T+1 SECURITIES SETTLEMENT INDUSTRY IMPLEMENTATION WORKBOOK

August 2022

DTCC
ADVANCING FINANCIAL MARKETS. TOGETHER.℠

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Introduction

Baseline Metrics

T+1 Baseline Metrics				
Metric Category	**Metric**	**Dimensions**		
		Count/ Value	**Product**	**Legal Entity/Line of Business**
Trade Volume	U.S. Equities/DTCC eligible products			
	Fixed income (e.g., US treasuries/Bonds)/DTCC population			
	ETFs/ Exchange Traded Note (ETNs)			
	ADRs/Master Limited Partnerships (MLPs)			
Fail Rates	Metrics for trades unmatched from T+1:			
	Due to SSI mismatch			
	Due to product not being Setup			
	Due to inventory			
	Due to counterparty missing instructions			
	Due to mismatch on trade details			
	Due to ongoing corporate action event			
	Fails resolved by manual intervention			
	Fails resolved by client sending correct trade file			
	Fails resolved by counterparty matching			
	Fails due to trades being “don’t know’d” (DK'd)[1]			
	Average time to resolve fail			

[1] A DK’d trade results when one of the parties has a dispute or rejects the trade due to a given discrepancy.

T+1 Baseline Metrics				
Metric Category	**Metric**	**Dimensions**		
		Count/ Value	**Product**	**Legal Entity/Line of Business**
Allocation Rates	Average Daily Count of Allocations			
	Allocated on T			
	Allocated on T+1			
	Allocated on T+2			
	Percentage of allocations on trade date (T) after 7:00PM ET			
	Number of clients not sending trades on T			
Affirmation Rates	Average Daily Affirmation Rate			
	Affirmed on T			
	Affirmed on T+1			
	Affirmed on T+2			
	Percentage of affirmations done after 9:00PM ET on T			
Buy-in (DTC)	Number of buy-in due to insufficient stock			
	Number of buy-in due to no locate in place			
	Buy-in due to settlement error			
	Number of buy-in due incorrect place of settlement (e.g., trade booked in Italy instead of DTC)			
Trade Errors	Number of trades manually touched everyday			
	Reason for trades being manually touched			

T+1 Baseline Metrics				
Metric Category	**Metric**	**Dimensions**		
		Count/ Value	**Product**	**Legal Entity/Line of Business**
	Trade failed due to manual error			
Corporate Actions	Average volume of corporate action events			
Securities Lending	Bi-lateral trades (daily, weekly, monthly, etc. for all)			
	Margin/Exposure/Collateral management			
	Contract Compare breaks			
	Delivery versus Payment (DVP) vs Free of Payment (FOP)			
	Recalls (Securities Industry Automation Corporation (SIAC), etc.)			
	Reg SHO 204 (failure to deliver)			
Payments	Number of manual checks			
	Average ACH timing			
	Average ACH volumes			

Trade Processing

Trading Systems and Reference Data

3.3.1.A. Activities to Configure Trading Systems			
#	**Implementation Steps**	**Organization Participants (Front, Middle, Back, IT, Vendor)**	**Supporting Systems**
1	Inventory trading systems, including hardware and software (completeness check)		
2	Determine systems with in-scope products impacted by T+1 implementation		
3	Examine changes required to systems for settlement date configuration (e.g., hardcoding vs. logic in programs)		
4	Assess the impact of required changes to upstream and downstream systems		
5	Determine responsibility for trading system changes (proprietary vs. external vendor and service bureau)		
6	Coordinate trading system changes with internal and external stakeholders		
7	Develop trading system test plans		
8	Schedule and execute system changes (consider customer experience and user interface continuity when scheduling trading system changes)		

3.3.1.B. Activities to Update Reference Data			
#	**Implementation Steps**	**Organization Participants (Front, Middle, Back, IT, Vendor)**	**Supporting Systems**
1	Identify data sources and inventory reference data (completeness check)		
2	Determine reference data impacted by T+1 implementation (coordinate with vendors and service bureaus if necessary)		
3	Assess the impact to downstream systems and data and interconnecting activities for reference data changes		
4	Examine impact of reference data changes on regulatory compliance requirements		
5	Determine responsibility for reference data changes (proprietary vs. external vendor and service bureau)		
6	Coordinate reference data changes with internal and external stakeholders		
7	Develop reference data test plans (consider how to migrate reference data on T+1 migration date while continuing operations on T+2 settlement)		
8	Schedule and execute reference data changes		
9	Review SSI data quality		

3.3.1.C. Activities to Review Trade Funding Processes and Payment Mechanisms			
#	**Implementation Steps**	**Organization Participants (Front, Middle, Back, IT, Vendor)**	**Supporting Systems**
1	Ensure that systems and reference data related to trade funding, as well as payment mechanisms, are included in inventories for configuration		
2	Examine upstream system, data, and process changes to ensure that they do not interfere with the process for trade funding		
3	Determine changes required to processes related to trade funding including any global trade funding		
4	Assess how changes to payment mechanisms impact policies, procedures, and controls		
5	Develop capacity for mobile deposits or other electronic payment methods and recommend these methods to customers (consider efficiencies to decrease check and Automated Clearing House (ACH) processing time for retail investors)		
6	Coordinate changes to payment mechanisms and processes related to trade funding with internal and external stakeholders		
7	Develop trade funding process and payment mechanism test plans		
8	Schedule and execute changes to trade funding and payment mechanism processes, policies, procedures, and controls		
9	Communicate changes to trade funding policies and procedures to customers		

3.3.1.D. Activities to Revise Mutual Fund Settlement Dates			
#	**Implementation Steps**	**Organization Participants (Front, Middle, Back, IT, Vendor)**	**Supporting Systems**
1	Inventory mutual funds		
2	Determine whether to revise mutual fund settlement dates		
3	Assess changes required for mutual fund settlement date configuration		
4	Coordinate with DTCC to revise mutual fund settlement dates within Fund/SERV		
5	Develop test plans for settlement of mutual funds		
6	Schedule and execute mutual fund settlement date changes		

3.3.1.E. Activities to Adjust ETF Create and Redeem Processes			
#	**Implementation Steps**	**Organization Participants (Front, Middle, Back, IT, Vendor)**	**Supporting Systems**
1	Review ETF Create and Redeem processes to meet agreed upon cut-off times		
2	Develop test plans for ETF creation and redemption		
3	Schedule and execute ETF settlement date changes		

3.3.1.F. Activities to Review Trade Order Management and Trade Capture Processes			
#	**Implementation Steps**	**Organization Participants (Front, Middle, Back, IT, Vendor)**	**Supporting Systems**
1	Ensure that systems and reference data related to trade order management and trade capture are included in inventories for configuration (i.e., Trade Order Management Solution (TOMS), UTC)		
2	Determine changes required to processes related to trade order management and trade capture		
3	Coordinate changes to processes related to trade order management and trade capture with internal and external stakeholders (e.g., FIX, SWIFT)		
4	Develop test plans for trade order management and trade capture		
5	Schedule and execute process changes for trade order management and trade capture		

3.3.1.G. Activities to Standardize Communication Protocols for Trade Away Processes			
#	**Implementation Steps**	**Organization Participants (Front, Middle, Back, IT, Vendor)**	**Supporting Systems**
1	Ensure that systems and reference data related to trade away processes are included in inventories for configuration (i.e., Trade Order Management Solution (TOMS), UTC)		
2	Determine changes required for trade away processes and relevant communication protocols		
3	Coordinate changes to processes related to trade away communication protocols with internal and external stakeholders (e.g., FIX)		
4	Develop test plans for standardize communication protocols for trade away processes		
5	Schedule and execute process changes for standardization of communication protocols for trade away processes		

3.3.2.A. Activities to Update Trade Matching Processes			
#	**Implementation Steps**	**Organization Participants (Front, Middle, Back, IT, Vendor)**	**Supporting Systems**
1	Ensure that systems and reference data related to trade matching are included in inventories for configuration		
2	Examine upstream system, data, and process changes to ensure that they do not interfere with the process for trade matching		
3	Determine changes required to processes related to trade matching		
4	Coordinate changes to processes related to trade matching with internal and external stakeholders		
5	Develop test plans for trade matching		
6	Schedule and execute process changes for trade matching		

3.3.2.B. Activities to Align Industry-Recommended Allocation Timelines			
#	**Implementation Steps**	**Organization Participants (Front, Middle, Back, IT, Vendor)**	**Supporting Systems**
1	Ensure that systems and reference data related to trade allocations are included in inventories for configuration		
2	Examine upstream system, data, and process changes to ensure that they do not interfere with the process for trade allocations		
3	Determine changes required to processes related to trade allocations		
4	Coordinate changes to processes related to trade allocations with internal and external stakeholders		
5	Develop test plans for trade allocations		
6	Schedule and execute process changes for trade allocation timelines		

3.3.2.C. Activities to Configure Purchase and Sales Systems for Near-Time Matching			
#	**Implementation Steps**	**Organization Participants (Front, Middle, Back, IT, Vendor)**	**Supporting Systems**
1	Ensure that systems and reference data related to Purchase and Sales systems for near-time are included in inventories for configuration		
2	Examine upstream system, data, and process changes to ensure that they do not interfere with Purchase and Sales systems for trade matching		
3	Determine changes required to configure Purchase and Sales system processes for near-time trade matching		
4	Coordinate changes to processes related to near-time trade matching with internal and external stakeholders		
5	Develop test plans for configuration of Purchase and Sales systems for near-time matching		
6	Schedule and execute process changes for Purchase and Sales systems for near-time matching		

3.3.3.A. Activities to Review Trade Affirmation Processes			
#	**Implementation Steps**	**Organization Participants (Front, Middle, Back, IT, Vendor)**	**Supporting Systems**
1	Ensure that systems and reference data related to trade affirmation are included in inventories for configuration		
2	Examine upstream system, data, and process changes to ensure that they do not interfere with the process for trade affirmation		
3	Determine changes required to processes related to trade affirmation and new cutoff time		
4	Coordinate changes to processes related to trade affirmation with internal and external stakeholders		
5	Develop test plans for affirmed and unaffirmed eligible institutional trade submission, prime broker transactions, and ID Net transactions		
6	Schedule and execute process changes for affirmed trade submission		
7	Utilize services (e.g., ITPs M2i) to achieve maximum affirmations		

3.3.3.B. Activities for Changes to the Timing of NSCCs CNS Projection Reports			
#	**Implementation Steps**	**Organization Participants (Front, Middle, Back, IT, Vendor)**	**Supporting Systems**
1	Inventory projection reports, including created projection reports and those received and used from other organizations (i.e., cash projection reports, CNS Projection Report)		
2	Assess projection reports for changes from T+1 settlement		
3	Determine if settlement date changes to projection reports will be automatically captured or need to be manually updated		
4	Coordinate changes to projection reports with internal and external stakeholders		
5	Develop test plans for activities related to projection reports		
6	Schedule and execute changes for projection reports		

3.3.3.C. Activities to Align Industry-Recommended Affirmation Timelines			
#	**Implementation Steps**	**Organization Participants (Front, Middle, Back, IT, Vendor)**	**Supporting Systems**
1	Ensure that systems and reference data related to trade affirmations are included in inventories for configuration		
2	Examine upstream system, data, and process changes to ensure that they do not interfere with the process for trade affirmations		
3	Determine changes required to processes related to trade affirmations		
4	Coordinate changes to processes related to trade affirmations with internal and external Stakeholders		
5	Develop test plans for trade allocations, confirmations, and affirmations		
6	Schedule and execute process changes for trade affirmation timelines		

3.3.3.D. Activities to Standardize Communication Protocols Among Affirming Parties			
#	**Implementation Steps**	**Organization Participants (Front, Middle, Back, IT, Vendor)**	**Supporting Systems**
1	Ensure that systems and reference data related to communication protocols among affirming parties are included in inventories for configuration (i.e., Trade Order Management Solution (TOMS), UTC)		
2	Determine changes required for affirming parties and relevant communication protocols		
3	Coordinate changes to processes related to affirming parties' communication protocols with internal and external stakeholders (e.g., FIX)		
4	Develop test plans for standardized communication protocols among affirming parties		
5	Schedule and execute process changes for standardization of communication protocols among affirming parties		

Physical Securities

3.3.4.A. Activities to Decommission Physical Securities			
#	**Implementation Steps**	**Organization Participants (Front, Middle, Back, IT, Vendor)**	**Supporting Systems**
1	Inventory platforms supporting physical securities delivery		
2	Determine platforms supporting physical securities delivery impacted by T+1 implementation		
3	Assess changes required to decommission platforms supporting physical securities delivery for T+1 settlement		
4	Determine responsibility for platform changes (proprietary vs. external vendor and service bureau)		
5	Coordinate platform changes with internal and external stakeholders		
6	Develop test plans for decommissioning physical securities delivery		
7	Schedule and execute changes to decommission physical securities		

3.3.4.B. Activities to Adjust Processes and Systems Related to Physical Securities			
#	**Implementation Steps**	**Organization Participants (Front, Middle, Back, IT, Vendor)**	**Supporting Systems**
1	Inventory platforms supporting physical securities delivery		
2	Determine platforms supporting physical securities delivery impacted by T+1 implementation		
3	Assess changes required to platforms supporting physical securities delivery for T+1 settlement		
4	Determine responsibility for platform changes (proprietary vs. external vendor and service bureau, issuers)		
5	Coordinate platform changes with internal and external stakeholders		
6	Develop test plans for physical securities delivery for T+1 settlement		
7	Schedule and execute changes to physical securities for T+1		

Asset Servicing

Ex-Date Calculations

4.3.1.A. Activities to Configure Ex-Date Changes			
#	**Implementation Steps**	**Organization Participants (Front, Middle, Back, IT, Vendor)**	**Supporting Systems**
1	Identify and inventory instances where ex-dates are generated or received		
2	Conduct conversations with vendors and service bureaus to ensure that ex-dates are captured, tested, and approved		
3	Assess changes required to systems for capturing ex-dates		
4	Review processes for corporate action events to determine impact of ex-date changes		
5	Examine impact of ex-date changes to compliance and oversight requirements		
6	Ensure materials regarding T+1 ex-date implications are included in customer communication plans		
7	Develop ex-date and corporate action event test plans		
8	Schedule and execute ex-date changes		

4.3.1.B. Activities to Adjust Ex-Date Notification Announcement Systems			
#	**Implementation Steps**	**Organization Participants (Front, Middle, Back, IT, Vendor)**	**Supporting Systems**
1	Identify announcement systems used for ex-date notifications		
2	Determine impact to ex-date notifications and announcement systems for T+1 settlement		
3	Coordinate ex-date notification and announcement system changes with internal and external stakeholders		
4	Develop ex-date notification and announcement system test plans		
5	Schedule and execute announcement system changes		
6	Communicate changes to ex-date notifications and announcement system changes to external organizations		

4.3.1.C. Activities to Modify Internal Processing Systems that Calculate Ex-Dates			
#	**Implementation Steps**	**Organization Participants (Front, Middle, Back, IT, Vendor)**	**Supporting Systems**
1	Ensure that systems and reference data related to ex-date calculations are included in inventories for configuration		
2	Evaluate the impact on downstream processes (internal and external) for system and ex-date calculation changes		
3	Determine responsibility for ex-date calculation changes (proprietary vs. external vendor and service bureau)		
4	Coordinate changes with internal and external stakeholders		
5	Develop internally calculated ex-date test plans (consider how to make changes on T+1 migration date while continuing T+2 settlement operations)		
6	Schedule and execute changes related to internal ex-date calculations		

4.3.1.D. Activities to Adjust Due Bill Processing			
#	**Implementation Steps**	**Organization Participants (Front, Middle, Back, IT, Vendor)**	**Supporting Systems**
1	Ensure that systems and reference data related to due bill processing are included in inventories for configuration		
2	Determine changes required for due bill processing		
3	Coordinate due bill processing changes with internal and external stakeholders		
4	Develop test plan for due bill processing		
5	Schedule and implement due bill processing changes		

4.3.1.E. Activities to Modify Interim Accounting Processes			
#	**Implementation Steps**	**Organization Participants (Front, Middle, Back, IT, Vendor)**	**Supporting Systems**
1	Ensure that systems and reference data related to interim accounting are included in inventories for configuration		
2	Evaluate the impact on downstream processes (internal and external) for interim accounting process changes		
3	Determine responsibility for interim accounting process changes (proprietary vs. external vendor and service bureau)		
4	Coordinate interim accounting process changes with internal and external stakeholders		
5	Develop interim accounting testing plans		
6	Schedule and execute changes related to interim accounting		

4.3.2.A. Activities to Review Reorganization Announcement Platforms			
#	**Implementation Steps**	**Organization Participants (Front, Middle, Back, IT, Vendor)**	**Supporting Systems**
1	Ensure that reorganization announcement platforms and reference data are included inventories for configuration		
2	Evaluate the impact to downstream systems and processes (internal and external) for reorganization announcement platform changes		
3	Determine responsibility for reorganization announcement platform changes (proprietary vs. external vendor and service bureau)		
4	Coordinate reorganization announcement platform changes with internal and external stakeholders		
5	Develop test plans for reorganization announcement platforms		
6	Schedule and execute changes related to reorganization announcement platforms		

4.3.2.B. Activities to Modify Voluntary Reorganization Processing Applications			
#	**Implementation Steps**	**Organization Participants (Front, Middle, Back, IT, Vendor)**	**Supporting Systems**
1	Ensure that systems and reference data related to voluntary reorganization processing are included in inventories for configuration		
2	Evaluate the impact to downstream processes (internal and external) for voluntary reorganization processing changes		
3	Determine responsibility for voluntary reorganization process changes (proprietary vs. external vendor and service bureau)		
4	Coordinate voluntary reorganization processing changes with internal and external stakeholders		
5	Develop test plans for voluntary reorganization processing applications and voluntary reorganization event processing		
6	Schedule and execute changes related to voluntary reorganization processing		

4.3.2.C. Activities to Update Internal Processing Systems that Consume Cover/Protect Dates			
#	**Implementation Steps**	**Organization Participants (Front, Middle, Back, IT, Vendor)**	**Supporting Systems**
1	Ensure that systems and reference data related to cover/protect date calculations are included in inventories for configuration		
2	Evaluate the impact on downstream processes (internal and external) for system and process changes related to cover/protect date calculations		
3	Determine responsibility for cover/protect date calculation changes (proprietary vs. external vendor and service bureau)		
4	Coordinate changes with internal and external stakeholders		
5	Develop internally calculated cover/protect date test plan		
6	Schedule and execute changes related to internal cover/protect date calculations		

4.3.2.D. Activities to Adjust Stock Record Platforms as Necessary			
#	**Implementation Steps**	**Organization Participants (Front, Middle, Back, IT, Vendor)**	**Supporting Systems**
1	Ensure that systems and reference data related to stock record platforms are included in inventories for configuration		
2	Evaluate the impact on downstream processes (internal and external) for system and process changes related to modification of stock record platforms		
3	Determine responsibility for stock record changes (proprietary vs. external vendor and service bureau)		
4	Coordinate stock record changes with internal and external stakeholders		
5	Develop internally calculated stock record test plan		
6	Schedule and execute changes related to modification of stock record platforms		

Dividend Reinvestment Plans

4.3.3.A. Activities to Assess Dividend Reinvestment Plans			
#	**Implementation Steps**	**Organization Participants (Front, Middle, Back, IT, Vendor)**	**Supporting Systems**
1	Determine required changes for DRIPs due to T+1 settlement		
2	Determine required changes to issuance of DRIP shares (if open market purchases)		
3	Determine required changes to DRIP communications resulting in shortened settlement cycle		
4	Develop test plans for DRIP changes for T+1 settlement		
5	Schedule and execute changes prior to T+1 settlement		
6	Advise plan participants of changes to DRIP functionality		

Documentation

External Documentation

5.3.1.A. Activities to Update External Client-Facing Documentation			
#	**Implementation Steps**	**Organization Participants (Front, Middle, Back, IT, Vendor)**	**Supporting Systems**
1	Inventory external client-facing documentation that references T+2 settlement, including electronic documents and website information		
2	Inventory static data resources used for auto-populating documentation that references T+2 settlement		
3	Determine which identified documents need to be updated		
4	Create master list of required documentation changes		
5	Coordinate documentation changes with internal and external stakeholders		
6	Schedule and execute identified changes to documentation		
7	Cross-reference updates with master list of required documentation changes to ensure accuracy and completeness		

5.3.1.B. Activities to Update External Service Agreement Documentation			
#	**Implementation Steps**	**Organization Participants (Front, Middle, Back, IT, Vendor)**	**Supporting Systems**
1	Inventory vendor and service bureau documentation that references a two-day settlement period, including agreements, service descriptions, product guides, and fee schedules		
2	Update external vendor and service bureau documentation for a one-day settlement		
3	Review, approve, re-negotiate, and re-authorize changes to documentation as necessary		
4	Test the execution of updated documentation in the delivery and pricing of services		

5.3.1.C. Activities to Determine Impact of E-Delivery for Client Groups			
#	**Implementation Steps**	**Organization Participants (Front, Middle, Back, IT, Vendor)**	**Supporting Systems**
1	Inventory vendor and service bureau documentation that is required to be delivered to clients, including agreements, service descriptions, product guides, and fee schedules		
2	Determine e-delivery procedures and documentation that references T+1 settlement		
3	Assess changes required to e-delivery procedures and documentation		
4	Coordinate changes with internal and external stakeholders		
5	Coordinate changes with client groups		
6	Schedule and execute required changes to identified e-delivery procedures and documentation		
7	Test the execution of updated e-delivery for client groups		

Internal Documentation

5.3.2.A. Activities to Adjust Operating Procedures and Internal Control Documentation			
#	**Implementation Steps**	**Organization Participants (Front, Middle, Back, IT, Vendor)**	**Supporting Systems**
1	Identify and inventory sources for operating procedures and control documentation		
2	Determine operating procedures and control documentation that references T+2 settlement		
3	Assess changes required to operating procedures and control documentation		
4	Coordinate changes with internal and external stakeholders		
5	Schedule and execute required changes to identified operating procedures and control documentation		
6	Document and track changes to documentation to ensure completeness		

Customer and Staff Education

5.3.3.A. Activities to Educate Customers and Staff on T+1 Settlement			
#	**Implementation Steps**	**Organization Participants (Front, Middle, Back, IT, Vendor)**	**Supporting Systems**
1	Identify customers and staff who require education related to T+1 implementation		
2	Determine if education materials need to be updated or if new education materials need to be created.		
3	Assess changes to staff training materials		
4	Assess changes to customer educational materials		
5	Develop a training plan to ensure staff are adequately trained prior to T+1 conversion		
6	Develop a communications plan to address customer needs		
7	Create or update materials for staff and customer education		
8	Train staff for T+1 implementation		
9	Distribute T+1 settlement education material to customers		

Securities Lending

Securities Lending Processes and Procedures

6.3.1.A. Activities for Determining Impact on Securities Lending Processes and Procedures			
#	**Implementation Steps**	**Organization Participants (Front, Middle, Back, IT, Vendor)**	**Supporting Systems**
1	Inventory securities lending processes and procedures documentation (completeness check)		
2	Ensure that systems and reference data related to securities lending are included in inventories for configuration		
3	Assess the impact of required changes to upstream and downstream systems		
4	Determine responsibility for securities lending changes (proprietary vs. external vendor and service bureau)		
5	Coordinate changes with internal and external stakeholders		
6	Develop exercise and assignment test plans		
7	Schedule and execute system, process, and documentation changes		
8	Review effective controls to prevent issues (e.g., inadvertent data disclosure, client confidential breach)		

Stock Loan Recall

6.3.2.A. Activities to Align to Updated Stock Loan Recall Timing Changes			
#	**Implementation Steps**	**Organization Participants (Front, Middle, Back, IT, Vendor)**	**Supporting Systems**
1	Determine required changes to stock loan recall processes for migration to T+1 settlement		
2	Determine responsibility for stock loan recall timing changes		
3	Coordinate changes with internal and external stakeholders		
4	Develop stock loan recall timing changes test plan		
5	Schedule and execute changes prior to migration to T+1 settlement		

6.3.3.A. Activities to Update Margin Calculation Processes			
#	**Implementation Steps**	**Organization Participants (Front, Middle, Back, IT, Vendor)**	**Supporting Systems**
1	Ensure that systems and reference data related to margin calculations are included in inventories for configuration		
2	Evaluate the impact on downstream processes (internal and external) for system and process changes related to margin calculations		
3	Determine responsibility for margin calculation changes		
4	Coordinate changes with internal and external stakeholders		
5	Develop margin calculation test plan		
6	Schedule and execute changes related to margin calculations		

6.3.4.A. Activities to Update Master Securities Loan Agreement			
#	**Implementation Steps**	**Organization Participants (Front, Middle, Back, IT, Vendor)**	**Supporting Systems**
1	Inventory Master Securities Loan Agreements that references T+2 settlement		
2	Assess changes required to MSLAs		
3	Coordinate changes to MSLAs with internal and external stakeholders		
4	Schedule and execute identified changes to MSLAs		
5	Document and track changes to MSLAs to ensure completeness		

6.3.5.A. Activities for Assessing Regulatory Considerations related to Securities Lending			
#	**Implementation Steps**	**Organization Participants (Front, Middle, Back, IT, Vendor)**	**Supporting Systems**
1	Assess rule changes for securities lending		
2	Ensure that systems and reference data impacted by rule changes are included in inventories for configuration		
3	Determine process changes required to maintain compliant with rule changes		
4	Coordinate changes with both internal and external parties		
5	Develop rule change test plans		
6	Schedule and execute changes for system changes		
7	Update operational policies and procedures as applicable for each rule change		
8	Update compliance policies and procedures as applicable for each rule change		
9	Update regulatory policies and procedures as applicable for each rule change		

Prime Brokerage

Review Client Onboarding Documentation and Processing Dependencies

7.3.1.A. Activities to Review Prime Broker Disaffirmation Timelines			
#	**Implementation Steps**	**Organization Participants (Front, Middle, Back, IT, Vendor)**	**Supporting Systems**
1	Ensure that systems and reference data related to prime broker disaffirmation are included in inventories for configuration		
2	Examine upstream system, data, and process changes to ensure that they do not interfere with the process for prime broker disaffirmation		
3	Determine changes required to processes related to prime broker disaffirmation		
4	Coordinate changes to processes related to prime broker disaffirmation with internal and external stakeholders		
5	Schedule and execute process changes for prime broker disaffirmation		

7.3.1.B. Activities to Review Prime Broker Affirmation Timelines			
#	**Implementation Steps**	**Organization Participants (Front, Middle, Back, IT, Vendor)**	**Supporting Systems**
1	Ensure that systems and reference data related to prime broker affirmation are included in inventories for configuration		
2	Examine upstream system, data, and process changes to ensure that they do not interfere with the process for prime broker affirmation		
3	Determine changes required to processes related to prime broker affirmation		
4	Coordinate changes to processes related to prime broker affirmation with internal and external stakeholders		
5	Schedule and execute process changes for prime broker affirmation		

Funding and Liquidity Considerations

Liquidity and Collateral Management

8.3.1.A. Activities to Assess Liquidity and Collateral Management			
#	**Implementation Steps**	**Organization Participants (Front, Middle, Back, IT, Vendor)**	**Supporting Systems**
1	Determine if strategies, policies, or practices to manage liquidity risk need to change based on the shortened settlement cycle		
2	Determine impacts to projection of cash flows		
3	Determine if T+1 settlement will impact the collateral management process		
4	Determine if changes to collateral management systems are required due to shortened settlement cycle		

Forex Considerations and Funding

8.3.2.A. Activities to Assess Forex Considerations and Funding			
#	**Implementation Steps**	**Organization Participants (Front, Middle, Back, IT, Vendor)**	**Supporting Systems**
1	Identify changes to market synchronization for T+1 settlement cycle		
2	Assess impact of market synchronization changes to foreign exchange and funding		
3	Determine changes required due to T+1 implementation		
4	Coordinate identified changes with internal and external stakeholders		
5	Schedule and execute identified changes		

8.3.3.A. Activities to Assess Intraday & End of Day DTCC Settlement Processing			
#	**Implementation Steps**	**Organization Participants (Front, Middle, Back, IT, Vendor)**	**Supporting Systems**
1	Ensure that systems and reference data related to intraday & end of day DTCC settlement processing are included in inventories for configuration		
2	Examine upstream system, data, and process changes to ensure that they do not interfere with intraday & end of day DTCC settlement processing		
3	Determine process changes required for intraday & end of day DTCC settlement		
4	Coordinate changes to processes related to intraday & end of day DTCC settlement with internal and external stakeholders		
5	Develop test plans for intraday & end of day DTCC settlement processing		
6	Schedule and execute process changes for intraday & end of day DTCC settlement		

Additional Considerations

Global Considerations

9.3.1.A. Activities to Review Processes for Global Considerations			
#	**Implementation Steps**	**Organization Participants (Front, Middle, Back, IT, Vendor)**	**Supporting Systems**
1	Identify changes to market synchronization for T+1 settlement cycle		
2	Assess impact of market synchronization changes to foreign exchange, foreign investment, and cross-border transaction processing, procedures, and policy documentation		
3	Review issuance and cancellation procedures around ADR processing		
4	Determine changes required due to T+1 implementation		
5	Coordinate identified changes with internal and external stakeholders		
6	Schedule and execute identified changes		

Options Exercise and Assignment

9.3.2.A. Activities to Assess Options Exercise and Assignment Processes			
#	**Implementation Steps**	**Organization Participants (Front, Middle, Back, IT, Vendor)**	**Supporting Systems**
1	Inventory exercise and assignment processes and documentation (completeness check)		
2	Ensure that systems and reference data related to options exercise and assignment are included in inventories for configuration		
3	Assess the impact of required changes to upstream and downstream systems		
4	Determine responsibility for exercise and assignment changes (proprietary vs. external vendor and service bureau)		
5	Coordinate changes with internal and external stakeholders		
6	Develop exercise and assignment test plans		
7	Schedule and execute system, process, and documentation changes		

Primary Offerings

9.3.3.A. Activities to Assess Primary Offerings			
#	**Implementation Steps**	**Organization Participants (Front, Middle, Back, IT, Vendor)**	**Supporting Systems**
1	Determine required changes for primary offerings required for migration to T+1		
2	Accelerate documentation procedures required to close primary offerings		
3	Coordinate changes with internal and external stakeholders		
4	Develop test plans to check the robustness of the system in handling operational issues		
5	Schedule and execute new systems for primary offerings to cater to the new compressed timeframe of T+1		

9.3.4.A. Activities to Assess Reconciliation Processes for Errors/Fails			
#	**Implementation Steps**	**Organization Participants (Front, Middle, Back, IT, Vendor)**	**Supporting Systems**
1	Determine the redundant manual touchpoints and illiquid securities in the current system		
2	Automate the processes and streamline communication channels		
3	Ensure seamless flow of trade instruction from one counterparty to another		
4	Coordinate changes amongst all stakeholders		
5	Test the new systems in place		
6	Schedule and execute system changes		

Buy-Side Considerations

9.3.5.A. Activities to Assess Buy-Side Considerations			
#	**Implementation Steps**	**Organization Participants (Front, Middle, Back, IT, Vendor)**	**Supporting Systems**
1	Revisit the internal processes, begin impact analysis, and look for investment opportunities that can accelerate change		
2	Identify processes that can be automated and controls that need to be updated		
3	Update systems to incorporate new recordkeeping changes related to trade allocation, affirmation, and confirmation		
4	Schedule and execute system, process, and documentation changes		
5	Test the processes and assess to solve outstanding issues		

Testing and Migration

Activities to Develop Test Plan

11.3.1.B. Activities to Draft Test Plan			
#	**Implementation Steps**	**Organization Participants (Front, Middle, Back, IT, Vendor)**	**Supporting Systems**
1	Draft test plan		
2	Confirm readiness with vendors and service bureaus to determine static data and software field updates for internal systems		
3	Develop internal testing scenarios and data		
4	Conduct internal testing and evaluate results		
5	Coordinate external testing with internal and external stakeholders		
6	Conduct external testing and evaluate results		
7	Develop the organizations' plan to participate in industry testing		
8	Participate (if applicable) in DTCC testing prior to industry test		
9	Conduct post-migration testing activities		

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