

SDR: Try Not to Fail



What Is Changing?

The next element of Europe's Central Securities Depositories Regulation (CSDR), which is aimed at enhancing the safety, security, and efficiency of securities settlements and market infrastructure, is set to "go live" on February 1, 2022. The coming Settlement Discipline Regime (SDR) will be a central component of CSDR and is specifically designed to address the risk of European security settlement failure, which will have a material impact on the securities lending industry. Participants must ensure that they have adequate technology and automation, enhanced internal collaboration, and revised processes and policies to meet the regulation's requirements and avoid disruption.

To address CSDR's impact, RMA's Financial Technology and Automation Committee (FTAC) has commissioned this whitepaper and a related survey to provide insight, identify potential risks and pain points, and share potential solutions for market participants.

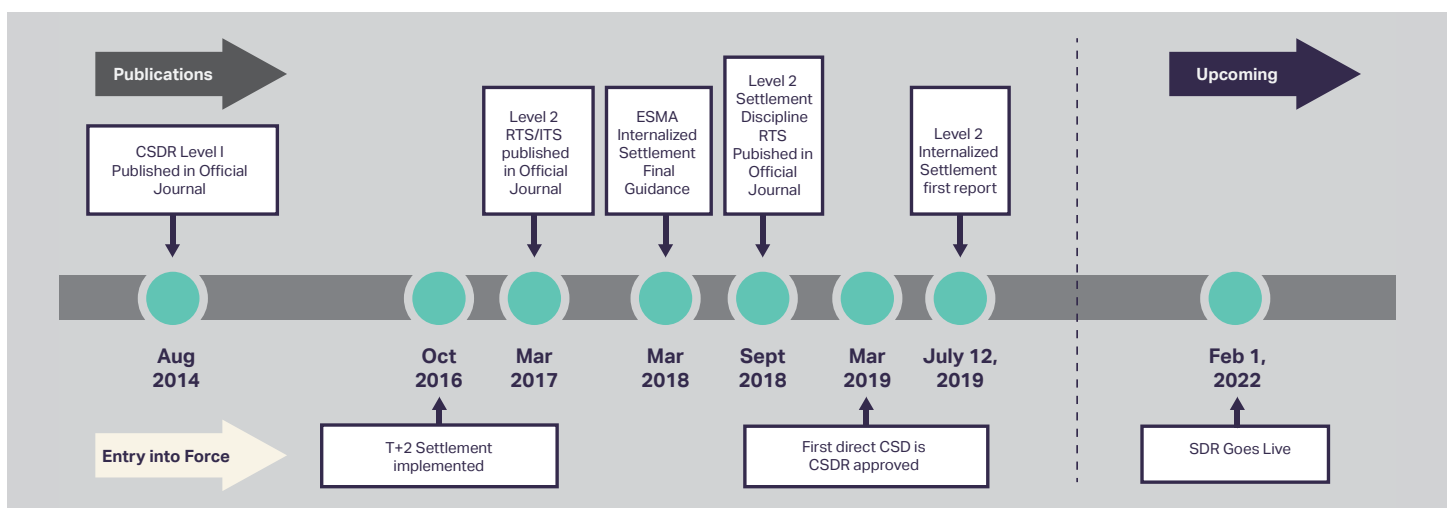
What Is SDR?

CSDR is intended to increase the safety and efficiency of securities settlement across all European Union (EU) and European Economic Area (EEA) Central Securities Depositories (CSDs). The SDR introduces several measures to facilitate timely securities settlement and mitigate settlement fails, specifically through cash penalty fines and buy-ins.

The types of transactions subject to cash penalties are all settlement instructions settling at an EU/EEA CSD, which are matched on or after their intended settlement date (ISD) and fail to settle on and after their ISD. Those that fail to deliver will be assessed a daily cash penalty calculated on the market value of the failed transaction. The penalty amount will be credited to the affected party.

Additionally, if the securities on loan have a duration of longer than 30 days and are not delivered within a required timeframe after the contractual settlement date, SDR calls for a mandatory system to "buy in" these securities from another source. There is, however, a potent degree of regulatory uncertainty regarding the buy-in regime (as further illustrated by the July 1st report¹), which has solicited a strong reaction from market participants.

Timeline of Events



¹ https://ec.europa.eu/info/publications/210701-csdr-report_en

Who Is Impacted?

SDR will affect all financial firms that trade in EU-issued securities, regardless of where they are located. These include banks and broker-dealers, hedge funds, investment and asset managers, custodians, agents, and CSDs.

What Are the Risks?

The penalty fees that will soon be associated with SDR are not trivial. While similar in principle to Treasury Market Practice Group (TMPG) fails charges for U.S. Treasuries, the cost of failing under TMPG is directly related to prevailing funding rates. SDR penalties are administered at the CSD level, with CSDs penalizing failing participants and then passing the amount of the penalties on to the failed-to participant. As with TMPG's fails charges, SDR's penalties are intended to mitigate settlement failures.

The following is an example of how an SDR cash penalty works:

Assume an equity loan of European Security XYZ is booked for 1,000,000 shares with a market value of 100,000,000 euros. If this loan was matched but failed to be delivered by its ISD, the lender would be assessed an applicable fail penalty rate of 1 bps or 10,000 euros (100,000,000 *.01%) for the 1 day and the CSD would credit the borrower's account by this amount. The same penalty fee would apply if it were a return transaction (but in that case the borrower would then be charged the penalty).

The following is a SDR penalty fee summary that all participants must be aware of:

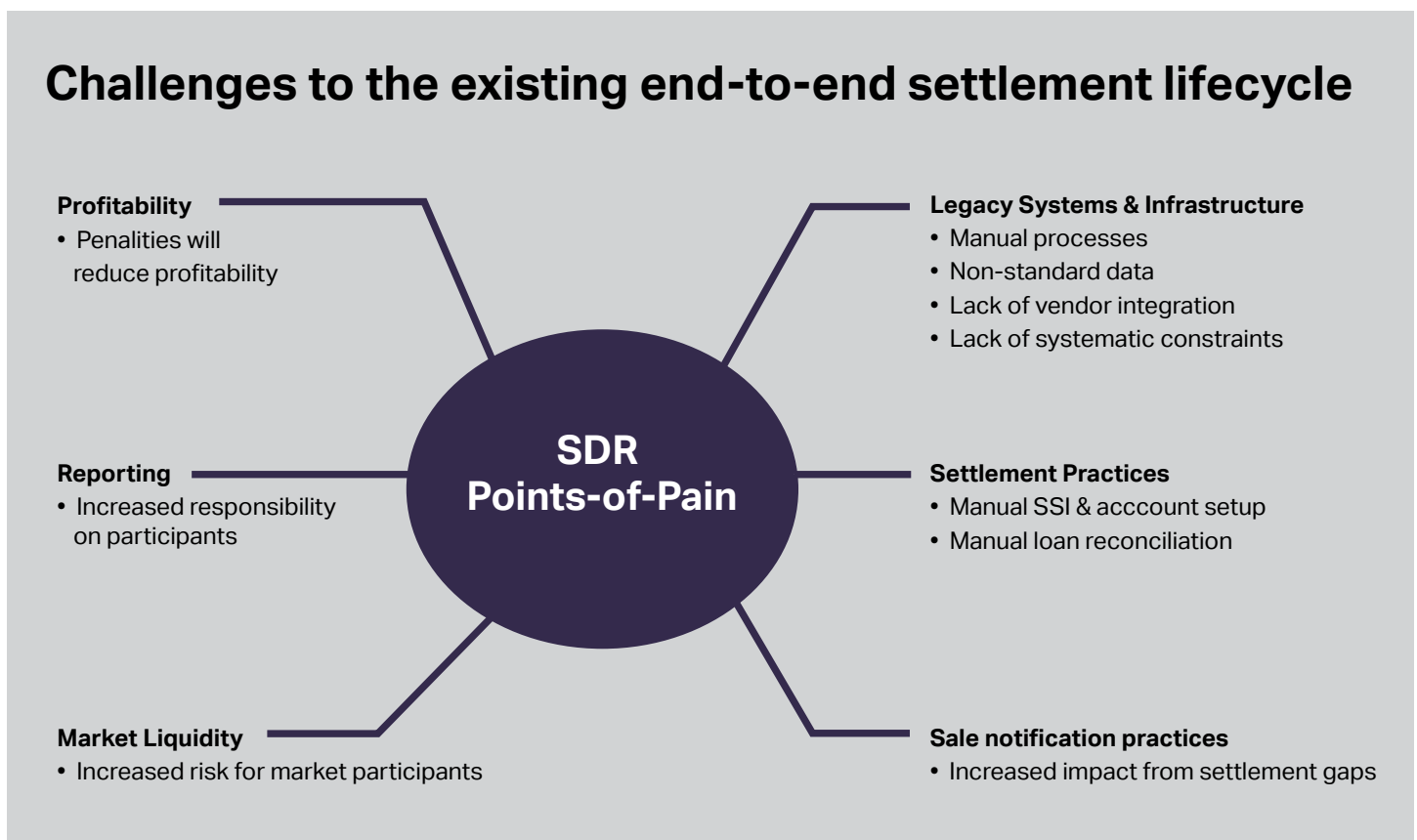
Type of Fail	Rate
1. Settlement fail due to a lack of shares that have a liquid market within the meaning of point (b) of Article 2(1)(17) of Regulation (EU) No 600/2014, excluding shares referred to in point 3.	1.0 basis point
2. Settlement fail due to a lack of shares that do not have a liquid market within the meaning of point (b) of Article 2(1)(17) of Regulation (EU) No 600/2014, excluding shares referred to in point 3.	0.50 basis point
3. Settlement fail due to a lack of financial instruments traded on SME growth markets, excluding debt instruments referred to in point 6	0.25 basis point
4. Settlement fail due to a lack of debt instruments issued or guaranteed by: a. a sovereign issuer as defined in Article 4(1)(60) of Directive 2014/65/EU; b. A third country sovereign issuer; c. A local government authority; d. A central bank; e. Any multilateral development bank referred to in the second paragraph of Article 117(1) and in Article 117(2) of regulation (EU) No 575/2013 of the European Parliament and of the Council; f. The European Financial Stability Facility or the European Stability Mechanism.	0.10 basis point
5. Settlement fail due to a lack of debt instruments other than those referred to in points 4 and 6	0.20 basis point
6. Settlement fail due to a lack of debt instruments traded	0.15 basis point
7. Settlement fail due to a lack of all other financial instruments not covered in points 1 to 6	0.50 basis point

In addition to financial risk, the SDR could dampen liquidity across different asset classes, with particular emphasis on those sectors that currently have less liquidity, such as corporate bonds and other corporate debt. The lasting impact on that liquidity will directly correlate to how well the industry reacts and collaborates to evolve the securities lending ecosystem, as we discuss throughout this whitepaper. The nature of such systemic regulation can only be forecasted and then retroactively reviewed to determine the actual quantitative impact (positive or negative). There is little doubt that SDR will change this interconnected global market and could lead to beneficial owners seeking liquidity outside of Europe (e.g., the ADR marketplace).

Other risks that cannot be overlooked are the persistent pressures on margins and rising short-term capital and funding costs.

How Do We Prepare for SDR in the Short Term?

An initial approach to preparing for SDR is identifying the root causes for securities borrowing and lending trade settlement failures. Incorrect trade bookings and notifications, inaccurate account setups, reconciliation issues, and inaccurate SSIs are the predominant points for failure in the settlement process. From loan initiation to recall and sale, all participants including beneficial owners, lenders, borrowers, end users, custodians, and CSDs must enhance efficiency through three arenas: automation and technology, training, and process.

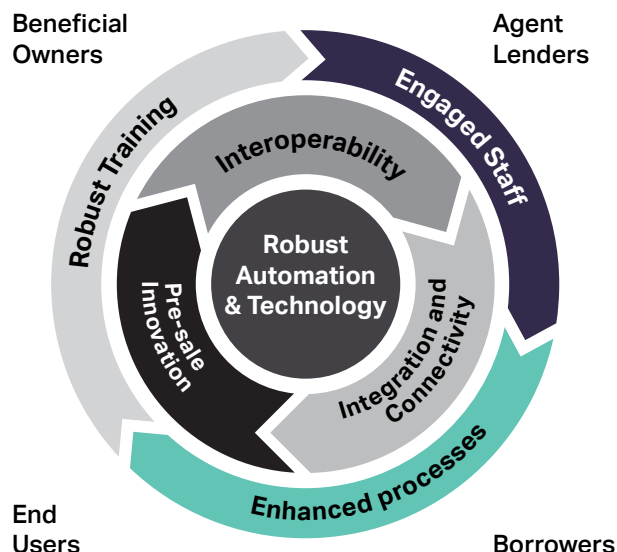


Leveraging SDR to Reduce Friction

- Interoperability of vendor solutions will keep costs low, provide for more efficiency, and encourage participation.
- Timely sale innovation will tighten settlement gaps.
- Integration & Connectivity will improve settlement failure rates.

Benefits

- Better profitability
- Lower incident of penalty reporting
- Enhanced market liquidity
- Increase in data standardization



Automation and technology will need to focus on near real-time settlement processing as well as upstream and downstream automation. Areas include books and record settlement configuration, confirmation of trade status messaging, systematic rules for trading and operations, pre-sale innovation and delivery, electronic trading platforms, and real-time post-trade vendor tools. Multiple post-trade vendor solutions are clearly a path being pursued by both borrowers and lenders, but it's important that these tools are utilized intraday and as close to real-time as possible.

Robust training and collaboration will be needed among trading, operations, middle-office, front office, accounting, and compliance / risk personnel. They will need to be prepared to act in a timely and cohesive manner to settle reconciliation breaks, modify SSIs, handle account set up issues, manage inventory and price risk, recognize and account for penalty fees/disputes, and manage sale activity. Organizations that can pivot these trainings away from process management and towards exception management will ultimately be determined by the level and degree of automation to which an organization subscribes to.

Several critical processes will need to be enhanced by market participants, including the use of intraday reconciliation tools, inventory management to ensure sufficient and settled holdings, canceling and or modifying failing transactions by ISD, pre-sale data management, maintaining and utilizing SSIs in a centralized repository, and the communication and accounting of penalty fees. Additionally, processes will need to be developed for collecting penalty fees that result from failing sale transactions. There are still components of CSDR, such as partial settlement, that will initially be a more manual process out of the gate, which will hopefully gain industry traction to become more automated over time.

Impact on Pricing Strategy

From a trading and funding perspective, the associated break-even (as a fee rate) per the risk of obtaining a daily penalty fee can be explained as:

$$((\text{PENALTY FEE} / \text{LOAN DURATION}) * 360) / (\text{AVG. COLLATERAL VALUE})$$

Practically, a one day penalty fee (assuming a liquid equity) would equate to 360 bps of net loan fee spread. From this, it would seem somewhat practical (all-else equal) that longer term transactions can be a good way to help mitigate the financial impacts associated with CSDR – ex any impacts associated with a related mandatory buy-in regime. It can also be inferred that hard-to-borrow securities are better suited

to absorbing the economic impact of the penalty regime than lower spread securities. This could lead to a wider variety of small-cap and mid-cap securities being priced off traditional GC-like levels (i.e., a floor).

What Is Your Feedback?

In conjunction with socializing and understanding SDR, FTAC commissioned an industry survey to ascertain a benchmark on converging and diverging perspectives with respect to the impact, solutions, and mitigants across the securities finance industry. The survey was sent to several market participants of which 26 responded, including lenders, borrowers, and custodians (also referred to in this paper as buy side, sell side, and custodians). The findings are summarized below.

- Nearly 66% of respondents agreed that the top three challenges the SDR poses to institutions are: (i) management of CSDR's buy-in regime, followed by (ii) trade matching performance, and (iii) reconciliation of penalty fees and dispute handling. Enablement of post-trade vendor solutions was a distant fourth. Worth noting is that lenders were more concerned with CSDR's buy-in regime, as borrowers prioritized the challenge of trade matching performance.
- Approximately 87% of respondents are leveraging one or more post-trade solutions in the areas of standard settlement instruction (SSI) reconciliation / repository and loan reconciliation products. However, 13% do not use any post-trade solutions that will be utilized for CSDR, and 18% plan on using multiple solutions for SDR.
- Forty-eight percent of respondents actively utilize a loan and or SSI reconciliation / repository product daily, while 18% do on an intraday basis.
- Nearly 70% of respondents plan on developing or have developed a technology solution to manage either pre-sale or real-time sale notifications, while 10% of respondents were not pursuing such a development.

View from the Vendors

Vendors such as DTCC, Pirum, and Broadridge have a consistent perspective, as concluded in the FTAC's industry survey, aligning with the SDR thematic challenges of trade matching, buy-in regime, SSI management, and reconciliation of penalty fees and dispute handling. These challenges are being mitigated through pre-and-post trade solutions that combine technological automation, standardization, interoperability, and transparency. Market participants should, if they haven't already, conduct due diligence of these third-party vendor solutions to address SDR's impact. For further information regarding vendor perspective and their solutions, please see the appendix.



Impact on Contractual Arrangements

CSDR is likely to impact contractual documentation, particularly among the trading and custodial agreements including Global Master Securities Lending Agreements (GMSLA), Custody Agreements, Securities Lending Authorization Agreements (SLAA), and Investment Advisory Agreements. With respect to this suite of agreement types, market participants will need to understand cut-offs, cure periods, termination rights, and service levels to determine, in conjunction with their historical transacting activity, whether the contractual provisions, variables, and elections are written to mitigate SDR fail penalties. Additionally, contracts will have to be amended to address how and when cash penalties will be incurred and paid, and their funding sourced and allocated (allocation among funds and asset managers). In the same vein as cash penalties, contracts will need to address dispute notifications as well (to the extent mandatory buy-ins come to fruition), and the handling of buy-ins. Although the buy-in regime is still uncertain, it should not prevent market participants from thinking about new relationships and contractual arrangements with buy-in agents—or from including the process and procedures of such buy-in process. Moreover, it is becoming increasingly clear that changes to confirmations will have to take place to address these SDR components. On a go-forward basis, regardless of whether mandatory buy-ins are effectuated, market participants should begin or continue to digitally manage their contract portfolios, arrangements, and respective contractual data. This may require firms to:

- Perform a level of due diligence against the contractual portfolios.
- Analyze and reconcile new SDR requirements against existing contractual arrangements to identify contracts that may be problematic for SDR compliance.
- Prospectively—on a go-forward, business-as-usual basis—ensure that the contracts are managed with levels of digitization, automation, and provision level reporting.

Forward Thinking – The Case for DLT

In assessing the impacts and changes that must be made to the industry's infrastructure, regulatory reforms are forcing markets and firms to rethink the way they do business. Distributed ledger technology (DLT) provides the tools and capabilities to support the end-to-end trade lifecycle through quicker processing and more accurate outcomes. As such, the securities lending industry would have a positive effect on liquidity, reduce short-term funding costs, and allow for the optimal use of assets for collateral and capital purposes. While CSDR does not resolve issues of inventory shortages for delivery, it is aligned with enforcing tighter settlement practices.

In assessing the impacts and changes that will have to be made to the industry's infrastructure and individual market participants, DLT appears to check quite a few requirements for CSDR compliance. DLT and its companion operational code, commonly referred to as "smart contracts," present an ample opportunity to automate the securities finance loan and transaction lifecycle. Because of the nature of the DLT ecosystem, there is a level of standardization to participate in the network. This promotes automation and interoperability.

Outside the DLT network and its operationalization via smart contracts, converting physical and non-physical assets so that they reside in DLT is the process of tokenization, where assets are represented as digital tokens.

An example of where DLT, smart contracts, and tokens are operating in the market at this level of digitization and automation is the distributed finance market called decentralized finance, or "DeFi." DeFi is a distributed financial network that does not have traditional intermediaries where those market participants, commonly referred to as "end users" and "liquidity providers," can transact (buying, selling, borrowing and lending) digital tokenized assets.

Many see DeFi in shades of grey with respect to its regulatory status. Whether or not it reflects the true nature of the new financial marketplace, the levels of automation around digital and tokenized asset lending and collateralization may reflect a potential path forward for the securities finance industry, including the levels of automation that the current market infrastructure is evolving towards. DLT and smart contract solutions may not be the immediate solution for CSDR compliance. However, market participants should continue to watch this space and see how components can be leveraged and utilized for digitizing and automating the trade and loan lifecycle.

RMA's FTAC is following the ongoing DLT pilot regime in the EU. It is aligned to support the digital transformation of financial markets while mitigating related risks. One market infrastructure being introduced is a DLT securities settlements system that is defined under the CSDR regulation. While the use of this technology through the pilot is limited to CSDs for settlement purposes, it highlights the challenges that must be overcome for DLT to effect wider-spread adoption, including the regulatory challenges of redefining certain definitions and requirements. Other challenges include the reduction and consolidation of today's securities lending ecosystem intermediaries at the individual firm-level, as trading platforms and post-trade platforms that have historically been separate could now be combined under a DLT system. Additionally, DLT requires participants to keep enough liquid assets on hand to be able to settle transactions in real time, which could tie up assets that could be used for other purposes. It's also important to note that from a collateral perspective, unless that collateral is tokenized, an intermediary will still be required to deliver that collateral through an established settlement system, which reduces the overall impact that DLT can have on the securities lending ecosystem. These and other risks and benefits must be understood by market participants and the broader securities lending industry before decisions are made.

The risks include regulatory and legal certainty, but also security (including cybersecurity and penetrability), KYC and AML, and levels of transparency. Market participants continue to assess DLT capabilities, and importantly, the risks, as this space evolves.

Conclusions

CSDR is likely to achieve its purpose of enhancing the safety, security, and efficiency of securities settlements and market infrastructure, including harmonizing standard practices among the different European CDS. While the outcome will be a better operating model, CSDR and specifically SDR will have a systemic impact on market participants. To mitigate this impact, market participants should already be assessing CSDR readiness individually, including their own unique infrastructures, data standards, technological readiness, processes, and procedures across their trade and loan lifecycle. This includes the potential changes to contractual and operational documentation. Market participants should continue to strive to improve technological and data standardization, leveraging new and existing third-party vendor solutions as well as internal solutions. Outside of the continuing socialization of CSDR and its risks, perspectives, and potential solutions, it is clear CSDR presents opportunities. As this whitepaper discusses, market participants can leverage the regime to explore new technologies, adopt data standards that will enhance the way they do business, increase their safety and security, and collectively mature the securities finance market infrastructure.

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APPENDIX:

Vendor Perspectives on CSDR Challenges

To round out the industry's perspective on CSDR, several third-party vendors including Broadridge, DTCC, and Pirum provided their outlook on SDR challenges for market participants.

Broadridge

Broadridge sees SDR as giving rise to three core challenges.

First, the inaccurate behavior resulting in late matching or late/failed settlements: Mismatches and late settlements can easily become the result of the swift securities finance (same day) trade/settlements cycle. The main cause of late fails can be holding back settlement instructions which are common practice in the securities finance industry. This becomes an expensive solution.

Second, the increased operational complexity via (voluntary) partial settlement: Currently, many securities finance processes and solutions cannot process partial settlement. Unless the partial settlement workflow considers the knock-on effects on the full front-to-back process, it could still result in fully failing the objective of the participant.

Third, and most discussed, is the buy-in (triggered 4-7 days after intended settlement date): The regulation instructs this regardless of the source of the transaction. Where securities finance is frequently used as a remediation to avoid buy-ins for settlements, securities finance itself becomes subject to buy-in.

With managing efficient settlement flows compounded by an increasingly complex daily operational cycle, stringent deadlines, and additional cost, there is increasingly less room for error. With the settlement discipline going into force, it's time to further reduce operational risk and review with your ops team how the daily flows are managed. Broadridge SFCM solution has been enhanced to support the full CSDR life cycle including fines/penalties management, partial settlement processing and buy-in. To help navigate through CSDR, Broadridge has created dashboards to measure how sound your operational flows are, understand pain points and propose remediation.

EquiLend

SDR aims to provide robustness and efficiencies to securities settlement and settlement infrastructures in the EU. It will introduce a settlement discipline for the central securities depositories (CSD) operating across the EU, enabling harmonization and standardization of the settlement cycle.

SDR's broad goal is to achieve 99% settlement efficiency. To achieve this, the regulation is introducing measures to prevent fails, focusing on trade bookings, the confirmation process, and leveraging automated platforms to match trades prior to settlement.

To encourage this behavior, SDR will require investment firms to have processes and procedures in place to prevent fails. It is also supporting firms to increase straight-through processing to ensure timely settlement. If the trade does fail, market participants will be liable to pay daily penalties or charges against each

transaction that fails to settle. There will also be mandatory buy-ins for cash T+2 fails, although securities lending trades are currently under review.

The unique challenge to securities lending transactions is that they are predominately free of payment (FOP) transactions, which generally have a later settlement cycle than cash T+2 trades. There is also the additional requirement of having collateral pledged into the account of the lender before it releases the securities. Overall, the biggest challenge for the securities finance industry is that there will be more requirements to conduct same-day activity, and therefore, more pressure to reduce latency between booking and instructing a trade. It is essential that the trade is booked correctly at the outset through an automated platform to ensure CSDR requirements are achieved, and additional costs are reduced.

NGT

Currently, over 60% of the current daily trade flow is conducted on Equilend's flagship product. NGT enables complete STP at trade booking, and statistics show that less than 1% of trades booked on NGT have trade booking errors. It supports LEI processing, and clients can also get SSIs at the point of booking.

Event Blotter

Through the OneFile, EquiLend strips out all the events processed by clients including new loans, returns and recalls. It confirms the trade bookings that have been completed not only on NGT but on any other trading platform or manual execution. This tool will identify any problems and enable enrichment to ensure the correct booking instructions have been completed.

Settlement Monitor

EquiLend's Settlement Monitor, a pre-matching tool, enables firms to keep track of trades with up-to-date trade status. The Settlement Monitor ensures that all aspects of the booking are correct, monitors the collateral movements associated with the trade and provides settlement deadlines across all the different settlement markets within the EU. This tool helps firms to prioritize exceptions, structure the day and offers transparency of the potential costs associated with the trades. Simply, it gives firms peace of mind and confidence in the status of both their instructions as well as their counterparts'.

EquiLend Exposure

There is no doubt that there will be an increase in same-day activity to support SDR. More emphasis will be placed on automated booking; however, the one area that can and will trip clients up will be the timely distribution of collateral. EquiLend Exposure addresses these concerns. Using real-time data, it calculates a firm's collateral requirements and processes collateral movements to all the different tri-party agents automatically. It tracks and reconciles the collateral movements and notifies the lenders once the collateral has been received instantly, thus enabling the lender to release the loan instructions in a timely manner. All of this is within one product.

Unified Comparison

UC confirms the settlement of the transaction and provides daily reconciliation of the trades. This is important primarily for returns and recalls as UC will be able to notify firms if any amendments to the trade have been made that has not been completed by one side, the biggest culprit being SSIs. If clients manage the SSIs throughout the lifecycle of the trade, then there will be timely settlement of the return and recall.

SSI Repository

The SSI Repository interacts with EquiLend’s suite of services to provide SSIs to borrowers and lenders. It is well recognized that SSIs are the biggest contributor to failing trades. This tool allows for SSIs to be stored and distributed to firms.

DTCC

DTCC views SDR posing specific challenges for buy-side, sell-side, and custodian clients.

Buy-side: The buy-side community faces significant challenges, including ensuring effective broker relationships and performance to avoid failing transactions and financial penalties under SDR. Buy-side firms are encouraged to prepare without delay by switching from manual to automated post-trade processes and leveraging these solutions. Clients can gain further efficiency and transparency from post-trade automation, which will support smooth implementation of the upcoming regime. Pre-empting potential challenges will contribute to SDR success for impacted firms—automation has a part to play.

Sell-side: In a European market participant survey, the majority felt that the sell-side would most significantly be affected by SDR, including the sell-side’s stock borrow loans (SBL), which could increase exposure to SDR penalties and fines if SBL inventory is not segregated from normal trading and market making inventory. Sell-side firms may need to implement fully resourced teams to carry out stringent reconciliation processes and handle settlement penalties. Under SDR, if a trade fails to settle on time, it will incur a charge of 1bp per day, which could eliminate any commission charged.

Custodians: Discretionary custodian services such as account segregation and partial settlement will be mandatory under SDR, which could lead to an increase in documentation and onboarding responsibilities and the development of new processes for custodians. SDR will also mandate partial settlement at CSDs to help minimize financial penalties and to ensure CSDs only apply failed trade penalties to the outstanding, unsettled balances.

Pirum

Pirum’s perspective begins by the comparing and contrasting CSDR to other regulatory regimes, including SFTR & EMIR. The reporting regimes were a “big bang” where the industry, assisted by service providers, needed to be ready on launch date. Yet CSDR/SDR on the other hand is more subtle because the impact of inefficient settlements and operations will be financial when the cost of fails start to be felt via SDR buy-ins and fines.

Furthermore, unlike SFTR, where the legal entity to the trade drove a reporting requirement, under SDR any institution trading European assets will be in scope and impacted, thereby capturing EU and non-EU entities. This has triggered a global awareness for the market.

Pirum currently sees around 5-6% of European securities lending and repo transactions failing, which increases by 20+ % during busy and/or volatile market periods. Pirum estimates fails could cost market participants around €150mm (~\$175mm) in SDR settlement fines annually, which could grow even higher when buy-ins are considered.





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