



POINT OF VIEW

An Overview of the  
**Settlement Discipline Regime  
under CSDR Regulations**

# Abstract

This paper discusses the cash penalty and mandatory buy-in actions prescribed in the Settlement Dispute Regime that are deemed as mitigation steps against settlement failures. It delineates the causes of these settlement failures and the delay in those functional areas of the trade flow that contribute to these failures. The article also discusses the authors' point of view on the gaps that could be filled to reduce potential delays.



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# 01 A Brief Overview

Central Securities Depositories Regulation, termed as the third major regulatory pillar after the Markets in Financial Instruments Directive (MIFID) and European Markets Infrastructure Regulation (EMIR), CSDR is expected to address issues related to late matching and settlement fails at any European Union (EU) security depository by imposing cash penalties and buy-ins bringing in a new settlement discipline regime for all the players involved.

CSDR aims to orchestrate and systematize key aspects of the settlement cycle and infrastructure to ensure consistent, frictionless settlement throughput across the EU. Financial services firms, irrespective of their domicile and geography, that trade in securities that will eventually settle at an EU-domiciled Central Securities Depository (CSD) will be considered as in scope for CSDR's Settlement Discipline Regime (SDR). The implementation plan for Settlement Discipline Regime (SDR) was envisaged in 2014 with a series of precursor regulations and processes implemented.

## CSDR Traversal Timeline

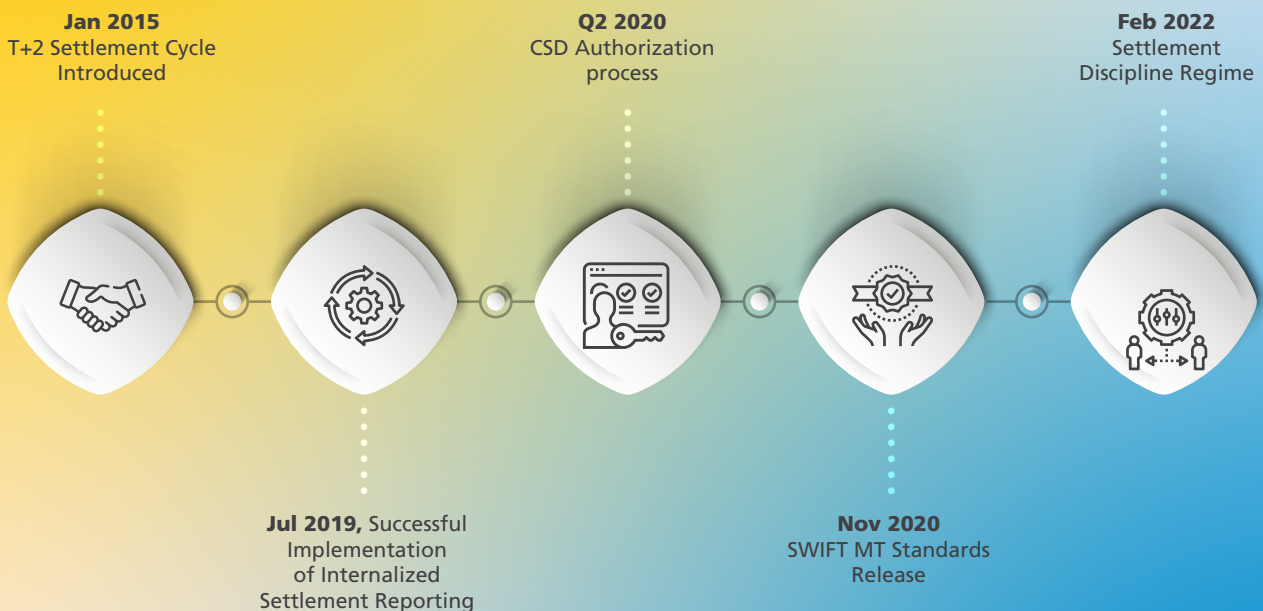


Image 1: CSDR Timeline



Since its introduction in 2014, the implementation has been in phases:



.....  
T+2 settlement cycle was introduced in 2015.  
.....



.....  
Omnibus and individual segregated accounts and disclosure of risks and costs associated with different account structures were introduced in 2018.  
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.....  
Implementation of rules on reporting of internalized settlement went live in 2019.  
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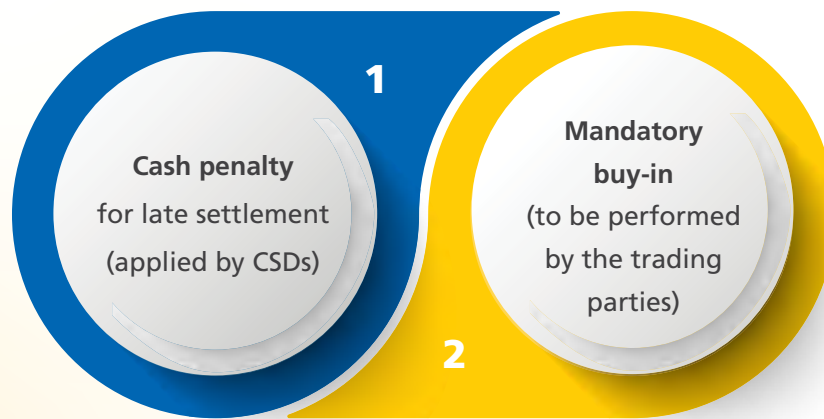
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CSD authorization was published in 2017, wherein CSDs were obliged to apply for authorization and comply with strict organizational, conduct, and prudential rules by 2020.

The next significant change the CSDR framework will bring to the industry is set out within provisions referred to as the Settlement Discipline Regime (SDR)



# 02 Goals of SDR

The main goal of SDR is to reduce the number of settlement failures on the settlement date and the duration of such settlement failures. To ensure that, CSDR introduced two new rules:



These mandatory rules will be applied within four business days of the settlement failure.

The scope for settlement fails can be from purchases and sales, collateral, security lending & borrowing, repo, and others. The CSD/Central Counterparty Clearing House (CCP) will debit the direct participant on a net basis monthly but report each amount daily.

### The scope of CSDR is applicable for the following:

1. All European CSDs.
2. All parties involved in transactions in the European markets.
3. All parties dealing with securities that settles in an EU CSD. In other words, geographical location is not important here as long the transactions are settled in any European CSD.



# 03 Understanding Cash Penalty

Settlement failures happen when the settlement does not occur, or only partial settlement takes place on the intended settlement date. Such failure might be due to IT system or market liquidity issues. In such cases, the customer who was supposed to deliver but failed must pay the penalty in cash to the relevant CSD and then pass it on to the participants who didn't receive the security. The cash penalty calculation is based on the failure type and the number of days after the Intended Settlement Date (ISD).

Say, for the delivery of 25,000 liquid shares against payment of EUR 2,500,000 at a European CSD, the settlement instruction is matched but fails due to a lack of securities for 3 business days after ISD. The reference price for those three days is Day 1: EUR 105, Day 2: EUR 110, and Day 3: EUR 95. The calculation will be made using the following equation:

Penalty Amount = Total shares traded \* 0.01% (Penalty amount for liquid shares)\*Closing Price. Based on the settlement, it is calculated day-wise.



Here is a flowchart to delineate it.

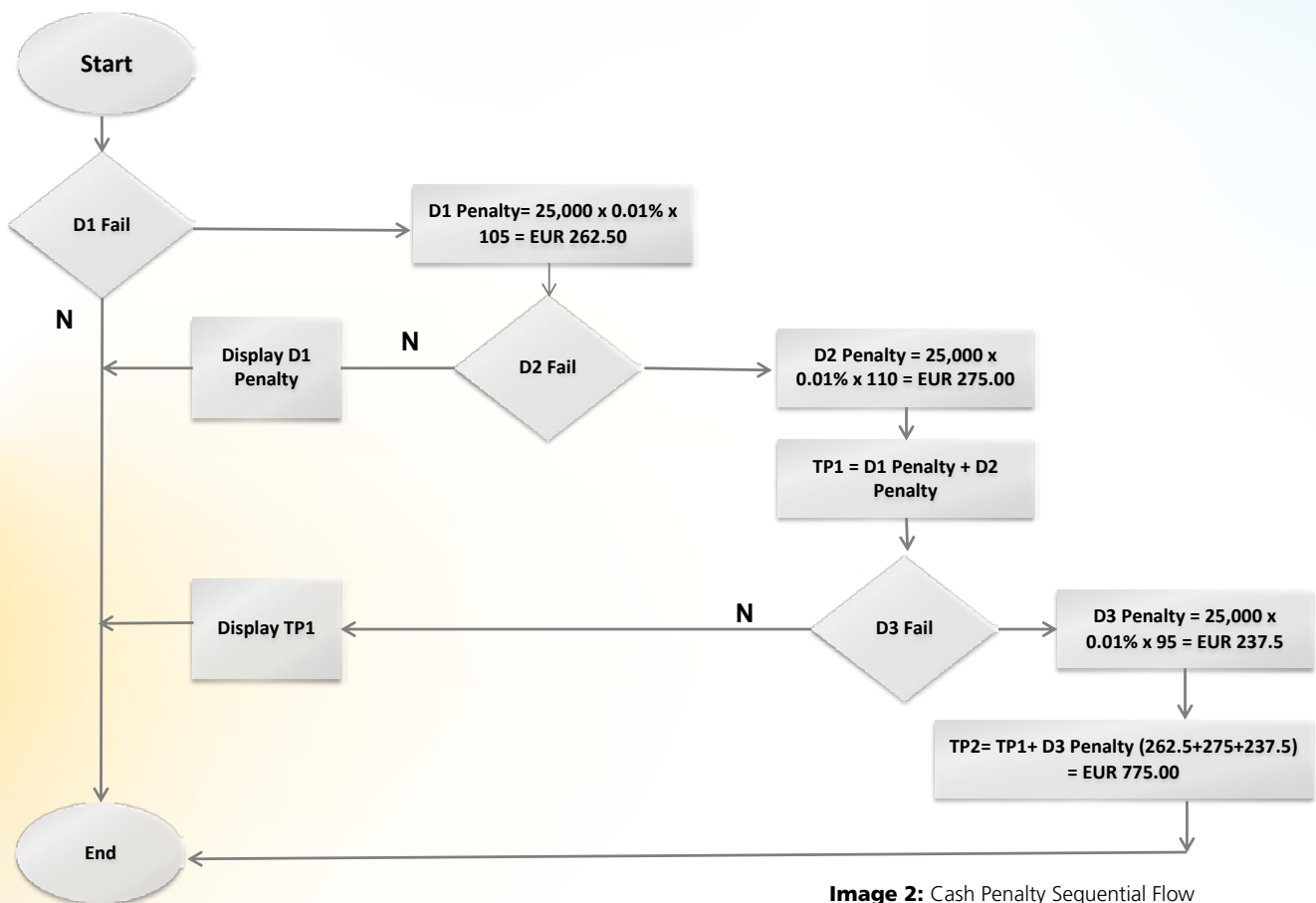


Image 2: Cash Penalty Sequential Flow

The amount of cash penalty as calculated above might appear insignificant. However, in reference to the 2018 annual report of the European Central Bank (ECB), the daily failure is 2.6% of the total turnover of EUR 900 billion resulting from 570K transactions. Considering a 2.6% settlement failure in equity shares with liquidity, the calculated cash penalty will be a whopping EUR 23.4 billion if the settlement fails just one day from the intended settlement date (ISD).





# 04 Understanding Mandatory Buy-in

In case of settlement failure, the buyer may purchase the securities from the market and ask the original seller to pay the price difference, if any. The CSDR introduces a mandatory buy-in framework, whose application is postponed until November 2nd, 2025, in which it is compulsory for the buyer to purchase from a buy-in agent agreed to by the parties within a specific period from the ISD, depending on the type of security. For example, the period is within ISD + 4 days for liquid shares; for illiquid shares, it is ISD + 7 days. The defaulting seller must pay any buy-in differential to the buyer when the buy-in prices are higher. Where it is lower, the differential is deemed paid.

## High-level Buy-in life cycle

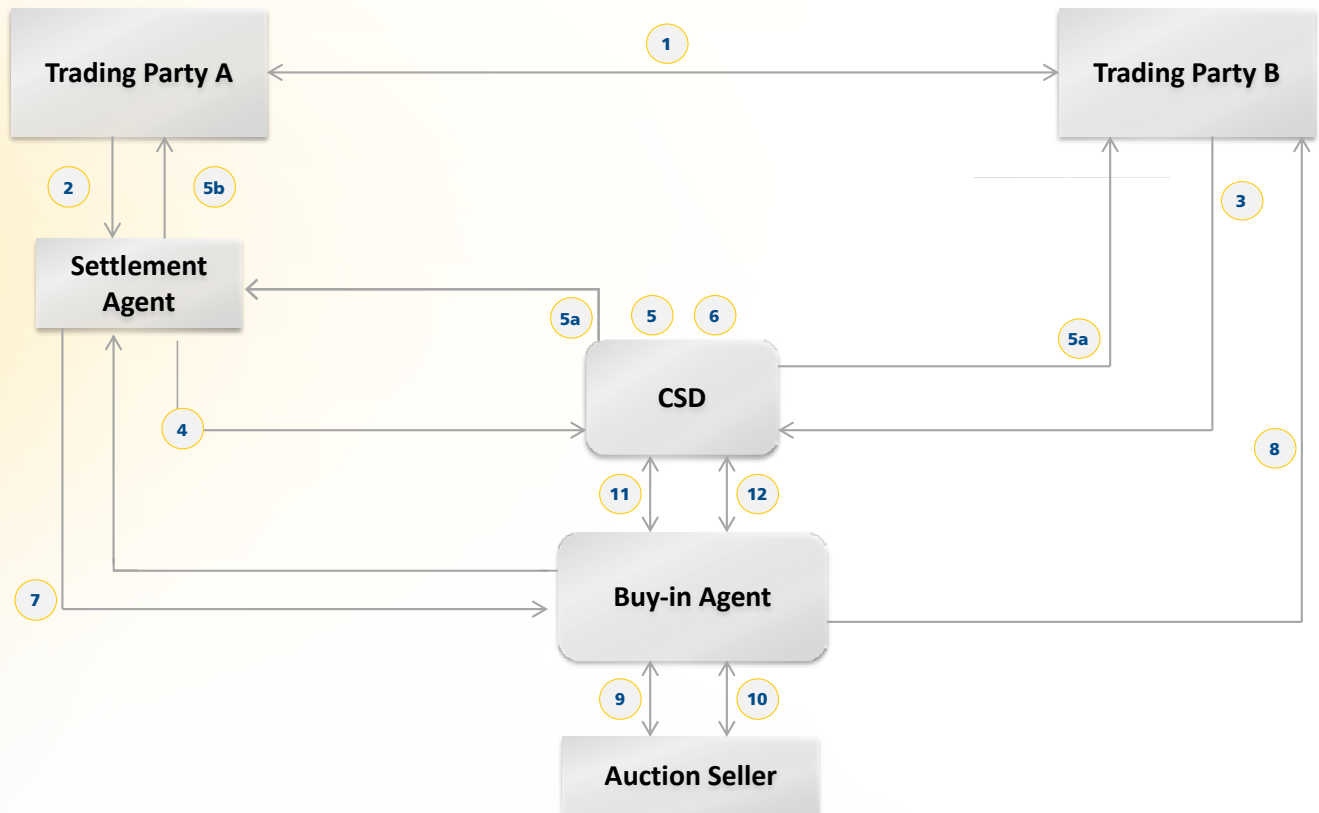


Image 3: Buy-in Lifecycle



1. Trading Party A purchases 10,000 Google shares from Trading Party B for T+2 settlement
2. Trading Party A instructs its settlement agent with a Receive vs. Payment (RVP) instruction for the T+2 settlement
3. Trading Party B is a direct participant of CSD who they instruct with a Deliver vs. Payment (DVP) instruction for T+2 settlement
4. The settlement agent of Trading Party A sends RVP instructions for matching and settlement at the CSD
5. The settlement instructions match at the CSD ahead of the settlement date
  - 5a: The CSD sends a matched status to their participants via a SWIFT MT548
  - 5b: The settlement agent of party A sends a matched status to them
6. The trade fails on ISD because Trading Party B is short of securities. The trade continues to fail on ISD+ 4, showing matched but short as of the market close.
7. The buyer sends buy-in request to the Buy-in Agent
8. Notification is sent to the seller by the Buy-in Agent
9. Buy-in Agent to host an auction to purchase the undelivered securities
10. Settlement completed, and members notified
11. Price difference or compensation
12. Buy-in execution communicated to CSD

### Other Requirements of SDR

Reporting: To prevent settlement failures, investment firms and trading parties will have to share information concerning confirmations of executed transaction orders on a tighter timeframe and in more granular detail than today.



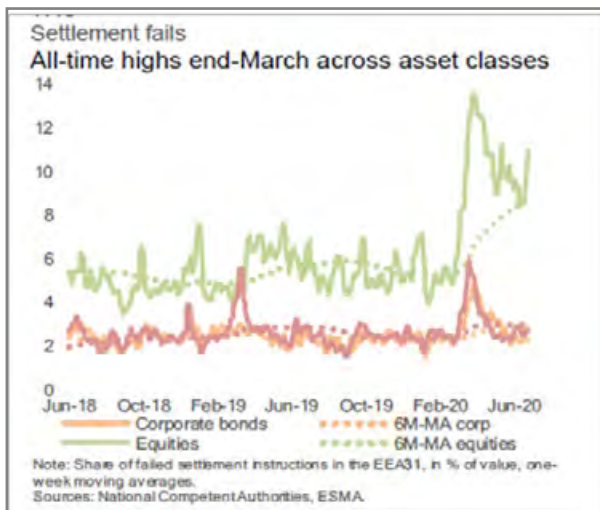
# 05 Genesis of Settlement Failure

According to the European Securities and Markets Authority (ESMA) report on trends, risks, and vulnerability, dated between 2018 to 2022[1][2][3], in a study of 31 European jurisdictions, settlement fails for equity averaged 5%-10% during 2018-20. It peaked at 14% between February and June 2020. About 2-4% of all bond trades failed to settle during the same period. While the June 2020-22 data shows that the settlement fails for equity ranged between 7-8%, with the peak at 12% during Nov 2021.

One of the main causes of such settlement failures is situations where securities are not available when they are needed to meet the settlement on the intended settlement date. The other reason for such failures results from data issues found during the matching phase.

According to a [settlement efficiency survey undertaken](#) in the summer of 2021 published by the European Repo & Collateral Council (ERCC), about 70% of all settlement fails resulted from sellers not being able to deliver the securities on time, whereas 27% resulted from issues relating to the matching of instructions.

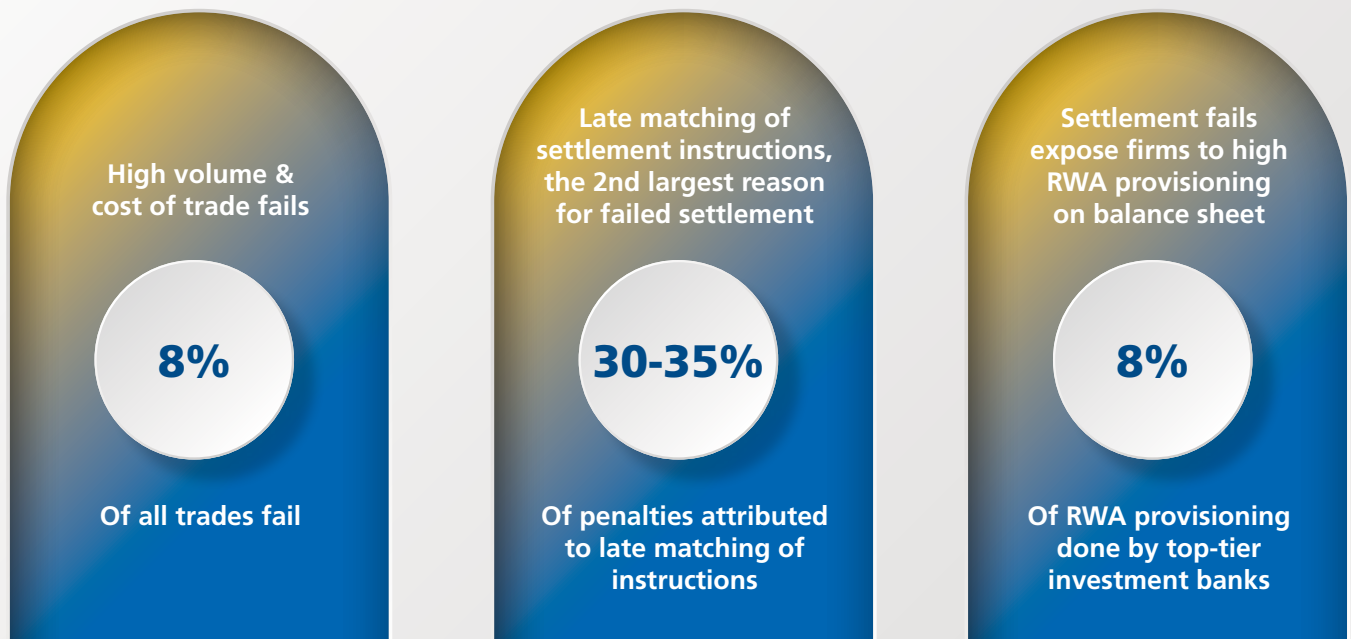
**2018-2020: Settlement Fails**



**2020-2022: Settlement Fails**



It is quite apparent from the statements of senior executives of Euroclear, Marije Velhest and Rebecca Carey, that addressing settlement fails related challenges and establishing a robust settlement discipline regime will need significant time and effort. In an interview with Securities Finance Times in early 2022, just after the implementation of CSDR, Rebecca Carey mentioned that late matching contributed to 30% cost of the penalties levied on fails.



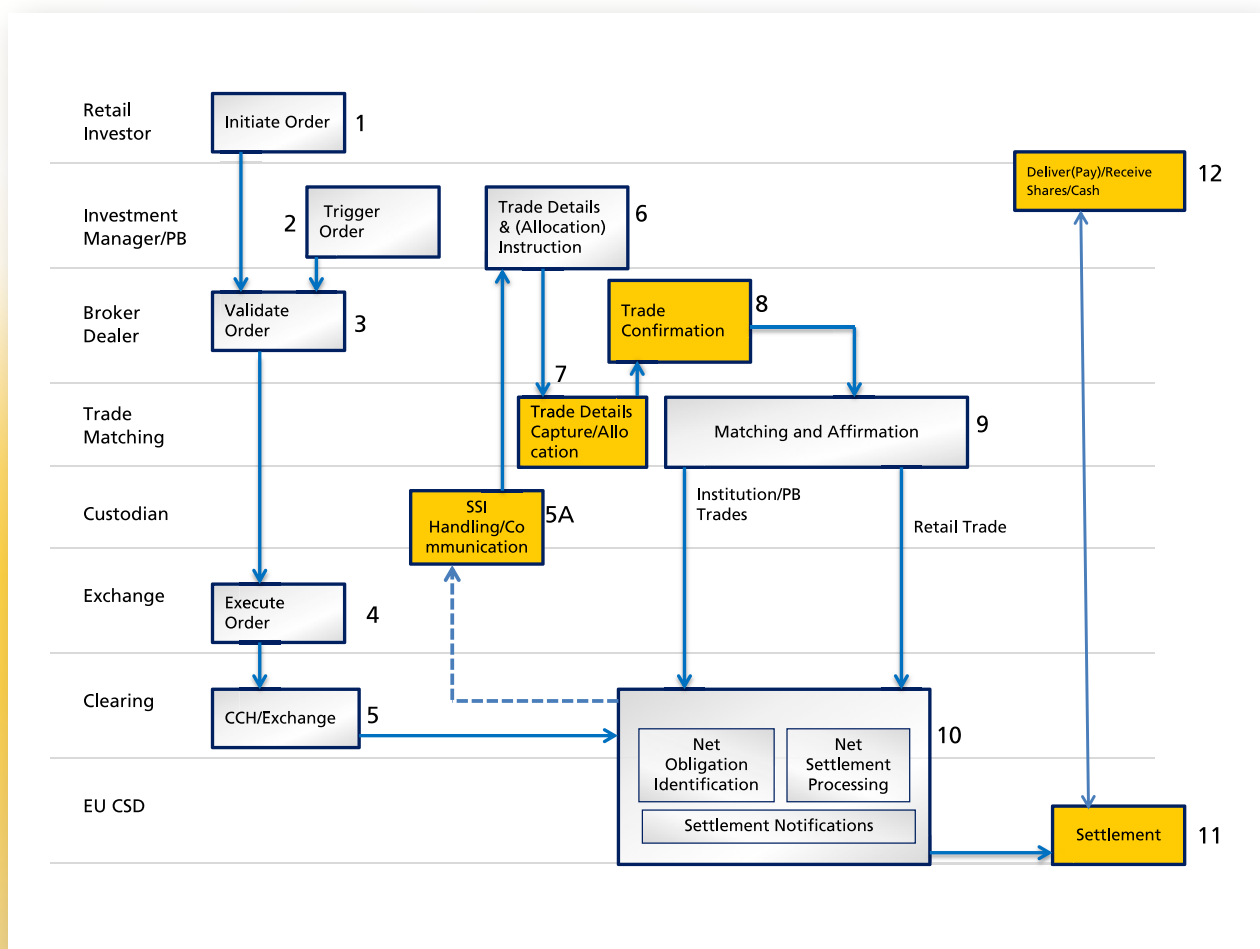
Upcoming market changes, such as the T+1 shortening of the settlement cycle, will stress the pre-matching SLAs further

Image 4: Tier of Settlement Failure



# 06 Functional Areas that Contribute to Settlement Fails

The following high-level trade lifecycle flow depicts the areas wherein any error or issues can result in settlement fails. The areas highlighted below need to be pondered upon for mitigating failures.



**Image 5:** Key Functionalities attributing to Settlement failures



Flow #	Areas that attribute to Trade Fail	Possible reasons
5A	SSI/Data Set up	Inconsistent data setups in reference data systems and data issues in SSIs due to manual errors
6,7,8	Trade Allocation & Confirmation	No faster SLAs or duration for trade allocation & confirmation, currently until 12:00PM of T+1 day. Automated checks for data issues during allocation and confirmation are not available.
11	CSD Recon Issues	No mechanism to validate the position integrity of participant with settling agent/CSD
12	Delivery(Pay ins)/Inventory	Unavailability of holdings mainly for illiquid securities at the time of security pay-ins



# 07 Ways to Mitigate settlement failures

## Trade allocation and confirmation

Investment firms need to ensure that allocation instructions contain complete and correct information in order to prevent any unmatched trade in the allocation and confirmation process. Also, per the CSDR regulation, investment firms must ensure that clients accept the terms of the transaction once the confirmation of the execution is sent to them. In turn, the client must respond back with allocation details and cash within a specific deadline. Allocation and confirmation are required on the same day or by 12 PM of the next day. Furthermore, investment firms need to confirm to the client within two hours of receipt of allocation/confirmation. The above communication should also have the necessary Standing Settlement Instructions (SSI) details in place to eliminate any instructional gaps.

## SSI data setup/reference data

An accurate and timely data flow from order inception to settlement is critical to prevent any settlement fails. The main areas where any inconsistency of data can lead to settlement fails are:

1. Instrument data: incorrect instrument data can contribute to settlement fails, and to mitigate this, one should have a clean and accurate golden source instrument data in all the systems.
2. Counterparty and SSI data: Another area where improvement can take place is in the accuracy and completeness of counterparty and SSI data. This would reduce any matching issue that might otherwise arise.
3. Cross-border trades: Ensure that the SWIFT message is correct and in proper format and standardized for Cross border trades.



Delivery (pay-ins)/inventory management: As mentioned earlier, one of the main reasons for settlement failure is the inability to deliver security on the ISD due to a lack of securities. This is more so for illiquid securities, which are difficult to purchase at the last moment to meet the settlement obligation. This SDR cash penalty can also impact the security lending business as the lender/broker might fail to get back the security on time and thereby fail their obligation to deliver, resulting in a cascading effect. This requires monitoring and tracking inventory in real-time to avoid failing the delivery obligation. Efficient inventory management requires:

1. To have an automated borrowing process to cover short positions in order to avoid penalties and buy-ins.
2. To have a real-time view of the balances across all cash and holdings for their customers.

## **CSD reconciliation issue/real-time settlement status**

Currently, the settling agent/CSD has no mechanism to validate the position integrity of participants. The market participants should strive to get the real-time or close to real-time settlement status working with the CSD/settlement agent to get a view of the volume and size of open trade. This would help them better prepare to deal with settlement fails and have a depot reconciliation to ensure market participants have position integrity vs. their settlement agent/CSD. In addition, the market participants need to monitor and track moving stock to and from an (I)CSD and the respective deadline dates.

## **Issues related to SDR**

1. There is uncertainty surrounding how CSDR would apply to non-EU states. However, CSDR intends to extend SDR to all transactions, irrespective of whether those originate in Europe or elsewhere, settled in European CSDs.
2. The time it could take to develop new message protocols for the automation of the Buy-ins can be used by industry-wide participants to comply with CSDR.
3. Currently, there are few buy-in agents in Europe, which could lead to potential concentration risk.





# 08 Conclusion



This new security discipline regime, with the objective of standardizing the settlement process to reduce settlement fails, has introduced punitive actions like cash penalties and mandatory buy-in that will have a far-reaching effect on the European markets. Financial institutions must be warier of penalties and hence are required to track, reconcile, and regulate their pay-ins. All entities involved will have to ensure that a robust system is in place to mitigate settlement fails and reduce costs. All impacted entities need to focus on augmenting their reference data setups to ensure timely allocation and confirmation. They must also have control over their inventory to ensure that the right security is in place at the right time to avoid potential settlement fails due to non-delivery. Finally, though punitive actions may reduce settlement failures, an integrated infrastructure would provide lineage, transparency, and integrity and would facilitate further reduction or elimination of the quantum of settlement failures.



# 09

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- <http://www.sifma.org/>



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