION MODELS9
TRADESUITE ID
CASH13
CORPORATE ACTIONS AND INCOME
SECURITIES LENDING
COLLATERAL MANAGEMENT16
GLOBAL FX
FX SOLUTION FOR T+1
BROKERAGE OPERATIONS AND PORTFOLIO SOLUTIONS
BROKERAGE U.S
BROKERAGE EMEA & APAC CLIENTS24
BROKERAGE ITS SOLUTION
INVESTMENT OPERATIONS OUTSOURCING
HEDGE FUND SERVICES (HFS)
GENERAL QUESTIONS
PENALTIES & FEES

TECHNOLOGY4	10
OTHER MARKETS & WHEN	11
INDUSTRY ENGAGEMENT	11

GENERAL INFORMATION

What is happening?

The Securities Industry and Financial Markets Association (SIFMA), the Investment Company Institute (ICI), and The Depository Trust & Clearing Corporation (DTCC) established an Industry Working Group (IWG) to accelerate the U.S. securities settlement cycle from trade date plus 2 (T+2) to trade date plus 1 (T+1) in the first half of 2024. On February 15, 2023, the Securities Exchange Commission (SEC) approved changes to modify Rule 15c6, *Shortening the Securities Transaction Settlement Cycle*, from trade date plus two (T+2) to trade date plus one (T+1). The SEC received over 3,000 comments, where most advocated for the shorter settlement cycle and supported a longer period to implement the change from the proposed March 31, 2024, compliance date. The industry widely promoted a conversion over the Labor Day weekend, September 2, 2024. In a vote of 3 to 2 the **SEC approved a May 28, 2024, compliance date.**

Subsequently, on December 1, 2021, the Canadian Capital Markets Association (CCMA) announced plans to shorten the trade settlement cycle to T+1.

The CCMA has been working with industry participants, U.S. (United States) Securities Industry and Financial Markets Association (SIFMA), Investment Company Institute (ICI) and Depository Trust & Clearing Corporation (DTCC) and Canadian Depository for Securities (CDS) in coordinating efforts for the transition. CCMA has been discussing T+1 settlement cycle since the market moved from T+3 to T+2 in September 2017. On May 14, 2023, the CCMA announced T+1 settlement will start on **May 27, 2024.**

Following the formal intent for the U.S. and Canada, Mexico Contraparte Central de Valores (CCV) and the Mexican Association of Brokerage Firms (AMIB) has announced their recommendation to change the settlement cycle to T+1 and **has confirmed the effective date of May 27, 2024**

Why are the Regulatory Governing bodies looking to reduce settlement cycles?

The industry has been discussing the eventual migration to a shorter settlement cycle since the move from T+3 to T+2, which was implemented on September 7, 2017. In addition, the SEC has highlighted two recent events that increased market volatility: In March 2020 following the outbreak of the COVID-19 pandemic, and in January 2021 following the heightened interest in

certain "meme" stocks. These two episodes have highlighted potential vulnerabilities in the U.S. securities market that shortening the standard settlement cycle could help mitigate.

Accordingly, the transition to a T+1 standard settlement cycle was approved in both the US Mexico and Canada. They believe that achieving settlement by the end of trade date ("T+0") could benefit investors by further reducing the amount of time investors are exposed to their counterparties and related systemic risk. While neither market is introducing a T+0 standard settlement cycle at this time, they sought industry feedback to better understand the challenges that market participants may need to address and resolve to achieve T+0.

What areas or functions will be impacted?

The following areas/functions are impacted by this change and industry participants must update their procedures and systems to adopt the shorter settlement cycle.

- Trade Processing
- Middle Office
- Settlement Systems
- Securities Lending
- Asset Servicing
- Broker-dealers
- Client Onboarding
- Collateral Management
- Funding & Treasury
- FX
- Staff Operating Hours
- Regulatory Reporting
- Enterprise

In Scope US Products

SIFMA, The Depository Trust & Clearing Corporation (DTCC) and the Investment Company Institute (ICI) are committed to leading the industry's collaboration on accelerating the settlement cycle.

It is important to note the change applies not only to equities, but includes corporate and municipal bonds, agency securities, mutual funds, REITs, ETFs and others—in short, any product which currently settles T+2, below:

In-	-Scope Products
American Depositary Receipt (ADR)	Future
Asset-Backed Security (ABS) or Global ABS	Institutional Mutual Mortgage Insurance Fund (IMMI)
Auction Rate Preferred Stock	Limited Partnership
Bearer/Callable Zero Coupon Bond	Medium-Term Note
Bilateral Contracts	Municipal Amortized Issue
Certificate of Deposit	Municipal Auction Rate Note
Certificated Money Market Instrument	Municipal Bond
Closed End Fund	Municipal Derivative
Collateralized Mortgage Obligation (CMO)	Municipal Insured Custodial Receipt
Commodity Linked Note	Municipal Note
Common Stock	Municipal Option Call Right
Common Stock Real Estate Investment Trust (REIT)	Municipal Other Tax Exempt
Convertible Common Stock	Municipal Variable Mode Obligation (VMO)
Convertible Corporate Debt	Municipal VRDO
Convertible Preferred Stock	Mutual Fund
Corporate Austion Date Note	Mutual Mortgage Insurance Fund (MMI) Banker's
Corporate Auction Rate Note	Acceptance Note
Corporate Bond or Global Corporate Bond	Non-CMO/ABS Amortizing Issue
Corporate Debenture	Preferred Stock
Corporate Debt Derivative	Preferred Stock REIT
Corporate Insured Custodial Receipt	Private Investment Public Equity (PIPE)
Corporate Other Tax Exempt	Right
Corporate Variable Rate Demand Obligation (VRDO)	Structured Product
Credit Linked Note	Tender Rate Preferred Stock
Debt Unit	Total Return Swaps
Depositary Share	Unit Investment Trust (UIT)
Equity Derivative	Warrant
Equity Unit	When Issued
Exchange Traded Fund (ETF)	Zero Coupon Bond
Exchange Traded Product	Zero Coupon Denominated in Initial Principal Amount

Depot transfers will need to be instructed on Trade Date as well to effectively move eligible holdings into these markets for timely settlement, best efforts will be applied for any late instructions.

CUSTODY TRADE

T+1 SUMMARY

- Changes to the Custody Trade Cut off times for U.S. Mexican and Canadian markets further information can be found in the section below entitled Trade Cut Off Times
- Change in the timing for trade affirmations in the US Market, which will need to be completed by 09:00 PM EST on Trade Date.
- Shortening the timeframe available window to resolve exceptions, before settlement on T+1
- Fails might potentially increase due to shorter window for recall & substitution (SL & Collateral)

HOW NORTHERN TRUST IS PREPARING

People, Process and technology changes have been made to support Trade settlement (confirmation, affirmation and Settlement) in a T+1 settlement cycle, which include:

- System changes to support new affirmation deadlines, and Trade Delivery via S-1 Authorization, NDO and DDO
- Operating model changes to provide extended coverage and support for the new shortened settlement cycle (affirmation deadline and exception management)
- Process changes to resolve exceptions in short window before T+1 settlement

IMPACT TO CLIENTS

Client to review internal processes that will need to be changed, which include but are not limited to:

- Familiarize with industry timelines, expectations and considerations
- Under T+1, US trades will have to be affirmed by 09:00 PM EST on the trade date, meaning the trading entity must get the trade to their custodian in time
- Review internal operating models to ensure their alignment with the T+1 change
- Existing batch and manual processes to be aligned to T+1 change
- Move to earlier deadlines on Trade confirmation, allocation and affirmation processes
- Review SSI (Standing Settlement Instructions) and ensure accuracy
- Engaging with your brokers and other service providers to assess any changes to timelines & downstream impacts
- Clients and IMs will need to consider the funding ramifications and FX request / execution in-line with T+1 settlement cycle
- In the event that loaned securities are recalled, these will need to be identified in a shortened timeframe
- As part of the regulatory changes the SEC announced earlier this year, there are changes to **rule 204-2** which impact **Registered Investment Advisors (RIAs)** relating to the records they keep for their trades:

- Previously, RIAs were only required to keep records of the trades they placed and executed. After May 2024, they will be required to retain additional information:
- The placing or execution of any order to purchase or sell any security; and, for any transaction that is subject to the requirements of § 240.15c6-2(a) of this chapter, **each confirmation received, and any allocation and each affirmation sent or received, with a date and time stamp** for each allocation and affirmation that indicates when the allocation and affirmation was sent or received
- Clients will now have to retain records for information they may or may not have if they have outsourced either their confirmation or affirmation processes
- Firms may look to retain in-house or ask third parties to retain on their behalf

U.S. CUSTODY TRADE CUT OFF TIMES

As a result of the industry timeline changes described, Northern Trust's instruction deadlines for U.S. Custody trades will need to change, all times are in Eastern Time (EST).

Clients who perform their own trade affirmation will have until the DTCC cut-off of 9pm on T to affirm:

Description	Current cut-off	New cut-off
Self-Affirming Clients	11:30 am on T+1	9:00 pm on T

Clients who wish for Northern Trust to perform affirmation on their behalf will need to provide their instructions prior to the new cut-off:

Description	STP / Electronic Instructions		Manual / Fax Instructions	
	Current cut-off	New cut-off	Current cut-off	New cut-off
Non Self-Affirming Clients	11:00 am on T+1	8:30 pm on T	9:00 am on T+1	5:00 pm on T

Please note that the instruction cut-off for same day settlement at DTC remains unchanged at 2:30 PM EST for electronic instruction

- Self-Affirming Clients are those who affirm their own trades within DTCC's TradeSuite, or through some other third party, and do not require Northern Trust to affirm on their behalf.
- Non Self-Affirming Clients are clients who do not complete their own trade affirmation within DTCC's TradeSuite. Northern Trust acts as agent to affirm the trades on behalf of the client.
- If a trade is not affirmed for any reason, the deadline for submitting trade instructions for timely settlement is also listed this time has not changed but will be applicable on T+1 rather than T+2.

CANADIAN CUSTODY TRADE CUT OFF TIMES

As a result of the industry timeline changes described, Northern Trust's instruction deadlines for Canadian Custody trades will need to change, all times are in Eastern Time (ET).

Northern Trust's cut off for Canadian Trades:

Description	Current cut-off	New cut-off
Cut Off for Electronic Instructions	10:00 am on T+1	02:00 am on T+1
Cut Off for Manual / Fax Instructions	08:00 am on T+1	12:00 am on T+1 (midnight on T)

Note: Affirmation is not required in the Canadian market, however, Canada is a pre-matching market and these new deadlines take into account Northern Trust's processing time with the Central Securities Depository in this market.

MEXICAN CUSTODY TRADE CUT OFF TIMES

As a result of the industry timeline changes described, Northern Trust's instruction deadlines for Mexican Custody trades will not be changing, all times are in Eastern Time (ET).

Northern Trust's cut off for Mexican Trades:

Description	Current cut-off	New cut-off
Cut Off for Electronic Instructions	12:00 PM on T+1	12:00 PM on T+1
Cut Off for Manual / Fax Instructions	10:00 AM on T+1	10:00 AM on T+1

Account Opening Note

Northern Trust is no longer able to offer the service of opening local accounts based upon the receipt of a security settlement instruction. Therefore, clients and investment managers must first confirm they have an account opened through Northern Trust in the specific local market they want to settle a transaction before executing the transaction. Furthermore, Northern Trust will not be held responsible for any fees or penalties incurred as a result of a trade failing because a local account was not opened in time for trade settlement.

AFFIRMATION & AFFIRMATION MODELS

US Market Only

Do you offer an affirmation process for clients and/or asset managers?

Northern Trust currently supports Clients and Investment Managers who directly affirm trades and Investment Managers who do not directly affirm trades and will continue to support both models in the T+1 environment, as NT currently provides this service there should be no need for additional documentation

Direct Trade Affirmation Model

The Investment Manager can directly affirm trades through DTCC's TradeSuite ID application or use automated affirmation methods such as CTM or M2i. However, you choose to affirm these trades, Northern Trust will systemically retrieve these affirmations from DTCC as custodian in order to settle these trades.

Non-Direct Trade Affirmation Model

The other model is where Northern Trust can affirm trades on behalf of the Client/Investment Manager, which sends the trade instructions through SWIFT (preference), Trade Notification, GFF or last resort fax. Northern Trust will match the broker's trade confirmation to the client's trade instruction and affirm the trade using our omnibus TradeSuite ID as long as the mandatory fields match. Please note that in order to match the Swift instruction and affirmation, all key attributes of the instructions must match exactly, including brokers details, quantity and net money. Where Swift instructions differ from the broker confirm/affirmation, duplicate trade entries may result.

If Clients/Investment Managers sign-up for their own TradeSuite ID Northern Trust can still affirm the trades with our Agent ID (20290), irrespective of what institution ID is used for non-affirming managers. Its market best practice that IMs affirm their own trades on their own ID. If Investment Managers sign-up for their own TradeSuite ID they would need to complete any documentation DTCC require.

Applicability of the T+1 Rules and how they apply to Brokers outside of the US

15c6-1 – the requirement to settle on the first business day after execution – has some exemptions for dual-listed and foreign securities

- If the security is DTC eligible and either the transaction was executed in the US or over 10% volume occurs in the US, then it will settle on a T+1 basis in the US at DTC.
- If executed in Europe (for example) and less than 10% volume occurs in the US, in general the transaction would be exempt from 15c6-1 and would align to the European settlement cycle (T+2)

15c6-2 – the requirement for brokers to ensure trades are affirmed on T – is only applicable to **broker-dealers that are required to register as such in the U.S.**

- A European broker who is not registered as a broker-dealer in the U.S. would not be subject to this requirement
- An IM/client who trades solely with these non-registered counterparties would technically be under no obligation to affirm their trades on T, although it is still market best practice in the U.S.

Will there be any changes to the DTCC's trade affirmation process in future vs current state?

The main change from current to future state is the timing for trade instructions and affirmations, which needs to be completed by the market cut-off on Trade Date, which is the day the trade was executed with the broker. Its market best practice to ensure that all trade confirmations and allocations are instructed by 7:00 p.m. EST with an affirmation deadline of 9:00 p.m. EST.

Will Northern Trust be able to cater for the use of Match To Instruct (M2i) by clients and brokers ? Yes, Northern Trust will be able to accommodate the use of the M2i product.

Is there an alternative model if CTM/M2i is down? Also need to understand if this is an industry standard.

DTCC's CTM workflow is a market standard. If CTM is down the Investment Manager can submit trade instructions to Northern Trust via SWIFT (preference), Trade Notification, GFF or last resort fax

If Investment Managers choose to self- affirm at DTCC, is there anything that Northern Trust Custody must do to ensure that trades are fed back to Northern Trust?

Self-affirm means an IM affirms the trade with DTCC directly using one of their tools. The service team needs to amend the affirmation responsibility at the Investment Manager level. Please coordinate with your Northern Trust representative to change your profile in our data tables.

Are you seeing a lot of Investment Managers choosing to go with DTCC affirmation?

Yes, there has been an uptick in Investment Managers changing their process to affirm their own trades.

How will cancellations be handled in each future state affirmation model?

Due to the accelerated reconciliations and short remediation timeline, the industry best practice is that cancelled trades and rebooks be completed on a T+0 basis.

Will MT548 be used to communicate affirmation status? If yes, under what field will the affirmation status be reflected?

Yes, MT548 with field 25D: MTCH//MACH

An unaffirmed confirm and an affirmed confirm will be generated from TradeSuite and sent to the custodian. What is the purpose of two confirms and if this is also a market/regulatory requirement?

We receive the broker confirm (unaffirmed) first and followed by affirm which is essential an update to the broker confirm. Both messages share the same DTC control Number. The swift instruction matched to broker confirm indicates the instruction is matched with broker and the affirmation update that follows make the transaction indicates investment managers agreement making the transaction eligible for authorization settlement at DTC vs night/day functions for unaffirmed activity.

Is affirmation typical for other markets too, especially Canada and Mexico that are also transitioning to T1?

Affirmation is a process specific to the U.S. market, however, there is pre-settlement matching in both the Canadian and Mexican markets.

If an Investment Manager has their own institutional ID, would that allow trades to be affirmed sooner than if the trades were alleged with Northern Trust's institutional ID?

Having their own institutional ID but still asking Northern Trust to perform the affirmation as an agent will not speed up the process, but it is market best practice for institutions to have their own ID regardless of who is performing the affirmation. The trades will be affirmed as they are received and there is no delay in the affirmation process based on the institutional ID.

Client wants to have different Institutional ID for different portfolio codes. IMAP shows this on a sponsor code level, can you confirm that can be done at NT?

This could require a rework on how we setup clients when Northern Trust is the affirming party, which would need to be investigated. Our current process is based on the senders BIC code. The affirmation is driven based on the affirmation flag setup at the client profile. The system identifies the IM profile based on the portfolio code/account and not based on Sender BIC. Please note that not all trade instructions are received via Swift to have a sender BIC. Both accounts are handled the same regarding the confirm/affirm process.

If trades are affirmed using DTCC's Match to Instruct (M2i) platform, would you require Investment Manager to instruct Northern Trust not to affirm these trades?

Northern Trust has a process in place by which affirmations made directly in the DTCC M2i platform are captured by the Northern Trust application and processed. There is no need for the Investment Manager to send Northern Trust your trade instructions. The only requirement is that clients work with their Northern Trust Relationship Manager to amend our data tables to reflect that client will self-affirm – this modification typically takes 48 hours.

Please advise on the process of how trades are reported to the SEC after they are affirmed

In the final Rule 204-2, the SEC requires registered investment advisers (RIAs) to maintain trade confirmation, allocation, and affirmations with date and timestamps. The "investment adviser recordkeeping rule is designed to ensure that registered investment advisers that are parties to

contracts under Rule 15c6-2 to retain the records to achieve same day trade matching. Therefore, the SEC does not approve Northern Trust as a keeper of these records on your organization's behalf. RIAs should prepare for this record keeping burden appropriately. SEC reporting for the trade activity and affirmation rates will be done by DTCC and not the client or Northern Trust. However, you can expect the SEC to validate the record keeping rules during their examinations of each SEC registered firm.

) to retain records of trade confirmation, allocation, and affirmations with date and time stamps. The Investment Adviser recordkeeping rule is designed to ensure that Registered Investment Advisers that are parties to contracts under Rule 15c6-2 retain the records. Therefore, the SEC does not approve Northern Trust as a keeper of these records on your organization's behalf. RIAs should prepare for this record keeping burden appropriately.

Whilst it is possible to be set up as an interested party in order to receive the relevant affirmation information, it requires the correct set up within the Standard Settlement Instructions (SSIs).

TRADESUITE ID

What is a TradeSuite ID?

TradeSuite ID is a post-trade processing service that automates the electronic distribution of trade details between counterparties to facilitate electronic settlement and regulatory compliance1. It is offered by the Depository Trust & Clearing Corporation (DTCC) headquartered in New York2. The service delivers substantial efficiency and cost savings to firms through automated electronic trade agreement between counterparties, reducing operational risk by eliminating manual and verbal communications, while accelerating the time from trade date to settlement. Additional information can be found at the DTCC Learning Center: TradeSuite ID[®] (dtcclearning.com)

Is it your intention to affirm confirms via TradeSuite once T+1 is implemented?

Yes, we will continue to use TradeSuite when Northern Trust is the affirming party. The industry best practise is that each Investment Manager obtains their own TradeSuite ID. The following DTCC FAQ provides guidance on how to obtain your own ID: <u>28757-M2i-Omnibus-TradeSuite-ID.pdf (dtcc.com)</u>.

How do I get a TradeSuite ID?

The attached link is the DTCC FAQ, which provides questions and answers on how to obtain your own TradeSuite ID: <u>28757-M2i-Omnibus-TradeSuite-ID.pdf (dtcc.com)</u>.

Will NT use an omnibus TradeSuite ID? If yes, could clients be added as interested third party to receive a copy of related affirmation information to comply with SEC's record keeping policy?

Northern Trust currently supports Investment Managers who directly affirm trades and Investment Managers who do not directly affirm trades and will continue to support both models in the T+1 environment.

The Investment Manager can directly affirm trades through DTCC's TradeSuite, where Northern Trust will retrieve these affirmations to settle respective activity. The other model is where Northern Trust can affirm on behalf of the Investment Manager with their trade instructions communicated through SWIFT (preference) or Fax.

In the final Rule 204-2, the SEC requires Registered Investment Advisers (RIAs) to retain records of trade confirmation, allocation, and affirmations with date and time stamps. The Investment Adviser recordkeeping rule is designed to ensure that Registered Investment Advisers that are parties to contracts under Rule 15c6-2 retain the records. Therefore, the SEC does not approve Northern Trust as a keeper of these records on your organization's behalf. RIAs should prepare for this record keeping burden appropriately.

Whilst it is possible to be set up as an interested party in order to receive the relevant affirmation information, it requires the correct set up within the Standard Settlement Instructions (SSIs).

Will there be any standard settlement instruction change to reflect the change of Trade Suite ID?

All new TSID information should be provided to Northern Trust and the broker dealers to allow for proper updates to account data and standing settlement instructions (SSI). Investment Managers using DTCC ALERT for management of SSIs should make the TSID update in ALERT. Where Northern Trust maintains SSIs on behalf of the investment manager through ALERT GCD, updates to the SSI will be made by Northern Trust.

Please direct all TSID changes to <u>TSID_Updates@ntrs.com</u>

CASH

T+1 SUMMARY

- Northern Trust continues to analyze the impact of the move to T+1 Settlement on industry cash flows and liquidity management.
- Northern Trust invites clients to closely monitor cash balances to ensure cash sufficiency for payment activity after the T+1 Settlement changes.

HOW NORTHERN TRUST IS PREPARING

- Northern Trust is reviewing process around:
- Potential impact of T+1 on client credit and overdraft
- Potential impact of T+1 on counter-party settlement limits
- Potential changes to liquidity flows due to the impact of T+1

IMPACT TO CLIENTS

- Clients should undergo a similar review process and monitor account balances to ensure that funds to settle custody trades are available when required.
- Clients are encouraged to adopt Northern Trust's Standing Settlement Instructions for timely posting of inbound cash to client accounts.

CORPORATE ACTIONS AND INCOME

T+1 SUMMARY

- Ex-Date Calculation for regular way dividend processing will shift from one day prior to the record date in a T+2 settlement cycle to the same day as record date in a T+1 settlement cycle
- Guarantee of Delivery or Cover/Protect period will be calculated as expiration date plus one day in a T+1 settlement cycle, versus expiration plus two days in the current T+2 environment
- T+1 compressed timeframes for voluntary corporate action events, both reconciliation and timely settlement of trades on securities undergoing a corporate action.
- Custodian system to consume the corporate action event announcement create client entitlements, perform trade reconciliation to determine the liabilities, and then ultimately tie-in the client instructions to DTCC all in a timely fashion is key to reducing risk
- Short window to Resolve exceptions in T+1 timelines

HOW NORTHERN TRUST IS PREPARING

Operating model: NT People, Process and technology changes to support processing of Income and Corporate Actions events in T+1 settlement cycle, which include:

- Operations readiness changes to Workforce support
- People and Process changes on managing Income events on securities held in Euroclear
- Potential increase in Market Claim activities due to T+1 shortened timelines
- Potential increase in Securities Lending adjustments. For example, when Clients sell stock, minimum denomination and in T+1 shortened timelines
- Additional process optimization to adopt to T+1 timelines on Securities Lending Liability Window when the Broker becomes liable, and to process minimum denominations

IMPACT TO CLIENTS

Review internal processes that will need to be changed, which include but are not limited to:

• Familiarize with industry timelines, expectations and considerations

- Ensure processes and systems updated to correctly consume changes related to Ex/Record dates and cover/protect dates on their event announcements.
- Review internal operating models to ensure their alignment with the T+1 change
- Ensure all automated and manual processes are aligned to T+1 change

SECURITIES LENDING

T+1 SUMMARY

- Accelerated settlement times impact securities lending by giving less time to retrieve the security from loan to settle the trade and may increase fails and related sell fail costs
- NT **best practice recommendations** to increase likelihood of recalls settling successfully to support T+1:
 - Equities and Corporate Bonds deadlines moving to 3:00 PM EST on T
 - Government Securities deadlines remain unchanged for same-day settlement
- For securities lending clients, adhering to these notification deadlines allows time for the reallocation process to occur and issue any resulting recalls prior to market close. This allows borrowers time to take action before market close and increases the likelihood of recalls settling successfully
- All trades must be received by relevant custody deadlines to receive trade settlement protection
- Technology enhancements were implemented to increase frequency and efficiency of our operations to align to T+1 settlement deadlines

HOW NORTHERN TRUST IS PREPARING

Northern Trust is working with industry participants and vendors to agree on new standards to meet the T+1 initiative. Involvement with industry participants from SIFMA, DTCC, ISITC and RMA helped us define and shape changes needed to the current processes.

We have updated our systems to increase the frequency and efficiency of our securities lending operational processes, including:

- Triggering reallocations/recalls based on market confirmations as opposed to waiting for trade affirmation
- Increasing frequency of recall notices on trade date to allow borrowers more time to source securities to be returned
- Setting earlier deadlines for Client/Investment Manager to instruct sales

IMPACT TO CLIENTS

• The move to T+1 impacts securities lending by shortening the timeframe available to return securities from loan. Today, our robust lending portfolio (\$1.4T) allows us to successfully reallocate participation in loans among our clients resulting in successful fulfillment of more than 93% of our clients' sales. If reallocation among our clients is not possible, Northern Trust will issue a recall notice to the borrower for the return of the loaned security. If loaned securities are recalled, these will be processed in the shortened timeframe. Trade settlement protection and contractual settlement practices will remain in place.

Our Securities Lending trade notification deadlines for securities in the United States, Canada and Mexico have been aligned with custody requirements.

However, to minimize the risk of a sale failing, Securities Lending clients and their investment managers should communicate trade notifications for securities in the US, Canada and Mexico to Northern Trust <u>as soon after trade execution as possible.</u>

COLLATERAL MANAGEMENT

What SWIFT format is permissible for collateral management purposes to instruct custody to deliver & receive securities which have been pledged and returned, without the use of a "Triparty" Collateral agent?

MT540/MT542 would be the correct SWIFT formats to instruct Custody, where no cash is involved. Messages may require specific coding in 22F field (or similar) so the transaction can be identified as a collateral movement in line with <u>Securities Market Practice Group guidelines</u>.

GLOBAL FX

T+1 SUMMARY

Global FX clients may wish to consider their FX process in light of reduced funding timelines for in-scope securities. This review should consider the entire trade lifecycle from trade to FX execution to ensure timely funding. More specific funding scenarios and solutions detailed below.

HOW NORTHERN TRUST IS PREPARING

The move to T+1 settlement has triggered efforts within GFX to ensure we are able to support timely FX execution and ultimately support our clients in funding their security transactions. At a high level, these workstreams cover:

- Reviewing the transmission of FX orders from Northern Trust systems to the GFX Execution Management system
- Broader implementation of a continuous 24/5 execution model for certain CustodyFX clients that do not already elect specific execution points
- Completion of process and technology modifications to support the above points
- Coordination with Relationship Management and support teams where necessary, including
 - For clients moving from a regional to a global execution model, completion of additional onboarding documentation
 - For clients that elect their own execution points, communications related to our global execution model and reminders that clients have the obligation to ensure their execution points are suitable in the T+1 post go-live

GFX is working closely with existing Capital Markets clients to improve and update their FX execution capabilities, these client service resources will continue to be available post T+1 go-live. GFX is also collaborating internally to ensure businesses connected to GFX are able to effectively service clients.

IMPACT TO CLIENTS

As mentioned above, a broader implementation of a continuous 24/5 execution model may apply to CustodyFX clients that do not already elect specific execution points.

General funding impacts that clients may want to consider will vary depending on the FX solution(s) used, client jurisdiction and client internal processes, so it is encouraged that clients:

- Review industry timelines, expectations, and considerations relative to the move to T+1; and
- Review internal operational processes and workforce to determine if changes are needed to ensure alignment with the industry move to T+1.

Challenges arranging funding for T+1 settlement

FX execution timing challenges vary depending on client jurisdiction and internal processes.

For clients based in North America and Europe, assuming the initial trade/affirmation/instruction process occur on T there is often a window on T to execute the FX for T+1 settlement. Clients may, however, struggle to complete these initial stages until the morning of T+1 due to internal processes, in which case there may be a smaller window on T to receive same-day FX settlement in the major currencies.

For APAC-based clients this timeline is more complex due to time zone differences. For example, assuming an APAC base currency, the FX effectively needs to be done on the same day for an APAC based client due to tighter same-day FX cut-offs in these currencies.

In both instances, it may be useful for clients to reconsider the FX trade lifecycle. Northern Trust's CustodyFX products, specifically instructions via Tag 11A, can be useful in ensuring prompt FX order generation for security-related FXs, or similarly via CompleteFX for custodied and non-custodied funds.

A separate and more general funding challenge is in managing misaligned equity settlement cycles, especially where a client's primary equity trading is in the US and Europe. Clients have historically benefitted from being able to align an equity purchase in the US with an equity sell in Europe, in the future model this may require a long USD balance.

Will there be any changes to the FX process?

Northern Trust offers a global, 24/5 execution model and some changes may be seen for clients that were not already set up to execute their FXs in all three of our regions (Chicago, London, and Singapore). For this group, post go-live, executions may extend from just one or two regions to global. For existing clients that opt to elect specific execution points, Northern Trust has provided communication to impacted clients to remind them of the upcoming changes to their current execution points, but the onus is on the client to ensure their execution points are suitable post T+1 go-live.

Are there any currencies pairs that are causing you concern regarding equities settling on T+1?

Clients should holistically consider the impacts of the compressed settlement timelines on both their securities trading and FX funding processes. Clients should work with their Relationship Managers to refine and align key processes such as Custody, Securities Execution and FX Funding to ensure that they can consistently settle on a T+1 basis.

Clients should also be aware of the impact of non-US Bank Holidays. For example, where there is a GBP based account which requires a GBP/USD FX to be instructed in order to settle the transaction, if there is a UK Bank Holiday on T+1 a same day FX may be required on T.

Will Northern Trust still accept third party FX?

Yes. Northern Trust is able to execute FXs as a third party provider and will continue to accept third party FXs subject to associated cut offs. Our CompleteFX offering is especially well positioned to handle the T+1 change, amalgamating transactional FX trades across client funds and ensuring prompt execution with one provider.

Will T+1 trades still be able to settle through Continuous Link Settlement (CLS)?

Yes, they will need to be instructed to Northern Trust and matched by the counterparty prior to CLS cutoff on Value Date -1.

It is important to note that CLS are not changing their current cut-off times.

When will you provide cut-off times for G20 currencies for T+0 settlement?

We are aligning our cut-off times with the industry best practice, and we are discussing our revised cutoff times with the Association of Global Custodians. We will be issuing an Atlas Bulletin once we have our new cut-off times. For our current guidelines, please refer to in Institutional Investor Passport, under News and Resources: <u>Guidelines & Deadlines (ntrs.com)</u>

What is your view on whether the shortened settlement cycle will bring any behavioral changes to the market, for example, encourage market participants to reserve more funding as liquidity buffer?

Clients that have historically benefitted from aligned T+2 settlement cycles may need to reconsider their funding in the US T+1 world, it seems clients will need to keep a larger USD buffer in these instances to avoid overdraft. Clients may also face varied internal process challenges and could benefit from outsourcing parts of this via CustodyFX products that will shorten the trade lifecycle timeline and facilitate FX funding.

On a separate note, it may be the case that as more clients look to instruct their US trading on T, we may see additional FX liquidity later into the US day and perhaps throughout the Asian session, this remains to be seen however.

Has Northern Trust received any questions related to APAC and/or Far Eastern clients funding USD in a T+1 environment? Is Northern Trust advising to pre-fund or suggesting a same day settlement for the FXs?

Yes, please refer back to the funding Q&A in this section. Whilst pre-funding can be a solution, clients are still able to keep the benefits of an outsourced FX model via CustodyFX products by ensuring their execution points are within the same-day FX deadlines and their instructions into Northern Trust are made accordingly.

Please advise if Northern Trust intend to change/amend your FX offering to support early funding to support US/CA T+1?

Northern Trust are able to offer a global, 24/5 execution model. Our CustodyFX products, specifically those instructed via 11A, are competitive in ensuring the FX order is generated quickly upon receipt of the instruction, allowing our client base to access liquidity around the clock. Northern Trust's FX, Cash and Settlements departments will continue to refine our execution cut-off times.

Please advise if Northern Trust intend to change/amend your CLS Cut off to support early funding to meet US/CA T+1 regulation?

Northern Trust has not changed our CLS cut-off times.

What if any impacts are there to our current and proposed (for seg mandates) operating model and how are Northern Trust preparing for readiness to support this?

Currently there are no anticipated changes to our FX offering since we currently support same day FX. However, Northern Trust is reviewing the current cut-off times and any changes will be announced through Atlas Bulletins and updated on our website.

For trades where FXs to fund US or Canadian trades is applicable, client will not know that final FX amount until after the trades have been finalized and the markets are closed. Can Northern Trust please advise if there would be any issues with completing T+0 FXs for US or Canadian trades on the related trades' settle dates to fund buys or repatriate the proceeds from sales?

There should be no issues with funding your T+1 trade activities by completing a T+0 FX, as long as the USD & CAD settle in time for the trades on T+1.

FX SOLUTION FOR T+1

Direct Dealing: GFX can accept client orders directly onto our desks in London, Chicago and Singapore (assuming all required client onboarding steps have been taken), providing prices based on liquidity Northern Trust sources from Tier 1 Bank Liquidity Providers.

CustodyFX: is an automated FX execution service that complements our Custody offering. SWIFT MT541/43 messages are automatically sent from our Custody platform to our automated trading platform to provide funding for settlement. This process also supports repatriation of corporate actions and other lifecycle events.

CompleteFX: is a delegated, fully automated FX execution service where GFX manages and executes FX funding trades with our clients. GFX receives underlying securities trade details from clients and executes via our automated trading platform to provide funding for settlement.

CompleteFX can also be integrated with:

- ITS (delegated securities execution) service
- IOO (Investment Middle Office) services

Benefits:

ITS + CompleteFX: integrated, delegated securities and FX execution ensuring that both the securities and funding is aligned on Trade Date, significantly mitigating the risk of failed trades.

IOO + CompleteFX: regardless of whether the clients custodies with Northern Trust or not, IOO manages incoming trade instruction from all custodians and GFX executes the funding FX on the clients behalf, reducing the cost of front office FX execution and receiving transparent pricing.

ITS + IOO + CompleteFX: Full front and middle office integration allowing clients to reduce the cost of FX and securities execution and reducing overall operational risk. Clients can focus on their core business and strength i.e. asset allocation, end client relationship development, alpha generation.

Marketing materials can be provided by GFX Product Management.

BROKERAGE OPERATIONS AND PORTFOLIO SOLUTIONS

T+1 SUMMARY

- The US brokerage business Northern Trust Securities Inc ("NTSI") is a SEC-registered broker-dealer and is therefore directly impacted by new regulations on affirmation timing, the shortened settlement window, and record retention for our RIA clients.
- All Global Brokerage clients are impacted where they trade and settle in US markets
- Impact to our Portfolio Solutions business, who trade and settle as a client of Brokerage, but now face a more complex challenge of managing cashflows and trading challenges on basket trades with US market on T+1 settlement cycle and other developed markets still T+2

HOW NORTHERN TRUST IS PREPARING

- NT Brokerage is making technology / operating model changes to support the 9:00 PM EST affirmation deadline across all client types and workstreams.
- NTSI are working with clients and custodians to support NTSI in meeting SEC target affirmation rates.
- The objective for investment managers and asset owners impacted by T+1 should be to complete the trade; trade processing (trade matching, clearing and settlement) AND trade-related FX as close in time as possible, with as few manual touchpoints as possible. We would encourage managers and owners to consider Northern Trust's Integrated Trading and Complete FX outsourced trading services as potential solutions for EMEA & APAC clients to support new strict timelines and FX funding challenges.

IMPACT TO CLIENTS

- Clients must prepare their operating models to meet earlier deadlines on Trade confirmation, allocation and affirmation processes
- Engage with their brokers, custodians and other service providers to assess any changes to timelines & downstream impacts including funding considerations for non-US clients
- Review existing industry best practices and reference materials related to Affirmation responsibility, Automation & Record Retention SEC Rule change

• Late confirms/affirms (received after 8 PM CST) will not be supported. The expectation is for clients to send in their allocations, preferably automatically, within the T+1 accelerated settlement timelines.

BROKERAGE U.S.

T+1 SUMMARY

- SEC Rule 15c6-2 requires a US broker-dealer to either enter into written agreements as specified in the rule or establish, maintain, and enforce written policies and procedures reasonably designed to address certain objectives related to completing allocations, confirmations, and affirmations as soon as technologically practicable and no later than the end of trade date.
- The SEC is monitoring affirmation rates and has set the goal of 100% affirmation as of May 28th implementation.
- Rule 204-2(a)(7)(iii) under the Advisers Act requires investment advisers registered or required to be registered under section 203 of the Advisers Act to make and keep true, accurate and current certain records with respect to any transaction that is subject to the requirements of Rule 15c6-2(a), specifically those transactions where a broker-dealer engages in the allocation, confirmation, or affirmation process with another party or parties to achieve settlement of a securities transaction that is subject to the requirements of § 240.15c6-1(a).

HOW NORTHERN TRUST IS PREPARING

- NT is providing an "auto-affirmation" service to a subset of clients for transactions executed with NTSI and custodied at NT. This service is intraday and will allow clients to meet the new deadlines. Allocations must be received by NT prior to 4 PM CST to be eligible for "auto-affirmation."
- NTSI is performing a client and custodian communication initiative for ITS clients utilizing NTSI as their outsourced trading provider and for post-trade services.
- NTSI is identifying and communicating client behaviours that are not in alignment with the new rules set forth by the SEC, working with clients to ensure an appropriate operating model is in place

IMPACT TO CLIENTS

- RIA's need to obtain a TSID and provide it to their relationship contact to update their account institution ID information prior to May 28th. Per updated Rule 204-2, RIA's are required to keep true and accurate records of allocations, confirmations, and affirmations.
- Non self-affirming clients will need to contact their custodians to arrange for them to affirm on their behalf prior to the new deadlines.
- Clients utilizing CTM may set themselves up for "Auto-Affirm" functionality to self-affirm
- Clients that are unable to have their trades affirmed by the deadline risk having brokerage services reviewed and restrictions imposed until they are able to adjust behaviours and meet the requirements.

BROKERAGE EMEA & APAC CLIENTS

T+1 SUMMARY

- EMEA & APAC brokerage clients are impacted by T+1 across many aspects of their operating model
- EMEA & APAC clients who are SEC Registered Investment Advisors (RIA's) will have to adhere to new record-keeping requirements where they trade with a SEC-registered US broker-dealer
- NT Brokerage and FX have products to assist clients with their time-zone and funding challenges Integrated Trading (whether full or partial/regional) and CompleteFX
- As non-US broker-dealers who are not registered with the SEC, the NTS LLP and NTSA brokerage entities that contract with EMEA & APAC clients are outside the scope of the affirmation and record-keeping requirements of the new T+1 rules, but must still adhere to T+1 settlement

HOW NORTHERN TRUST IS PREPARING

- Sales teams within Brokerage, working alongside the Capital Markets Client Solutions team, are actively promoting our Integrated Trading service as a solution to T+1 challenges around allocation for EMEA & APAC-based clients
- The Integrated Trading client servicing teams are reaching out to their clients about our understanding of how the regulation impacts them RIA and non-RIA
- Educating clients around the affirmation process for non-US clients and brokers, and regarding TradeSuiteID's (TSID)
- Rolling out a new process for handling non-standard (non T+1) settlement requests from clients these will become chargeable, will be considered only on a trade-by-trade basis and accepted only in limited and unusual circumstances.

IMPACT TO CLIENTS

- Clients should assess whether the NT Integrated Trading service would benefit them in a T+1 world
- Clients/RM's should engage with our materials on the impact of T+1 on Portfolio Managers / CIO's as well as operationally
- Clients should review their broker list to assess where affirmation will be possible and/or mandatory for trades with US vs non-US brokers
- Clients should discuss affirmation with their custodians and agree if they will self-affirm (where possible) or not
- RIA clients should ensure that they can meet the new record-keeping requirements

BROKERAGE ITS SOLUTION

The Brokerage ITS team have a solution in place to support clients globally through the T+1 settlement cycle.

NT have trading and operational teams to support the traders located in Chicago, London and Sydney offering a 24/6 solution. The only day NT does not trade is Saturday. This means for anybody that is trading in the US or a market that is moving to T+1 we already have a solution in place to support clients.

RMs should discuss with their clients to understand if they are solving for T+1 from a trading perspective and if not there may be an opportunity that NT could step in to support them and bridge the gap.

Benefits of utilizing NT's Brokerage service:

- Clients do not have to take the full service, they can utilize NT services for trading in the regions where T+1 is present
- NT have the ability to be able to offer a specific bespoke services that clients may require
- Client should take the move to T+1 seriously, as if they miss the affirmation on T it increases the possibility of the trade failing or buy ins required
- There is also a knock on impact from a reputational perspective as Brokers have raised that there is a possibility that they will stop trading on behalf of clients in T+1 markets due to the fees involved for late settlement and the costly overdraft charges that may apply

If you would like to discuss your clients requirements further or would like to set up a meeting with the Capital Markets team and your clients please contact Amy Thorne or Peter Herrlin.

INVESTMENT OPERATIONS OUTSOURCING

T+1 SUMMARY

- Shortened window for the allocation, confirmation, affirmation and settlement of trades.
 - Trade allocations, confirmations & affirmations mandated to be completed by 9:00 PM EST on Trade Date.
 - Trade settlement to be completed by T+1
- Shortened affirmation window creates the need for a global support model for the processing of late trades and resolution of queries.
- Enhanced record retention obligations which include the affirmation timestamp reporting

HOW NORTHERN TRUST IS PREPARING

- NT IOO is implementing a T1 support model that will provide extended global coverage and support in relation to deadlines for allocation, confirmation & affirmation, including late trades and queries.
- Following intensive review of NT IOO Affirmation process, NT IOO will be adopting 2 approaches
 - $\circ~$ Direct trade affirmation utilizing DTCC M2I automation to assist in timely affirmations and settlements.
 - Non direct trade affirmation where custodians will affirm trades.
 - The approach to utilize i.e., either Direct (M2i) or Indirect (Custodian Affirmation) will be determined based on a number of factors, including Brokers utilised; Custodians utilised; client trading model.
- Unique TradeSuite ID's have now been created for all clients subject to current service offering.
- Implementation of DTCC Trade Archive to address the Record retention obligation
- NT IOO is also reviewing trade MI and engaging with Clients directly to discuss Broker performance and Client processes which require attention.
- NT IOO has reached out to all custodians and are tracking details of responses.
- NT IOO is reviewing trade deadlines and will communicate to clients.
- NT IOO is sending regular client updates with details on key initiatives. The updates is provided monthly.

IMPACT TO CLIENTS

- Review times trades are sent to IOO for trade confirmation, market guidelines suggest all trades are sent through on T.
- Review internal systems ensuring trades are instructed to IOO when booked and not held as part of any batch processing.
- Review coverage and establish if this needs to be extended in order to assist with resolving any mismatches on T with brokers and to facilitate any trade rebooking's where applicable.
- Review trade funding, in particular for accounts where USD is not the base currency.
- Review brokers used for in scope markets considering broker performance.
- Review security lending policy with custodians.
- Review any requirements for internal testing in relation to system changes etc
- Review with third parties (e.g. Fund Accountants, TPAs) any required changes to blotters sent by IOO and advise IOO of the changes

Will IOO be incorporating a "follow the sun model"?

Yes, IOO Trade plans to have a robust process to pass-the-book to the next region, supporting the hours of operation. A key dependency to resolve any exception is to have live coverage including the Client, the Broker and Custodian, to answer any questions related to unmatched trades as needed. IOO Trade should be equipped with the corresponding client and counterparty escalation contacts to facilitate the resolution of CTM exceptions.

Will IOO have extended coverage?

IOO Trade is introducing an extension of the North America shift to ensure coverage for the new shortened deadlines for trade confirmation and affirmation. The extended shift will cover the hours of 5 to 8 PM CST.

Is IOO working with the Custodian network to get all the update cut off times and information available?

Yes, IOO have reached out to all custodians and are tracking responses in preparation for T+1

Will the trade deadlines be moved to incorporate the shortened settlement?

Yes, for non-US clients in line with our current SLAs, IOO cut-off will be 2 hours prior to the new custodians cut-off for receiving trades for affirmation to allow sufficient time for trade confirmation subject to receipt of broker confirmations.

Will there be increased reporting from WTS for Failed Trades and Unmatched trades ?

Real time confirmation is available via the IOO client dashboard. Failed Trade reports will continue to be provided in line with the SLA. Any mismatched trades would be queried with the client once identified.

How will IOO advise Clients of incorrect trade bookings / trade mismatches in CTM ?

IOO will continue to advise Clients of trade issues via the current methodology

Do you believe penalties for late settlement will be introduced?

No, there has been no indication from the regulators that penalties will be introduced

Regulation 15c6-2 requires a broker-dealer to either enter into written agreements as specified in the rule or establish, maintain, and enforce written policies and procedures reasonably designed to address certain objectives related to completing allocations, confirmations, and affirmations as soon as technologically practicable and no later than the end of trade date. How does this impact Investment Managers?

Whilst the regulation stipulates timings from a Broker perspective, the Investment Manager also needs to meet the same deadline in order for the Broker to be compliant. Brokers will need to measure allocation, confirmation and affirmation performance when deciding who to trade with. Please note, as part of our Proof of Concept test phase with DTCC product M2i, it has been established that SEC regulation 15c6-2 stipulates that Affirmation is only applicable for broker-dealers that are registered in the US. The requirement for brokers to ensure trades are affirmed on T is only applicable to broker-dealers that are required to register as such in the U.S. It is still best practice for non-US brokers to affirm.

IOO have reached out to our top US Brokers for comment on this, some have responded advising that whilst their policies are still being discussed, it is likely that they would impose punitive measures such as temporary/permanent refusal of trading orders with clients who frequently/systematically fail to provide trade details for allocation/matching in time for them to adhere to the new deadlines.

Is it recommended that a client has its own unique Trade settlement ID? (is there a benefit, cost speed etc)

Yes, in order to be able to adhere to the new regulation a unique TradeSuite ID will be required for all Investment Managers. TradeSuite ID is required for retrieving affirmation time stamps for trades that have been affirmed by the custodian. Whilst trade affirmation is not a requirement for settlement, it is still strongly advised by the regulator due to the reduced costs and increased efficiency.

Unique TradeSuite ID's have now been created for all clients subject to current service offering. These will be added to Alert in advance of May 2024.

What is the Affirmation process?

Affirmation is the process by which the sell-side version of the trade (the broker confirm) can be authorized by buy-side clients (or their agents) prior to submission for settlement. This is done in addition to, and after, trade matching, or confirmation – the process by which the details of the trade are agreed between the two parties. Affirmation can be performed by the custodian, investment manager or IOO. After further discussions with DTCC and the custodians a decision has been made that, subject to current service offering the affirmation for NT IOO accounts will be performed either via trade affirmation model utilizing DTCC M2i or Custodian Affirmation. This

decision has been determined based on a number of factors, including – Brokers utilization; Custodians utilization and client trading model. This should have already been communicated with yourself directly. We will be engaging with all custodians to understand if they will affirm the trades on the clients behalf IOO will continue to review the affirmation model post T+1 effective date as broker community continue to adopt DTCC M2i.

Unlike other major Central Securities Depositories, DTC does not require mandatory presettlement matching; the Deliverer initiates and the Receiver has the opportunity to accept or reject the trade prior to settlement. Most rejections through this process are due to the Receiver not knowing the trade, and require manual intervention – this often happens late in the process, and can result in delayed settlement. Unaffirmed trades are over 50 times more likely to be rejected in this process than affirmed trades. Affirmed trades submitted to DTC prior to the cutoff are also eligible for a lower processing charge. Currently these charges are being absorbed by the custodians but some custodians have suggested these charges could be passed onto clients. Please see below the difference in affirmation charges:

- Affirmed \$0.04
- Unaffirmed and sent via night batch (Night deliver order) \$0.17
- Unaffirmed and sent after night delivery deadline (Day deliver order) \$0.54

How will the FX requirements be covered ?

Unless directed by clients there would be no change to existing FX methodology however the timing of the receipt of the transactions need to be considered. Existing FX Standing Instructions and 11a tags will continue however there may be a shortened deadline for confirming trades (this would be made clear in the updated trade deadlines once finalised). Clients will be responsible for ensuring that they have the required funding to settle the transactions. Note NT Capital Markets offer a range of FX services (e.g. Complete FX) - clients should speak to their RM for more information.

Will there be any changes to the FX process?

Please refer above to the Global FX section of this document

Are there any currency pairs that are causing you concern regarding equities settling on T+1?

Currently there are no concerns with currency parings. However, institutions that are domiciled outside of the U.S. will need to consider the funding requirements for their trading activity and they must adjust to the shorter settlement timeframe.

Clients should also be aware of the impact of non-US Bank Holidays. For example, where there is a GBP based account which requires a GBP/USD FX to be instructed in order to settle the transaction, if there is a UK Bank Holiday there is no longer the option for IOO to send the Complete FX instruction or sending of the trade instruction with the 11a tag populated to the custodian on T+1. All Bank Holiday Settlement Date trades will need to be sent to IOO in time for them to confirm the trades with the Broker on T and for the associated FX instruction to be sent to NT Capital Markets (Complete FX) or Custodian (11a) for same day settlement. As a result, any trades not sent to IOO on T will not have the required funding to settle the trade and may result in a cash overdraft at the custodian.

<u>Clients are reminded that, as noted in previous question above, all US impacted trades need to be</u> <u>instructed on T to ensure that they are confirmed, allocated and affirmed with the Broker in</u> <u>order for the Broker to adhere to the regulation.</u>

Will Northern Trust still accept third party FX?

Yes, Northern Trust will still accept third party FX for accepted currencies. All third-party FX for funding trade activity must adopt to the shorter settlement cycle and counterparties will need to update their procedures.

Will T+1 trades still be able to settle through Continuous Link Settlement (CLS)?

Yes, they will need to be instructed to Northern Trust and matched by the counterparty promptly on

T+0.

Will the CLS cut-off time be extended?

Currently CLS have no plans to extend their current cut-off times. This is being monitored through the Investment association and custodian feedback.

What happens if stock is on loan?

Clients should liaise with their stock lending provider/custodian (if facilitated via them) for details. If the agent is NT then Clients should reach out to their RM/CSDM

What happens if stock is out for collateral ?

Clients should reach out to their RM/CSDM with any collateral related questions.

Will the timings of Trade Blotters/Reports/Interface files be changed / frequency increased ?

Trade blotters and reports can be amended to required frequency/amended recipients when requested by client via the current BAU process

What is happening with loan items?

Bank Loans are not impacted by the T+1 settlement initiative

HEDGE FUND SERVICES (HFS)

T+1 SUMMARY

• The move to T+1 shortens the window for the affirmation and settlement of trades

• This impacts trade processing, middle office, settlement system and staff operating hours for HFS

HOW NORTHERN TRUST IS PREPARING

- HFS will provide institutional ID for clients supported on CTM
- HFS will update ALERT with SSI enrichments and institution IDs
 - If a client is communicating directly with their execution/clearing broker, they will be responsible for SSI updates and institutions IDs
- HFS is working with DTCC to implement Match to Instruct (M2i). For Non-Prime broker flow, M2i will
 automatically affirm trades and deliver affirmation to DTC for settlement once trade details are matched
 with the executing broker on CTM eliminating the need to take additional action from either broker.
 Prime Brokers will still be required to affirm trades under the M2i workflow but will be able to receive
 confirms from executing brokers sooner to help achieve same day affirmation.
- HFS is enhancing trade processing to accelerate processing.

IMPACT TO CLIENTS

- Provide early and frequent trade transmission
- Recommend communicating EOD trade completion and volume for HFS to start their reconciliation process and ensure trades are completed
- Review any changes to funding requirements at the brokers/custodians, as required by markets
- Know the clearing brokers' cut off times and ensure trades are communicated to HFS ahead of that deadline
- Communicate post 6pm CST support/staffing model to HFS for North American clients and 6pm GMT for EMEA clients

GENERAL QUESTIONS

Does Northern Trust have any specific contact person/team who will manage the US, CA T+1 queries?

Clients can access the external T+1 site <u>Northern Trust T+1</u> – additional documentation/information can be found in the Reference section at the bottom of the webpage. Client queries should be directed to your Northern Trust relationship manager, client service manager or client service delivery manager.

Will my execution be affected by the move to T+1?

Yes. Managers everywhere in the world will be impacted. The move to T+1 will impact all managers using the in-scope instruments listed at the front of this document. Investment managers will need know and understand the ramifications for trading; trade matching, clearing and settlement; and for the trade-related FX for all those instrument types.

We are encouraging managers to speak to all their brokers, custodians and other service providers and ensure they know what steps they need to take to comply with the changes.

There are potential cost implications in the shortened cycle (cost of overdrafts and other instruments; costs of failed trades; costs of currency trading late in the working week; failed trade penalties in related markets, etc).

Northern Trust is working hard to help managers mitigate the risks of the change and the potential incurrence of those costs as much as is possible.

Is there something specific I need to pay attention to in order to make this work for my US/Canada/Mexico trading?

Yes. The move to T+1 means managers will need to know and understand each point in the lifecycle of an investment decision and ensure they understand what they, their brokers, their custodians and service providers will and can do to help with this change.

The logical order to review the lifecycle is:

- Portfolio management decision-making
- Execution decision and choice of broker(s)
- Trade matching, clearing and settlement processes
- Trade-related FX
- All other considerations, eg securities lending

Why is portfolio management impacted?

There are several reasons why portfolio managers need to be aware of this regulatory change.

Managers need to know and understand the trade and the trade-related FX cycles for their planned trading, especially late in the working week.

Managers need to consider their use of cash, their regulatory and legal permissions to hold cash in their funds and portfolios and any planned use of overdrafts or other such sources of liquidity. The key thing is there could be unwelcome cost surprises and/or performance drags for funds and fund managers to contend with. The risk of long periods of exposed FX positions is real, especially on public holidays before or after weekends.

To reiterate, the need for careful trade planning and execution is especially acute at the end of the working week in non-US markets.

What specific instruments and trading decisions need the most care and attention?

The list of in-scope instruments is lengthy and there are at least five instrument types that need careful thought and preparation as the end of the week approaches. Each of these needs deeper explanation but a short summary is as follows:

- **ETF trading** : ETFs are already known as difficult to settle and many thousands of ETFs listed on the US exchanges will move to T+1.

The key difficulty is that an ETF buy or sell creates two settlements for each single transaction. To explain, the broker sends an ETF order to a broker who in turn sends that order to the ETF' owner' or market maker. The market maker delivers a 'synthetic fill' (known as a 'proxy basket') back to the broker and then goes away and fulfils each sub-component of the ETF in the market. This already complicated process will be made more complex by the settlement mismatches embedded by US/Canada/Mexico T+1. For example, Managers will need to be aware and plan for the cash movements when selling an ETF where the underlying components of the ETF traded are on non-T+1 settlement cycles. The cash proceeds of the sale will not arrive for several days. That liquidity shortfall will need to be bridged.

- Back-to-back trading in different markets : This is where a manager wants to sell one instrument and buy another at the same time, but in different markets. All managers will need to know and understand the settlement cycle mismatches between the US/Canada/Mexico and other traded markets to avoid fails, cash shortfalls, missed currency cut-offs and other settlement problems. Back-to-backs are more difficult where the sell market is T+2 (or longer) and the buy market is T+1. This needs careful attention at the end of the working week outside the US. It seems likely that higher cash buffers or other forms of pre-funding will need to be used.
- **Block trades :** Where a manager executes a large trade which will be allocated to multiple funds, portfolios and/or segregated mandates, T+1 raises the level of complexity because the processing time for these trades is significantly reduced. Large blocks are often broken down by brokers, with the manager's agreement, into multiple smaller trades to match market liquidity availability and then re-aggregated and reported at the end of the trading day. Only at that point, can the manager start the allocations process to each of the underlying destinations and this process is even more complicated if only part of a block was in fact executed. The allocations are then passed back to the broker and affirmation can occur.

Managers should automate as much of this lifecycle as possible. Manual handling will obstruct timely settlement processing

 Basket or Program trades : This is similar to block trading but even more complicated because a program trade involves multiple instruments, multiple markets and multiple currency pairs when settling trades. Each of those 'multiples' needs to be separated into a single line item for trading; matching, clearing and settlement, and trade-related FX. This will be more complicated and need careful thought when the markets involved are on different settlement cycles. That means managers will need to pay close attention to inadvertent cash accumulation vs permitted levels (whether regulatory or investment agreement limitations) when selling to buy.

After US T+1 Go-Live on May 28th, will Northern Trust Securities (NTS) accept client requests for non-standard (non T+1) settlement in US securities?

Northern Trust intends to comply with the SEC Final Rule.

We are encouraging all our clients to comply with the change and as such we expect all client trades to be instructed and booked with T+1 settlement, as per the new regulations.

Can we have a standing agreement in place with NTS to settle all of our US trades T+2? No.

We have reviewed the SECs rules and alerts and we do not believe any form of permanent arrangement is allowed. As above, we expect all clients to adhere to the new T+1 settlement cycle.

In particular, we reference the following SEC Help Guide: https://www.sec.gov/exams/educationhelpguidesfaqs/t1-faq

"The Commission has previously stated that this so-called 'override provision' in paragraph (a) is intended for use only in 'unusual' or 'limited' circumstances." As you will see in the SIFMA memo above, there exist situations where extended settlement can be relied on in sections (c) and (d) of 15c6-1."

In what circumstances will NTS accept orders in US securities on a T+2 settlement cycle?

Our position is to adhere to the SECs desired outcome, i.e. for all trading to be allocated and affirmed on T and settled on T+1. At this point in time we do not anticipate any circumstances where we will accept orders on a settlement cycle beyond T+1 for US securities. If you anticipate any issues, please speak to your RM.

Can we do any other non-standard settlement cycles on US securities?

Whilst we expect the vast majority of trades to settle T+1, we may handle requests for T+0 (cash) settlement on a case by case basis, where clients have the infrastructure and processes in place to achieve T+0 settlement. Funding and other costs may be passed back to managers for any non-standard settlement requests.

T+1 settlement does not align with our subscription/redemption cycles – how do we solve for this cashflow issue?

This mismatch is the subject of much debate and discussion. We are happy to speak with managers and share our findings and market intelligence as we know it when considering how to adapt to this industry-wide problem.

How will trade settlement procedures be impacted?

The trade life cycle will be compressed from T+2 to T+1. This means financial institutions will have less time to process trade confirmations, allocations, and affirmations. All trade affirmations will need to be sent to DTCC by 9:00 P.M. ET (Eastern Time) on the trade date (TD). As a result, Northern Trust will amend its current cut-off times to align with the shorter settlement timeframe. Northern Trust has announced the cut off times for US and Canadian Trade, further cut off times will be announced in due course through the Atlas Bulletin and on the T+1 website.

Institutions with an investment book of record held outside of the U.S. will need to consider the funding ramifications of a move to T+1. When planning for their settlement needs, such firms may need to purchase USD (United States Dollar) earlier or change the settlement cycle of the foreign exchange they execute.

Organizations should review their current settlement process for mutual funds and other pooled investment vehicles. In many instances these types of products have a T+2 settlement cycle and their trading schedules will need to be updated to T+1 to reduce operational issues. In addition, firms that operate non-U.S. mutual funds with exposure to U.S. securities should consider the potential cash management implications of the misalignment of the fund settlement with the underlying securities' trade life cycles.

In the final Rule 204-2, the SEC requires Registered Investment Advisers (RIAs) to maintain trade confirmation, allocation, and affirmations with date and timestamps. The investment adviser recordkeeping rule is designed to ensure that registered investment advisers that are parties to contracts under Rule 15c6-2 to retain the records. Therefore, the SEC does not approve Northern Trust as a keeper of these records on your organization's behalf. RIAs should prepare for this record keeping burden and may want to consider signing up for their own DTCC TradeSuite ID, which is addressed in the TradeSuite ID section of this document

Why should I review my standard settlement instructions?

Maintaining and updating Standard Settlement Instructions (SSI) are key components for timely affirmations and settlements. Clients should review their existing SSIs and validate they have the correct counterparty SSIs. Incorrect SSIs will result in late trade matching and could result in unnecessary fails. All trades will need to be matched on T+0, which means less time to resolve settlement issues. Trades must be submitted to the relevant depository before the cut-off time.

What is DTCC Alert and how will it assist with my SSI Management?

DTCC ALERT is a secure online database for the maintenance and communication of Standard Settlement Instructions (SSI). ALERT allows automated sharing of SSI between investment managers and their trading counterparties, reducing the likelihood of data input errors. For clients and investment managers that have subscribed to DTCC ALERT service, Northern Trust can seamlessly provide custody cash and securities SSI to the platform through our integration with ALERT GC Direct. Additional information can be found on DTCC's ALERT website at Account and Standard Settlement Instructions (SSI) | DTCC ALERT

What are existing SLAs (Service Level Agreement) for instructions sent via FAX vs. Swift?

In the current environment, faxed instructions to Northern Trust are required 2 hours before any stated electronic instruction cut-off. This SLA will change with new affirmation cut-offs and will be announced at the same time.

Do you believe there will be sufficient details transmitted in SWIFT messages or will your organization be seeking to get new fields added?

There is sufficient detail in current SWIFT messaging to accommodate the settlement cycle change to T+1.

For Investment Managers based in APAC that can only get broker confirmation at the end of the US Day, which will be Asia T+1 morning. How will this affect the matching process and the trade instruction deadline that we will be announcing?

The deadline for affirmation in the market has been confirmed as 9pm EST on T+0, with matching and allocation to occur before this time. Investment Managers in other time zones will need to consider whether they have sufficient coverage to allocate and match, or confirm, trades, deal with exceptions, and arrange for the affirmation of the broker's confirm prior to this deadline.

Does this mean Northern Trust will not be able to support cancel/amends on Settlement Date?

If the situation requires, Northern Trust will support cancel and amendments on Settlement Date and beyond.

What are the major settlement platforms for trades (e.g. equities, fixed income securities, etc.) of external managers' portfolios currently?

The move to T+1 is a regulatory change driven by the SEC and is limited in the US to securities settling in DTC (please refer to the assets listed above). There are similar changes happening in Canada and Mexico.

Are Northern Trust aware of any regulatory requirements or proposed changes around overdrafts in mutual funds to align with the T+1 change?

Mutual Funds in the US already settle on a T+1 basis (with Money Markets on a T+0) as an industry standard. Mutual Funds outside of the US do not settle T+1 as a standard. There are no industry or reg changes targeting overdrafts for Mutual Funds.

At present, are any DTCC fees incurred due to DDO/NDO absorbed by you? Does Northern Trust expect this to change and in the future pass these charges back to Clients? If so what would be the charge back mechanism.

The current differential for DDO/NDO trades is absorbed by Northern Trust. Northern Trust is evaluating the impact of these differential costs in the T+1 environment.

Does Northern Trust intend to provide support in US hours? Do you foresee a change in contacts details/email groups?

Yes, Northern Trust will continue to provide support in US hours. No, Northern Trust does not see a change in contact details/email groups supporting/responding to trade management queries after the move to T+1 at this time.

How will new issues in these (T+1) markets will be treated? Generally the ISIN isn't published or available until T+1 which will miss the T confirmation deadline. Will this be more an issue for bonds then equity?

The SEC has specifically excluded new issues from T+1 – the rule is 15c6-1(c), but they have moved from T+4 to T+2 as standard: Paragraph (a) of this section shall not apply to contracts for the sale for cash of securities that are priced after 4:30 p.m. Eastern Time (EST) on the date such securities are priced and that are sold by an issuer to an underwriter pursuant to a firm commitment underwritten offering registered under the Securities Act of 1933 or sold to an initial purchaser by a broker- dealer participating in such offering provided that a broker or dealer shall not effect or enter into a contract for the purchase or sale of such securities that provides for payment of funds and delivery of securities later than the second business day after the date of the contract unless otherwise expressly agreed to by the parties at the time of the transaction.

The deadline for affirmation is 9:00 PM EST the day before settlement, so for these T+2 trades it would be 9:00 PM EST on T+1, in time for the ISIN to be published, and the trade to be rebooked, confirmed, and affirmed.

If SWIFT messages are released on Trade Date between 4:30pm – 6:30pm (GMT), when will they post to the accounts, show up on reporting, and be released to the market?

The SWIFT trades will be posted to the account and reporting once the trade is affirmed and will be released immediately to the market

If we are unable to send a SWIFT are we able to send a PDF with the trade details as we have done in the past?

SWIFT is a preferred method of instruction. Please refer to the Northern Trust deadlines which are in the process of being outlined with the T+1 change for manual instruction deadlines.

Are we able to complete T+0 trades if they are affirmed and SWIFTs are sent on Trade Date/Settlement Date?

Yes, this will be possible if the trade instruction is received prior to the standard cut off times

Does the money manager need to have this set up through the broker they are trading with?

Yes, the broker needs to be set up on CTM to submit confirms. Northern Trust should be marked as an interested party on the confirm so that we can receive the broker confirmations from DTCC to affirm the trades.

There is information indicating that new Derivatives linked to USD security underliers will also be impacted to avoid basis risk being introduced between the physical and the derivatives. Equity Swaps, Equity TRS, Bond TRS, CDS, CDS Options and Asset Swaps etc. are potentially impacted. what impact is expected to derivatives?

Northern Trust's has undertaken analysis that has included both the physical assets and derivative instruments in scope, as well as the knock-on impacts to out-of-scope instruments, such as FX.

Impacts include:

- If out-of-scope derivatives are being used to hedge exposure to underlying T+1 assets, there may be a desire to align cash flows/payments to avoid basis risk – this is not mandatory, so it's up to parties to agree bilaterally
- Potential late payment if the calculation date is the same as the payment date
- Mitigations already exist such as observation period shift
- ISDA (International Swaps and Derivatives Association) encourage looking at SSI management to mitigate other payment delays
- Translating legacy transactions after May 2024 is possible. –ISDA previously have published guidelines for the move to T+2 and are expect to do the same for T+1

In summary, there is a general move to align derivatives to the settlement cycle of the underlying, regardless of the scope of the regulation, to align cash flows and mitigate basis risk, but it is not mandatory. If PIC are agreeing bilaterally with their counterparties to settle these on a T+1 basis to align to the underlying, then the settlement will be supported by Northern Trust on the basis of valid payment and settlement instructions received in advance of the relevant cut-offs.

Does Northern Trust support DTCC's CTM system (for central matching of allocations and confirmations)?

Yes, we have connection with Omego SWIFT platform

Does Northern Trust support GCD (Global Custodian Direct) for SSI management?

Yes, we do, clients are urged to speak to their RMs to engage IM Custody Solutions when you are ready to move forward with this service

Does Northern Trust have any preliminary scheme for the upcoming US T+1 settlement cycle, like a stricter timeline for us to send trade instructions? If so, can you accept if we send trade affirmations through DTCC system by ourselves directly in the market?

Northern Trust has a connection with DTCC and affirmed trades load to our custody platform and are recognized as a good trade.

Are Catastrophe bonds in scope for the regulation? How is Northern Trust overall (Custody, Admin and middle office) preparing for the change in T+1 for ILS instruments.

At this time, we do not find any specific requirements or idiosyncrasies related to catastrophe bonds or other ILS instruments. It is expected that ILS instruments are subject to the T+1 regulations and will be handled like any other security.

In current state, understanding is that the counterparty builds an unaffirmed confirm in TradeSuite that is sent to the custodian – is this a market/regulatory requirement?

The submission of broker confirms is currently a requirement on the broker community. The capture of this information from DTCC's TradeSuite application by custodians is not specifically mandated, but market best practice to allow timely affirmation and reduce the friction for settlement within DTC.

Are you already supporting T+1 funds?

Yes, Northern Trust already support T+1 for various Asset Classes/Funds

Can you please confirm the best BIC to send any trade confirmations to so that we are setup properly on our side?

Clients should work with NT's CIMCAT group for onboarding via Swift. There needs to Client BIC setup done in RMA and NT's Trade Capture system and routing in place to get the Trade routed appropriately for US and Non US Settlement.

Does Northern Trust require any changes to the current SLA's between Client and NT?

Each business is currently reviewing all documentation to confirm whether any changes will be required. If changes are identified, we will reach out to clients through the RM teams.

Are Northern Trust proactively working with any industry body on the T+1 settlement change? If so, are Northern Trust taking instruction from them and can you share what has been discussed?

There is regular engagement with industry groups at the Northern Trust enterprise and Asset Servicing business unit levels. Northern Trust plays an active role in a number of industry forums and working groups addressing T+1, including the Association of Global Custodians (AGC), the Investment Company Institute (ICI), Securities Industry and Financial Markets Association (SIFMA), Canadian Capital Markets Association (CCMA) and others. The Asset Servicing transition has evaluated the outcomes of the industry forums to align Northern Trust's program with best practices for converting to T+1 settlement.

Are Northern Trust planning on running test cycles with DTCC?

Yes, Northern Trust are currently running test cycles with DTC and some clients

Where clients have appointed you to custody global equity and bond portfolios within a single custody account, do you expect clients to change the value dates for the depositing and withdrawal of cash and if so to what degree do you expect this change and what action are you taking to make this easier for clients. For instance, if a client has custodied a €5bn global equity portfolio with you which is 50% US equities and 50% rest of the world and the client withdraws €500m then do you expect the client to withdraw the €500m in two tranches of €250m and does this cause any issues or is it just more cash instructions?

Cash Deposit and withdrawal value dates will not change, unless connected to trade funding or withdrawal of Cash out of Sale trade proceeds. If trade related, Cash Deposit and withdrawal value dates need to align as per trade settlement date (or ISD).

Client can withdraw with just one cash instruction, as long as cash is available in Client account in respective currency (question indicates € or Euro currency).

PENALTIES & FEES

Do you believe either the U.S., Canada or Mexico will introduce penalties for late settlement?

There has not been any indication from the regulators that penalties will be introduced at this time as a result of the new T+1 rules.

Is there any difference in "custody fees" depending on whether settlement SWIFT instructions are in time for the T+0 Affirmation verses late Affirmed trades?

Currently there are no differences in custody fees. There is an increase in market charges for settlement overnight process due to T+1. Northern Trust is assessing this impact and reviewing how to manage the potential increase in market costs related to late affirmations.

Are there any additional costs associated with different affirmation models?

Northern Trust does not apply different charges depending upon the affirmation model the Investment Manager uses. However, if the Investment Manager is looking to take over the affirmation process, they will need to work with DTCC to assess what charges could be applicable.

TECHNOLOGY

Is your organization considering implementing new technologies to handle T+1 settlement?

No new technologies are being considered at this time. Rather, opportunities to improve current technology and operational efficiencies are in focus.

The Canadian Depository for Securities has announced plans to introduce a securities recall portal, similar to DTCC's. Northern Trust has engaged with the depository to better understand the process and requirements, which will automate the workflow from the current Canadian market practice to manually recall shares.

OTHER MARKETS & WHEN

Are other markets considering a move to T+1 settlement cycle?

- In Europe, the Association for Financial Markets in Europe (AFME) published the Geffen Report in February 2024 <u>Click Here</u>
- The UK Government has issued its response, endorsing all of the recommendations and formally establishing the Technical Group <u>Click Here</u>
- The date for the move to T+1 for the UK should, subject to Recommendation 3, be selected by the Technical Group established under Recommendation 6 and <u>should be no later than 31st</u> <u>December 2027.</u>
- The UK, EU and other European jurisdictions should continue to explore opportunities for close collaboration to see if they can align their moves to T+1. If the EU or other European jurisdictions commit to a transition date to T+1 the UK should consider whether it wishes to align with that timeline. However if that cannot be achieved within a suitable timescale the UK should proceed in any event.
- In an effort to be align with the United States and Canadian markets and replicate international best practices, the nuam exchange (the regional integrated stock exchanges of Chile, Colombia and Peru) has announced its intention to reduce the settlement cycle from trade date plus two business days (T+2) to trade date plus one business day (T+1) in the Chilean, Colombian and Peruvian equities markets. The local equities markets have targeted the second quarter of 2025 to complete their implementation of the shortened settlement cycle.

INDUSTRY ENGAGEMENT

How has Northern Trust engaged with the industry in its efforts to prepare for the move to T+1?

There is regular engagement with industry groups at the Northern Trust enterprise and Asset Servicing business unit levels. Northern Trust plays an active role in a number of industry forums and working groups addressing T+1, including the Association of Global Custodians (in which Northern Trust serves as a co-chair of its T+1 Working Group), the Investment Company Institute (ICI), Securities Industry and Financial Markets Association (SIFMA), Canadian Capital Markets Association (CCMA) and others. The Asset Servicing transition has evaluated the outcomes of the industry forums to align Northern Trust's program with best practices for converting to T+1 settlement.

For additional information, please contact your Northern Trust representative.

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