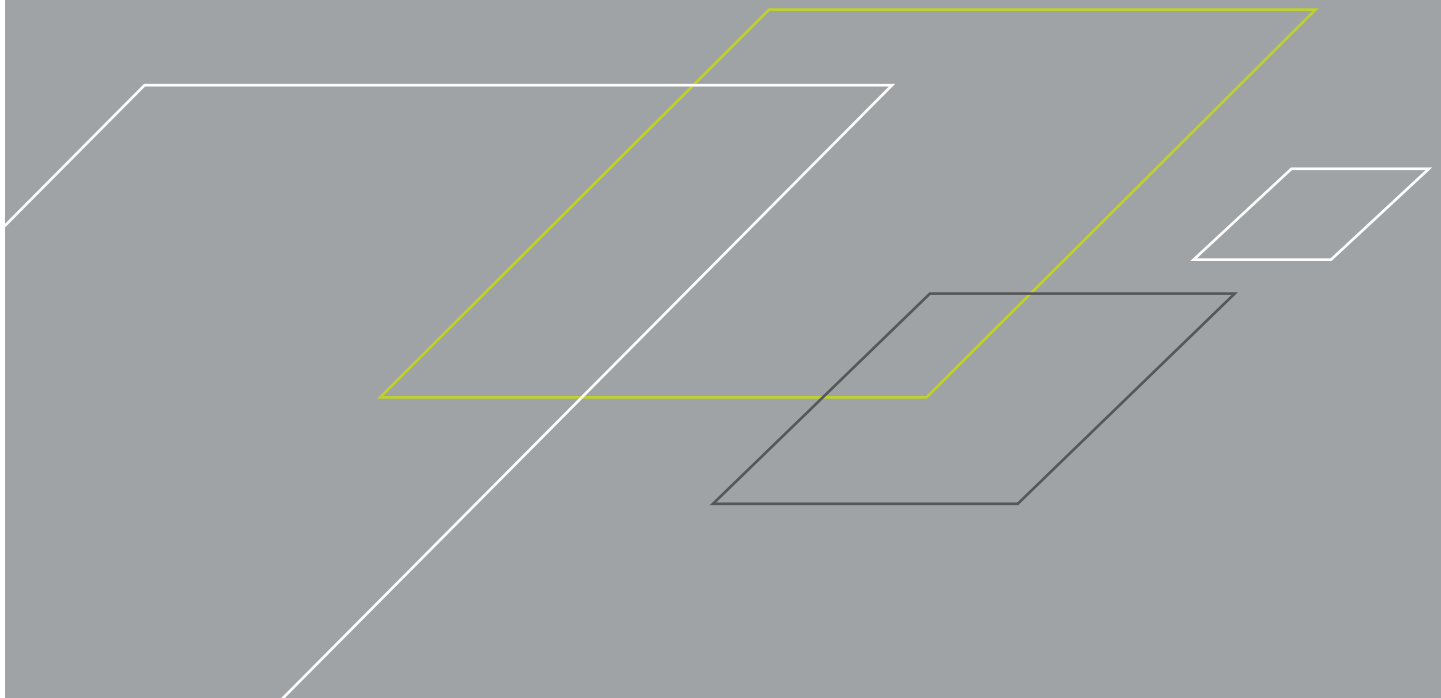




NORTHERN
TRUST

REGULATORY TRENDS IN NORTH AMERICA

ADDRESSING REGULATORY
AND INDUSTRY CHANGE



CONTENTS

1
California Consumer Privacy Act
(CCPA)

3
Interbank Offered Rate

4
Initial Margin on Uncleared
Derivatives

6
The EU Securities Financing
Transactions Regulation (SFTR)

8
The EU Central Securities
Depositories (CSDR)

This booklet outlines our thinking about recent regulatory changes, and how they might affect your programs. It summarizes recent developments impacting the financial industry and how we anticipate supporting our clients through this period. For more information, contact your Northern Trust representative or visit northerntrust.com.

CALIFORNIA CONSUMER PRIVACY ACT (CCPA)

BACKGROUND

The California Consumer Privacy Act (“CCPA” or the “Act”) enhances privacy rights and consumer protection for residents of the state of California. The effective date is January 1, 2020. The bill grants Consumer Rights, Disclosure Obligations, Purpose Specification and Direct Right to Private Action.

Currently there are 15 other proposed U.S. state laws pending that provide protection similar to the CCPA. It is also expected that the U.S. government will pass a federal law in the coming years. Northern Trust has made a decision to be forward looking as we build our Privacy Program for CCPA compliance.

KEY PROVISIONS

A company that does business in California and has annual gross revenues in excess of twenty-five million dollars (\$25,000,000), **or** receives sells or maintains personal information of 50,000 or more consumers, households **or** devices or derives 50 percent or more of its annual revenues from selling consumers’ personal information must comply with CCPA.

Consumers will have several new rights (“Individual Rights”) in relation to the personal information that companies collect about them, including:

1. Right to notice of collection and use of such information,
2. Right to access such information,
3. Right to opt out or say no to the selling of their information (right to opt-in for a minor),
4. Right to request deletion, and
5. Protection from discrimination against individuals who exercise the rights CCPA imparts.

Companies that violate the CCPA are subject to penalties pursuant to a civil action by California’s attorney general as set forth under Section

PERSONAL INFORMATION

“**Personal Information**” includes information that identifies, relates to, describes, or is capable of being associated with a particular consumer or household. The Act defines Personal Information more broadly than existing privacy laws. In fact, by referencing households, the law includes information that is not strictly identifiable to a single person. Household identifiers might include anything from household water or energy usage, to audio, video and data captured by smart home devices, to choice in cable providers.

17206 of California's Business and Professions Code. That code provides for penalties up to \$2,500 per violation. In addition, a company that intentionally violates the CCPA can be liable for up to \$7,500 per violation.

The Act also allows consumers to bring a direct action against companies for injunctive relief and statutory damages ranging from \$100 to \$750 per consumer arising out of a Personal Information data breach resulting from the company's failure to implement and maintain reasonable security procedures and practices.

(Reference: Bill Text - AB-375 Privacy: personal information: businesses)

NORTHERN TRUST ACTIONS

Northern Trust has established a comprehensive CCPA program that is delivering the necessary compliance improvements at both the corporate and the business level. The program is focused on key areas including:

Legal documentation

For several reasons, including the need to set out new obligations resulting from CCPA (including the response to Individual Rights requests), we must clarify certain vendor legal documentation to remain compliant. To accurately capture the new requirements, we engaged a global data privacy law firm to review our legal documentation and determine what changes were required. Where Northern Trust acts as a provider of services to a client (such as transfer agency or fund administration), we are required to request that clients send us such clarifying amendments.

Data mapping and tracking

Data mapping is required to allow Northern Trust to identify, understand and map out where highly sensitive data, including Personal Information, flows throughout our organization. The data mapping program strengthens Northern Trust's capabilities and the control framework that supports compliance with various CCPA requirements, including the need to assess and mitigate risks associated with the processing of Personal Information; respond to Individual Rights requests; and ultimately demonstrate compliance.

Enhanced rights

CCPA, and other upcoming U.S. state laws, afford individuals with enhanced rights to access their data, as well as the ability, in certain circumstances, to request data be erased. These rights are limited to specified circumstances and are not blanket rights which can be exercised at all times. We continue to refine and enhance all our processes in this space to further support any operational changes required ahead of implementation.

INTERBANK OFFERED RATES

The UK's [Financial Conduct Authority \(FCA\)](#) has in numerous speeches continued to state the need for firms to end their reliance on LIBOR by the end of 2021, most recently emphasizing that they are coordinating closely with counterparty authorities around the world to ensure a consistent approach to the transition globally. Work continues throughout the global financial services industry to prepare for the transition away from interbank offered rates (IBORs).

Under the direction of the Bank of England, the Working Group on Sterling Risk-free Reference Rates has identified the Sterling Overnight Index-Averaged Rate (SONIA) as the GBP LIBOR replacement rate. In the US, the Alternative Reference Rates Committee, convened by the Federal Reserve Board and the Federal Reserve Bank of New York, has settled on the Secured Overnight Financing Rate (SOFR) as the replacement for USD LIBOR.

The International Swaps and Derivatives Association (ISDA) confirmed it will amend its [2006 ISDA Definitions](#) to implement fallbacks for key LIBOR to alternative risk-free rates. ISDA plans to finalize amendments to the 2006 ISDA definitions and launch a consultation for all IBORS excluding EURIBOR and EUR LIBOR by the end of the year. The protocol will then take effect three months after finalization. ISDA will also propose a protocol for market participants to agree to amend fallback language for legacy contracts on a bilateral basis.

As of October 2, 2019, the calculation of the Euro Overnight Index Average (EONIA) will change. EONIA is currently calculated by the European Central Bank (ECB) based on the loans made by 28 panel banks. EONIA will soon be redefined as the Euro Short-Term Rate (€STR) plus a spread of 0.085% (8.5 basis points). The ECB will first publish the €STR on October 2, 2019, reflecting the trading activity of October 1, 2019.

The implications resulting from these transitions are significant. Northern Trust has an established global IBOR program to ensure we effectively work through the change required; planning for LIBOR to cease at the end of 2021 but monitoring progress should this happen sooner. We are also keen to provide our clients with support throughout their efforts. Should you wish to discuss this further please contact your Northern Trust representative.

LIBOR is produced for CHF, EUR, GBP, JPY and USD in seven tenors (Overnight/ Spot Next, 1 Week, 1 Month, 2 Months, 3 Months, 6 Months and 12 Months) based on submissions from a reference panel of between 11 and 16 banks for each currency, resulting in the publication of 35 rates every applicable London business day.

IBRO REFORM

The International Accounting Standards Board (IASB) has added IBOR Reform and the Effects on Financial Reporting to its standards.

FASB UPDATE

The Financial Accounting Standards Board (FASB) on September 5, 2019 issued a Proposed Accounting Standards Update to address concerns relating to the accounting for contract modifications and hedge accounting resulting from the changes in reference rates.

INITIAL MARGIN ON UNCLEARED DERIVATIVES

SUMMARY

The Uncleared (swaps) Margin Regulations mandate the exchange of Variation Margin and the exchange of Initial Margin (IM) on Over-the-counter (OTC) bilateral derivatives. The aim is to cover the credit risk of any potential future losses resulting from OTC bilateral derivatives exposure.

The regulations restrict the eligible forms of collateral to be exchanged as IM to highly liquid assets and prescribe methods from which related haircuts can be derived. Two-way exchange of IM is required based on a risk-based model or standardized table (or grid), and collateral must be segregated with prohibitions on the same for rehypothecation as well as limitations on cash reinvestment. Specific Credit Support Annexes and custodial documentation will govern new collateral relationships and the compliance dates for IM are based on OTC notional exposure, the definitions of which vary in different jurisdictions.

UPDATE

The thresholds are measured using Aggregate Average Notional Amount (AANA) of uncleared derivatives, to determine if and when an institution will need to comply with the requirements. Both counterparties must be above the relevant threshold in order for the IM requirements to apply.

On July 23, 2019, [the International Organization of Securities Commissions \(IOSCO\)](#) formally announced the addition of a new phase for IM implementation, which essentially provides an extra year's relief for some entities previously within phase-five of application:

PHASE	DATE	THRESHOLD
Phase I	February 4, 2017	AANA threshold of EUR/USD* 3 trillion
Phase II	September 1, 2017	AANA threshold of EUR/USD 2.25 trillion
Phase III	September 1, 2018	AANA threshold of EUR/USD 1.5 trillion
Phase IV	September 1, 2019	AANA threshold of EUR/USD 750 billion
Phase V	September 1, 2020	AANA threshold of EUR/USD 50 billion
Phase VI	September 1, 2021	AANA threshold of EUR/USD 8 billion

*local currency equivalent in other jurisdictions

NORTHERN TRUST ACTIONS

Collateral for IM needs to be segregated. Northern Trust's segregated collateral account is an Initial Margin rules compliant offering which enhances transparency and safety whilst reducing exposure to counterparties. Interested parties are encouraged to contact their Northern Trust Relationship Manager to obtain the applicable legal agreements that will be negotiated by the party's firm and broker, and Northern Trust.

Combined with custody and collateral management operations outsourcing capabilities, Northern Trust's derivatives services help clients respond to the new regulatory requirements and reduce the burden of the transition to a cleared derivative environment.

Northern Trust's collateral management operations outsourcing services comply with IM rules (mandating of calls and exchange of IM for every trade) and incorporate ISDA's standard initial margin model as the most efficient risk-based model in calculating IM. This includes the application of optimization rules in determining the most efficient assets to pledge which meet the margin eligibility rules.

Changes to margin requirements will likely lead to increased demand for highly rated sovereign bonds. Northern Trust is happy to assist clients in evaluating all potential opportunities for securities lending strategies.

THE EU SECURITIES FINANCING TRANSACTIONS REGULATION (SFTR)

BACKGROUND

The SFTR aims to increase the transparency of transactions which currently fall outside the regulated banking sector to enable better monitoring of securities financing transactions (SFTs). SFTs allow market participants to access secured funding. They are defined broadly within SFTR to include any transaction which utilizes securities in borrowing or lending cash. This includes securities lending transactions and securities lending collateral allocations, repurchase and reverse repurchase transactions, buy-sell back or sell-buy back transactions as well as margin lending transactions (not traditionally considered to be SFTs).

As an EU regulation, all EU entities are in scope of the requirements, but there will be indirect implications for non-EU entities trading with EU entities as the EU entities will require certain data to fulfill their reporting obligations. This includes a Legal Entity Identifier (LEI) which most non-EU counterparties will already have been disclosing by virtue of the same being required for MiFID II since January 2018.

KEY PROVISIONS

Although many of the disclosure requirements mandated under SFTR are already applicable, these are not onerous to comply with. The industry is awaiting publication of the regulatory technical standards for transaction reporting requirements, set to enhance reporting obligations for all who use SFTs. These technical standards were published in March 2019 and will become applicable for different entities at different times. Reporting will go live for banks and investment firms on April 11, 2020, CCPs and CSDs will need to begin reporting from July 11, 2020, and pension funds, insurance companies, AIFs and UCITS will be brought into scope of the reporting requirement from October 11, 2020. The applicable date for non-financial counterparties is January 11, 2021.

NORTHERN TRUST ACTIONS

Northern Trust's SFTR program has been in place for 18 months. As a securities lending agent, Northern Trust is able to provide a comprehensive and robust solution for securities lending transaction reporting.

NEW REPORTING REQUIREMENTS

- Both counterparties to an SFT will need to report details on the transaction at individual transaction level to a trade repository.
- All firms will need a Legal Entity Identifier.
- Reporting by both counterparties to a trade must match at the trade repository.
- Every transaction must be given a Unique Transaction Identifier (UTI) used by both counterparties.
- Reporting data will include all loan and return transactions and collateral positions. Additionally many life cycle events will also need to be reported such as changes in value or quantity to open positions.
- New trade details must be reported to trade repositories on Trade Date +1.
- Modifications of open trades, trade terminations and certain information surrounding collateral transactions must be reported to trade repositories on Settlement Date +1.
- Responsibility to report sits with beneficial owner to the transaction, but the reporting requirement can be delegated to the other counterparty or a third party.
- Records of any SFTs concluded, modified or terminated must be kept for at least five years following the termination of the transaction.

Northern Trust will offer a SFT reporting service to securities lending clients including generating an UTI for every trade, sharing the UTI with the borrower, reporting collateral positions and providing full visibility of the reports being submitted on your behalf through online portals.

Members of Northern Trust's SFTR program are engaged in industry wide working groups, led by the International Securities Lending Association, to create industry best practices for SFTR. These best practices will be essential in ensuring that the industry as a whole is able to deal with the challenges presented by SFTR.

A data-only solution will be offered by our Investment Operations Outsourcing and active collateral management clients who are trading repos.

Additionally, Investment Operations Outsourcing and active collateral management clients who are trading repos may sign up for the data-only solution which Northern Trust is offering.

THE EU CENTRAL SECURITIES DEPOSITORIES REGULATION (CSDR)

BACKGROUND

CSDR aims to harmonize the authorization and supervision of Central Securities Depositories (CSDs) within the EU. CSDR became applicable in 2014 with its first provision being to mandate the move to an EU settlement cycle of trade date plus two days. Subsequently, in 2017, CSDs were obliged to apply for authorization and comply with strict organizational, conduct and prudential rules.

Although many CSDR provisions have already been implemented, several key requirements are due to become applicable in 2020. The next significant change CSDR will bring to the industry is set out within provisions referred to as the Settlement Discipline Regime (SDR). Any in scope instrument that is either cleared at an EU central clearing house (CCP) or settled by an EU trading venue or an EU CSD is in scope of the SDR, meaning counterparties to a trade can be caught by the regime even if based outside of the EU.

KEY PROVISIONS

Cash penalties and compensation

CSDR SDR states a requirement to facilitate partial settlement if holdings are available, in order to mitigate exposure to the total penalty, where the counterparty has sufficient assets to settle part of the transactions.

A failing transaction could incur both late matching and late settlement penalties, however, both penalties will not be levied for the same date.

CSDs will send notifications of the penalty amounts payable to their participants on a daily basis. On at least a monthly basis, the CSDs will then pass on a net amount to the participant's cash account in monies owed from penalties. There is a fixed formula used for both late matching and late settlement penalty calculation, which takes into consideration the elements of the trade, asset type and closing daily prices. There is an opportunity to appeal a penalty from the date the CSD issues the penalty notification until the eleventh business day of the month following that within which the penalty was applied. If a dispute remains open, a bilateral arrangement to resolve the penalty between the two counterparties must be sought.

PENALTIES

- Late matching penalties can only be calculated once the match has occurred (as it is then known how many days late the matching was beyond the set timeframe). It will be calculated for all days of the late match period, at the individual day's closing price. Late matching penalties will be charged to the party who was last to submit or modified the instruction which enabled the transaction to match.
- Late settlement penalties will be calculated daily for each business day the transaction fails to settle post intended settlement date and the penalty will be imposed against the failing party. It should be noted that the reason for a failed settlement could change throughout the fail period, meaning a penalty could be imposed against both parties.

TIMEFRAMES FOR A BUY-IN

- Four business days beyond the intended settlement date (ISD+4) for equities trading on a liquid market;
- ISD+7 for bonds and less liquid securities; and
- ISD+15 for securities traded on SME growth markets.

Mandatory buy-ins and cash compensation

CSDR SDR will also impose mandatory buy-ins, a process that exists today in certain markets but will be superseded by SDR for all instruments cleared at an EU CCP or settled by any EU trade venue or CSD. If a transaction still fails to settle within certain timeframes, a buy-in process must be initiated.

The business day following the above timeframes, the party due to receive the instrument must appoint a buy-in agent to purchase the securities elsewhere. If a CCP has been used for clearance of the trade, the CCP will be responsible for initiating this buy-in process. The failing party must place the original settlement instruction on hold; the same will be cancelled once the buy-in transaction settles. Any price increase, foreign exchange cost, corporate event or buy-in agent fees must be paid by the failing party. A price drop will be deemed to have already been paid; the 'failed to' party will not have to compensate the failing party.

NORTHERN TRUST ACTIONS

Northern Trust's CSDR program has been in place since 2018 with dedicated resources to ascertain the implications of the regime to internal systems, operational processes and established dialogues between Northern Trust and its clients. The program continues to effectively manage all changes and provide clients with sufficient information in a timely manner.

As an entity within the trade settlement process, Northern Trust receives notification of any fines imposed or due to be received from the relevant EU CSD.

KEY STEPS INVOLVED FOR BUY-INS

- Upon expiration of the extension period, the failed-to trading party must appoint a buy-in agent and advise the failing trading party of the same.
- The failing party must put the original settlement instruction on-hold upon receipt of the buy-in notification.
- Once the buy-in execution has been completed, the failed-to trading party must notify the failing party of the outcome of the buy-in including all associate costs.
- If the buy-in could not be executed in full, a cash compensation will be due.
- Upon settlement of the cash difference between the initial trade and the buy-in, the underlying failing trade must be bilaterally cancelled
- If the buy-in execution cost is less than the initial trade price then the cash settlement is deemed to have been paid.
- The failed-to party must notify the respective CSDs of the buy-in results.

© 2019 Northern Trust Corporation. Head Office: 50 South La Salle Street, Chicago, Illinois 60603 U.S.A. Incorporated with limited liability in the U.S. Products and services provided by subsidiaries of Northern Trust Corporation may vary in different markets and are offered in accordance with local regulation. This material is directed to professional clients only and is not intended for retail clients. For Asia-Pacific markets, it is directed to expert, institutional, professional and wholesale investors only and should not be relied upon by retail clients or investors. For legal and regulatory information about our offices and legal entities, visit northerntrust.com/disclosures. The following information is provided to comply with local disclosure requirements: The Northern Trust Company, London Branch; Northern Trust Global Investments Limited; Northern Trust Securities LLP. Northern Trust Global Services SE, 6 rue Lou Hemmer, L-1748 Senningerberg, Grand-Duché de Luxembourg RCS B232281; Northern Trust Global Services SE UK Branch, 50 Bank Street, London E14 5 NT; Northern Trust Global Services SE, Abu Dhabi Branch, registration Number 000000519 licenced by ADGM under FSRA # 160018. The Northern Trust Company of Saudi Arabia - a Saudi closed joint stock company - Capital SAR 52 million. Licensed by the Capital Market Authority - License No. 12163-26 - C.R: 1010366439. Northern Trust Luxembourg Management Company S.A., 6 rue Lou Hemmer, L-1748 Senningerberg, Grand-Duché de Luxembourg, Société anonyme RCS B99167. Northern Trust (Guernsey) Limited (2651)/Northern Trust Fiduciary Services (Guernsey) Limited (29806)/Northern Trust International Fund Administration Services (Guernsey) Limited (15532) Registered Office: Trafalgar Court Les Banques, St Peter Port, Guernsey GY1 3DA.

northerntrust.com