

CHAPTER 13

Securities settlement systems

Updated on 17 December 2018

The dematerialisation and immobilisation of securities, as well as the increase in the volume of securities trades, both domestically and internationally, have made it necessary to set up securities settlement systems (SSS) which are managed by central securities depositories (CSDs, see Chapter 12). The operation of a securities settlement system is one of the three “core services” provided by a CSD (within the meaning of the European CSDR: see Chapter 12), and must be provided for an entity to qualify as a CSD – as well as at least one of the other two core services (notary and central securities accounts maintenance services). SSSs allow all securities admitted to a CSD to be processed, usually shares as well as bonds, or even fund units in certain CSDs.

SSSs come into the picture after the trade¹ and, if necessary, the clearing to allow the execution of securities contracts agreed between the parties, which results in delivery to the buyer of the securities underlying the transaction, in exchange for payment by the latter of the price agreed with the seller. The security of this operation requires that the organisation and rules of the SSS provide the guarantee that during execution of the transaction, delivery of the securities will occur if, and only if, the corresponding payment has been made, and reciprocally. The operational implementation of this principle of conditionality, called delivery versus payment (DvP), is one of the important tasks of SSSs.

SSSs can also provide for the delivery of securities without payment; this is called a free of payment (FoP) transaction. These free of payment transactions are used in the context of securities lending transactions (which can also be done in DvP) or collateral mobilisation to guarantee market transactions or credit from central banks.

As their name suggests, SSSs are “systems” and have no legal personality, unlike the CSDs that operate them.² They allow the securities to be transferred and the corresponding cash payment to

be settled in accordance with a set of contractually and legally enforceable rules. They thus manage the securities transaction flows, which are recorded in the securities accounts opened in the books of the CSDs.

The settlement systems operated by the CSDs were designed to ensure the operational and legal reliability of these securities transfers, which trigger the change of ownership for the benefit of the buyers. In addition, these systems use standardised messaging and processes, which allows all stakeholders to use a “common language” (international communication standards also facilitate access to the various European CSDs and are therefore now required by the European CSDR – see Chapter 12).

Due to the nature of their operations aimed at ensuring the smooth completion of trades in financial markets or enabling the posting of collateral (including in the context of monetary policy operations), SSSs are viewed as systemically important infrastructures.

In Europe, and in particular in the euro area, securities settlement systems, which had already been greatly improved during the 1990s and 2000s first to meet the international recommendations in this area and then gradually fine-tuned to improve the efficiency of settlement and the management of participants’ liquidity, are undergoing major further developments, with the entry into force of CSDR and, for most of them, the migration to T2S. This technical securities settlement platform, developed and operated by the Eurosystem, is described later (see Chapter 14).

1. Financial transactions and settlement instructions

The first “circulation” of a financial instrument takes place as soon as it is issued, which involves a trade and an exchange against cash in the so-called “primary” market: the issue is complete

¹ Or after clearing, when such a function exists in a market.

² Let us recall here that national central banks, acting as CSDs, can also operate securities settlement systems.

only if there is a buyer and an exchange takes place, resulting in the book entry of the issued securities in the securities accounts of the CSD's participants.

Once issued, most securities acquired by investors are then traded through buy and sell transactions in financial markets. These markets make up what is commonly known as the "secondary" market. The exchange of financial instruments is easier nowadays as it mostly takes place in dematerialised form via a simple set of accounting entries, the so-called book-entry form.

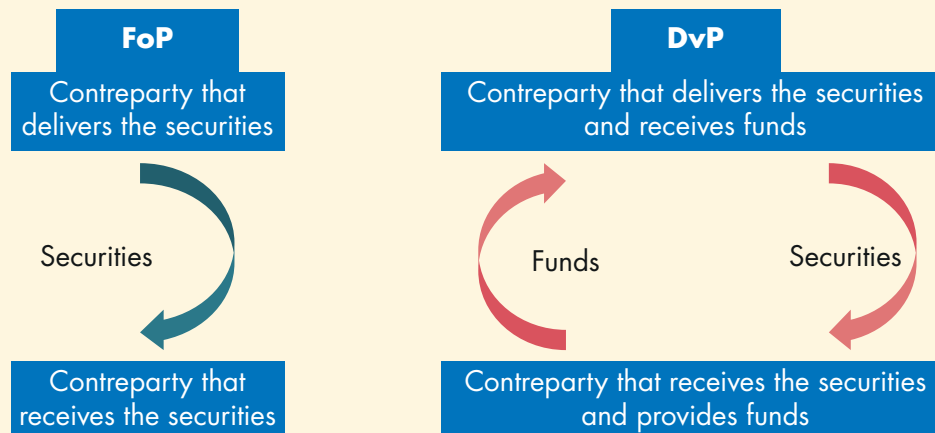
In the over-the-counter (OTC) market, once the trade has been struck and confirmed by the counterparties, the latter enter the corresponding instructions in the SSS, which processes them to allow the actual execution of the transaction. In the case of a regulated market, after the trade, executed orders are sent to the CCP, which then sends the instructions to the CSD.

1.1. The two main types of transactions

Transfers of securities between SSS participants can take place in two main ways, namely delivery versus payment (DvP) and free of payment (FoP).

- Delivery versus payment transactions include a securities leg and a funds leg. The transaction involves a transfer of funds in exchange for the delivery of securities (for example, in the event of a sale of securities or a repurchase agreement, commonly referred to as a "repo"). In practice the seller's custodian instructs the system to deliver a specific number of a specific type of securities (identified by their ISIN code) into the buyer's securities account, while the buyer's custodian arranges to pay into the seller's account the cash amount corresponding to the transaction. The organisation of the SSS must be such that it ensures that delivery of the securities takes place if, and only if, the corresponding payment has been made, and vice versa. The conditionality/simultaneity of this process is essential for the security of securities transactions and eliminates any risk of non-payment of securities or funds. This is by far the most commonly used type of transaction.
- A free of payment delivery does not have a funds leg but only a securities leg. This is, for example, the case for a securities lending transaction, a securities deposit as collateral or a margin call met exclusively with securities. However, in most systems

Box 1: FoP transactions vs DvP transactions



Box 2: The management of units or shares of investment funds in a CSD environment

In several European countries, in particular in France and Germany, securities representing the capital of investment funds (called “units” in the case of mutual funds and “shares” in the case of open-ended investment companies) are admitted to the operations of central depositories, like any other financial security. They are assigned an ISIN code at issue and are settled in the SSS.¹

There is also a secondary market for Exchange Traded Funds (ETFs), which are listed on an organised market. CSDs could play a role in the issuance and management of ETFs based on the model of the services they provide to open-ended funds. A prerequisite, however, would be the harmonisation of the management of ETFs, which is currently very diverse.

Any subscription/redemption order for units or shares of a fund affects the number of outstanding securities. The number of securities representing the capital of an open-ended fund may therefore change daily,² depending on the orders received. This specific feature has led to some adjustments in operational processes. A fund under French law, for example, has an issue account with Euroclear France, representing 100% of the issue. The main difference with an issuer of shares or bonds is that the CSD delegates to a financial intermediary, which acts as an issuer account holder, the management of a “quasi-issue account” enabling this intermediary to issue or redeem units or shares of the fund based on subscription and redemption orders. The centralisation of order taking is handled by a centralising agent, which receives all the subscription/redemption orders that are delivered to it by the entities marketing the fund (distributors) and communicates the information to the issuer account holder for the creation or deletion of units. Transactions in fund units generate instructions in the SSS under the same conditions as for other financial assets.

The T2S platform allows the settlement/delivery of fund units/shares (whether of open-ended funds or ETFs) provided they are admitted to the operations of a CSD. This should facilitate the cross-border distribution of funds in a CSD environment, since the links between T2S-connected CSDs cover 21 European states (see Chapter 14 on T2S).

As regards investment funds, several CSDs have set up automated platforms for the routing of fund unit or share subscription/redemption orders, the generation of settlement instructions and the management of corporate actions. Noteworthy in this respect are the service offerings developed by the two “international CSDs” (ICSDs) Euroclear Bank and Clearstream Banking Luxembourg (see Chapter 12), with the Fundsettle and Vestima platforms, respectively, to meet the cross-border distribution needs of funds. This appears to be a particularly high-growth segment in the current environment, according to a study by the European Central Securities Depositories Association (ECSDA) which brings together all European CSDs, in view of the increase in the distribution of funds in several EU Member States (around 80% of all UCITS are now marketed on a cross-border basis).

In France, the investment fund processing chain – from the custodian to the Euroclear France – is very integrated and is supported, via a dedicated platform (FSFOR), by an efficient automatic order routing system. Regardless of how orders are placed (i.e. via the platform or not), the settlement is now handled by T2S.³

1 This is not the case everywhere in Europe. For example, in Luxembourg and Ireland a so-called register model exists where a transfer agent (TA) can, in the case of “direct settlement” with the transfer agent, maintain the register of a fund and centralise all subscription and redemption orders of units or shares of this fund.

2 This is obviously not the case for a “conventional” company for which, apart from capital increase/decrease programmes and the issue/repayment of bonds, the number of shares and bonds outstanding does not change regardless of the volumes traded in the secondary market.

3 Except for closed funds (in particular employee savings funds).

these transactions require the entry of two instructions, one by the party who must deliver the securities, the other by the party who is to receive them. This avoids errors in the identification of the entity that will receive the securities;

- Lastly, some transactions, which are less common, may have two securities legs (for example in the case of an exchange of securities against securities).

Beyond these two main categories of transactions and the corresponding instructions, there are other types of instructions. One example is the delivery with payment (DwP) instruction, a new type of instruction in T2S that provides for the delivery of securities and a corresponding amount of cash by the same counterparty (used mainly by clearing houses).

Lastly, in some European Union countries, especially in France and Germany, the SSS ensures the settlement and delivery of securities representing the capital of investment funds, such as open-ended investment companies (OEICs), mutual funds, and innovation venture capital funds. Orders are delivered via a custodian to a centralising agent.

1.2. Transaction confirmation

After a trade has been struck in an OTC market, the parties must agree on its terms, i.e. the identification of the securities, price, quantity traded, settlement date and the counterparties. This is the confirmation process. The confirmation can be done in different ways, depending mostly on how the transaction was agreed.

In these markets, the counterparties must submit to each other the terms of the trade for verification, by SWIFT message or any other specialised messaging service. When the counterparties to a transaction go through a financial intermediary, they receive from their intermediary the information used for confirmation and state whether it corresponds to the agreed trade.

After the confirmations have been sent, both parties are contractually bound to each other by the terms of the transaction (obligation to deliver, and possibly obligation to pay). It should be noted that at this stage this mutual commitment has not yet (in most cases) had any effect at the level of the SSS, since the delivery-versus-payment instructions have not yet been sent to the system.

In recent years, automation processes have been implemented throughout the instruction processing chain, allowing for straight-through-processing (STP) and a reduction in operational errors, insofar as the settlement instructions (see below) are generated at the start of the transaction and there are no intermediate entries. The optimisation and increased reliability of flows have also helped to lower transaction processing costs. STP is not always possible, however, especially for cross-border transactions where manual procedures (fax etc.) are sometimes still in place.

1.3. Matching instructions

After a transaction has been confirmed, the custodian, who is in charge of the custody of the client's securities,³ sends settlement instructions to the SSS using the information it received from the client who is a counterparty to the transaction. The system then performs an initial verification that consists in checking the technical and formal validity of the instruction by making consistency checks (for example on the formats entered into the different fields of the instruction).

Matching allows participants in the SSS, i.e. entities that have opened securities accounts with the CSD and issued instructions to move securities in these securities accounts (for own account or for the account of their clients, see below) to verify that the instructions are in accordance with what has been agreed between the parties to the transaction by detailed comparison of the fields of

³ See Chapter 12 for a definition of custody and its players.

the two instructions received on behalf of the two counterparties. Matching relates to specific information or criteria (“matching criteria”), such as the number and type of securities (ISIN code), the settlement date, the securities accounts

and the cash accounts. This information must be identical on both sides for the two instructions to be matched. The matching process described above is primarily concerned with over-the-counter transactions, i.e. entered into bilaterally by

Box 3: The settlement date

Counterparties to a transaction must agree on a settlement date. The number of days between the date of the transaction and the date on which settlement occurs (the settlement date) is called the settlement cycle.

In its report published in March 1989,¹ the Group of Thirty (G30) recommended that the final settlement of securities transactions should take place no later than on T+3, T being the date of the transaction. In addition, the G30 also recognised that to minimize counterparty risks and market risks related to securities transactions, settlement on the day of the transaction should be considered as the ultimate goal to be achieved.

While the T+3 settlement has gradually been adopted in most countries, shortening the settlement cycle has so far proved elusive outside the European Union. The discussions on this subject in many countries have usually stumbled on the dilemma between the benefits, in terms of risk reduction and shortening of the cycle and, on the other hand, the risk of a greater number of suspense items (or settlement fails, see below), especially when transactions involve a long chain of intermediaries, which is often the case for cross-border transactions.

In the European Union, the settlement cycle has been set in CSDR (see Chapter 12) at the latest on the second working day after the trade, i.e. on T+2, for most securities transactions (transactions traded and executed on trading platforms). In most European countries the transition to T+2 settlement occurred in October 2014. The reform was preceded by extensive preparation by all relevant players at European level and coordinated within the framework of T2S governance bodies (see Chapter 14) and did not run into significant difficulties. In practice, the parties to a transaction may also contractually provide for a settlement cycle that is shorter than T+2. Nowadays most CSDs can even, from a technical point of view, offer settlement on T+0, i.e. on the same day as the transaction. Settlement on T+0 occurs for some OTC transactions and in particular for repurchase transactions (“repos”) the purpose of which is not in fact to buy securities but to obtain cash (the securities are then pledged as collateral), or for issue/placement transactions carried out by domiciliation agents with respect to money market securities.

In the United States, settlement cycles vary depending on the class of securities (T+0 for money market instruments, T+1 for US government securities, and, until September 2017, T+3 for equities and securities issued by local authorities and companies), but the Securities and Exchange Commission (SEC) adopted an amendment in March 2017 to reduce the maximum settlement cycle to T+2 as of September 2017. In Japan, the settlement cycle has also tended to decrease, with the transition from T+2 to T+1 for Japanese government securities as of May 2018; it can be T+2 for over-the-counter transactions, with the agreement of the parties, versus T+3 for other bond and share transactions.

¹ http://group30.org/images/uploads/publications/G30_ClearanceSettlement1988.pdf

two counterparties outside an organised market or a trading platform.

In an organised market or on more recent trading platforms created following MiFID 1 (see Chapter 5, Section 1.2.2), transactions can be matched by the platform based on the information provided by the counterparties. In that case, the instructions are already “pre-matched” when they get to the SSS. Most transactions dealt through organised markets are however cleared by a CCP which interposes itself between the counterparties (see Chapter 11): in this case, the CCP sends to the CSD pairs of instructions that have already been matched technically – or even cleared if the CCP offers the clearing function – which therefore do not need to go through the securities settlement system’s matching module.

Once they have been matched, the instructions become irrevocable (unless the parties both agree otherwise), which has the following operational and legal effects:

- Neither counterparty may unilaterally cancel or modify its instruction prior to settlement; the transaction can only be cancelled or modified if both counterparties agree and have received the corresponding amendment instructions;
- The counterparties are definitively committed to contractually fulfil their respective obligations to deliver the securities and, in the event of delivery against payment, to deliver the funds.

1.4. The settlement of transactions: delivery of securities and payment of these securities

After the corresponding instructions have been matched, the system will attempt to settle the transaction. This process involves checking whether the participant who must deliver the securities has enough securities in their account and whether the buyer has

the funds to pay the seller. If one of the two parties does not have the required securities or funds, the transaction is put on hold and other settlement attempts will be made later (first on the same accounting day and then, if the rules of the system provide for “recycling” over several subsequent days). If the securities or funds are sufficient, the transaction is said to be “settled” and becomes “final”, i.e. it can no longer be cancelled in the system. The parties to the transaction are then released from their mutual obligations.⁴

When both counterparties have enough securities – and, as the case may be, cash – the securities are then transferred from the selling participant’s account (for own account or for a client’s account) to the account of the buying participant (for own account or that of a client). The transfer of ownership of the securities is deemed to occur at the time of the credit and debit of securities on the relevant securities accounts. In the case of an indirect holding of securities via a financial intermediary (which participates in the system and therefore has an account with the central depository), the financial intermediary is then responsible for passing on the transaction initiated by its client – and which led to a book entry in the account opened in its name with the central depository – to the securities account which it maintains in its books on behalf of the client.

2. Operating organisation of securities settlement systems

2.1. Settlement in central bank money or in commercial bank money

As we mentioned in Chapter 12, settlement of the cash leg of the transaction settled at the CSD can be done either in “central bank money” or in “commercial bank money”: in the first case, the cash accounts used to settle the cash leg of securities transactions are opened in the books of

⁴ If one of the two parties then decides, for some reason, to request the cancellation of the already settled transaction, the cancellation request can be settled only by agreement between the parties and by sending to the system new opposite instructions (offsetting but totally independent from the first instructions). In the event of a profound disagreement between the parties, only legal action could decide a possible cancellation of the transaction, but even in this case the operational translation of the judicial decision would be the sending of new instructions, as the finality of the first transaction in the system can under no circumstances be challenged.

the central bank (for example, in the books of the Banque de France); in the second case, the cash accounts are opened either directly with the CSD (which must have obtained a banking license authorising it to open deposit accounts) or with a credit institution designated by the CSD.

2.2. Integrated model and interfaced model

In the case of a CSD operating in central bank money, the simultaneous and conditional delivery of securities and funds requires a close interaction between the SSS which manages delivery of the financial instruments (“the securities leg”) and the payment system that processes book entries in the cash accounts (“the cash leg”). There are two models for the settlement of securities transactions, depending on whether a common technical platform is used for the cash accounts and securities accounts of participants:

- the so-called “interfaced” model: the cash accounts and the securities accounts are located on two separate platforms. The accounts used to settle the cash leg of the transactions are directly the participants’ accounts with the central bank, and the securities accounts are located on the CSD’s technical platform. Therefore, settlement of the securities involves interactions (via interfaces) between the CSD’s SSS and the participant’s account in the central bank’s books. With the exception of the CSDs of Euroclear’s ESES platform (see Chapter 14), the interfaced model was used by all the big CSDs in the euro area before their migration to T2S: Monte Titoli, Iberclear, Clearstream, etc.;⁵
- the so-called “integrated” model: the cash accounts⁶ and the securities accounts are located on the same technical platform for settlement purposes, which facilitates the processing of transactions in real time. In the euro area, only the CSDs of the

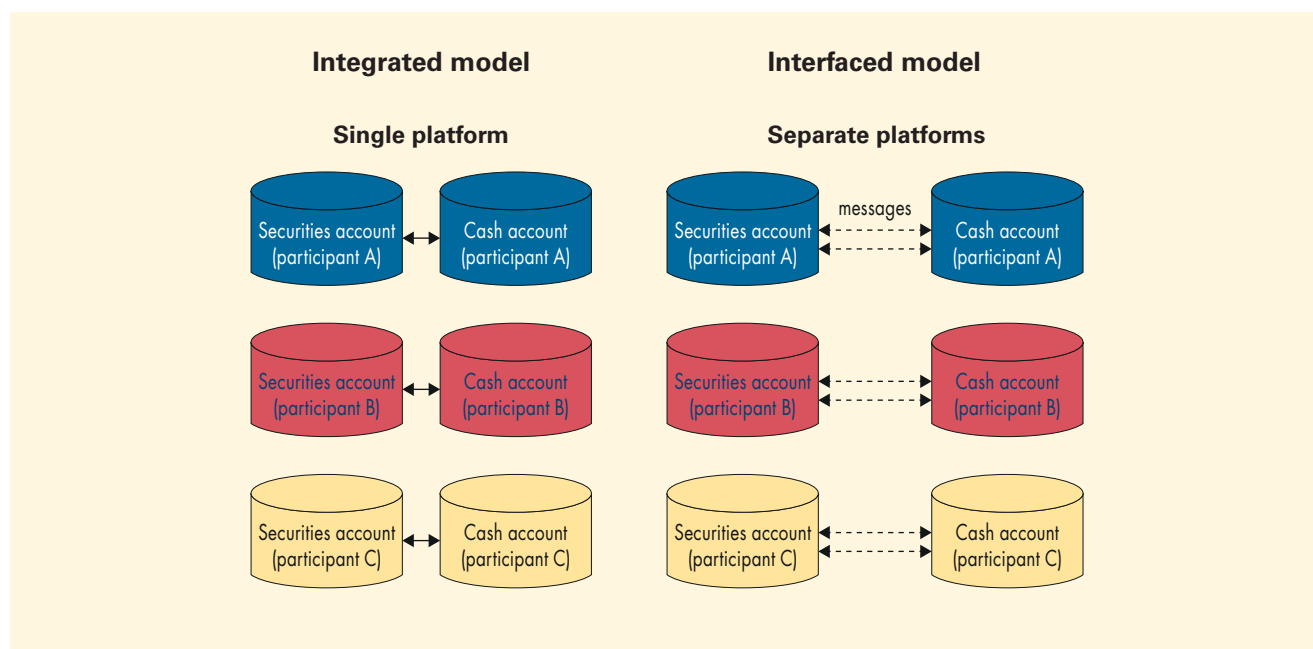
ESES platform operated using this model before T2S: the accounts used for the settlement of funds were considered, from a legal point of view, as open in the books of the national central bank, but their operational management was outsourced to the operator of the SSS on the same technical platform as the one carrying out delivery of the securities. The participants’ cash accounts were therefore managed by the CSD in the name and on behalf of the central bank, for the purposes of the settlement of securities transactions. The interactions with the RTGS system consisted in feeding the “technical” cash accounts of the participants in the SSS from their cash accounts in the RTGS system (and vice versa: transfer of funds available “in the SSS” to the participants’ cash accounts with the central bank). Apart from these interactions related to the supply (or removal) of liquidity, the “technical” cash accounts and the securities accounts were managed in an “integrated” way by the CSDs of the ESES platform, without the need for interfacing with another system.

The French market operated under the integrated model since the introduction of the RGV system by SICOVAM⁷ in 1998, and then the ESES platform by Euroclear in 2007 (based on the RGV system and extended to the CSDs of Belgium and the Netherlands). Securities accounts and cash accounts were managed on the same platform, by delegation from the central bank for the technical cash accounts. Although it had proven to be efficient and secure, especially for DvP transactions, the integrated model was not a practice shared by other markets, mainly because of the reservations made by some central banks about outsourcing the management of their settlement accounts to CSDs. After lengthy internal discussions within the Eurosystem, T2S was built in accordance with the integrated model, but the single settlement platform is managed by the central banks and not the CSDs (see Chapter 14).

⁵ There are several ways to organize the interface between the central bank and the CSD. The common practice is as follows: the CSD blocks the securities of the seller, sends a payment order to the central bank requesting the transfer of the countervalue of the securities from the buyer’s account to the seller’s account, and then, after execution of the transfer has been confirmed, releases the securities and transfers them from the seller’s account to the buyer’s account. In practice, the sending of debit and credit instructions to the central bank is/was done on a “net” basis, i.e. not transaction by transaction, but for a set of transactions.

⁶ Or more precisely the reflection of cash accounts held by central banks, which are directly connected to T2S.

⁷ For more details on RGV and SICOVAM, see Chapter 14..



2.3. Delivery-versus-payment (DvP) models

A CPSS report published in 1992 under the aegis of the Bank for International Settlements (BIS)⁸ identified three major models of DvP systems, forging a terminology that is still in use today:

- DvP Model 1: Gross (i.e. transaction by transaction) simultaneous settlements of securities and funds, one being contingent upon the other. This model eliminates the credit risk (or principal risk, i.e. the risk that the party that has already executed its own obligation does not receive the agreed securities or funds): if the necessary funds or securities balances are unavailable in the respective accounts of the participants, which the SSS operator can ascertain in real time, the transaction is “suspended”. If it has not been settled by the end of the day, it is in some cases cancelled by the system. However, this model can lead to a chain reaction, with fails of other transactions – a weakness that the other models nonetheless also share. This is why the practice of recycling has become so widespread: if a transaction cannot be settled on the scheduled day, the system may make several settlement attempts (“recycling”) the next day or – depending on system rules – on the following days. In addition, to mitigate this drawback, most systems built based on the DvP1 model also include so-called optimisation mechanisms (see 2.4 below);
- DvP Model 2: gross settlement of securities transfers throughout the day – in fact this is only a control that the required securities balances are available, since the securities are not delivered yet – followed by net settlement of the funds at the end of the daily process. In order to eliminate principal risk, the securities are delivered to the buying participants only against settlement (either in the central bank’s books if settlement is “in central bank money” or in a commercial bank’s books if settlement is “in commercial bank money”) of all the net debit positions resulting from the day’s transactions. With the passage of time and the emergence of more efficient technologies, this type of model has drifted towards an organisation where the settlement of funds takes place several times during the day;

⁸ “Delivery versus payment in securities settlement systems” September 1992 <http://www.bis.org/cpmi/publ/d06.pdf>

- DvP Model 3: net simultaneous settlement of securities and funds. The technical netting (this is a calculation of net balances, without the interposition of the CSD, and not a clearance in the CCP sense) therefore takes place for both the funds and the securities. The fact that the settlement is simultaneous is also intended to eliminate principal risk.

The DvP1 model is currently the most widely used in Europe because it is the one implemented by the T2S platform: transactions are settled individually for their gross amount as they arise. This model requires participants to maintain significant liquidity to meet their needs throughout the day, but platforms operating under this model, such as T2S (see Chapter 14), offer several features to reduce participant's liquidity needs (liquidity-saving features, see Chapter 14).

In the DvP 2 and 3 models, the frequency of settlements within the SSS and within the payment system, as well as the frequency of exchanges between the SSS and the payment system are also important because they determine the range of possibilities, in particular in terms of intraday liquidity provision. The provision of intraday liquidity assumes both that the SSS and the payment system offer several daily settlements (and not only one at the end of the day) and several daily interactions between the two, with different processes depending on the functioning of the payment system. The frequency of settlement cycles increases the effectiveness of the settlement process, but is limited by operational constraints. A CSD must therefore strike a balance between these two objectives in order to offer the best service to the participants of the SSS that it operates.

Using collateral to make transactions safer has become mainstream, which means that it is increasingly important for market participants to have full possession of acquired securities quickly in order to secure liquidity (from other players or central banks). In this respect, real-time settlement is a

definite advantage over deferred settlement since the transaction is completed and the acquired security is available immediately, which not only reduces the risk that the expected securities will not be received (this is in fact a "liquidity risk"), but also makes the security acquired in a "final" way immediately reusable by its buyer for some other need.

2.4. Optimisation mechanisms

The effectiveness of settlement depends first and foremost on the ability of SSS participants to effectively manage their liquidity in terms of securities and funds prior to settlement to minimize the risk of a settlement fail during the day and at the end of the day. If there is a shortage of liquidity, securities or cash lending facilities may be offered to participants, which greatly contributes to the effectiveness of the settlement process and the reduction of risk. In addition, organisational measures within the SSS, such as optimisation mechanisms or optimal sequencing of transactions, can usefully complement these services (see the T2S example in Chapter 14).

2.4.1. Liquidity management

Several lending schemes help improve cash or securities liquidity.

2.4.1.1. Securities lending services

Some CSDs organise a securities lending service that allows participants with ad hoc securities needs to call on those who have some to meet their delivery obligations. As in a repo, securities lending can lead to a temporary transfer of ownership of the securities to the borrower. The service is ancillary to the core services offered by a CSD.

Securities lending mechanisms help improve liquidity, and thus the proportion of transactions that are properly settled. The advantage for securities lenders, which are usually investors holding a portfolio of long-term – and therefore largely locked-in –

securities, is that it allows them to increase the profitability of these securities through the remuneration they receive.

When a CSD offers securities lending, it may either be restricted to the role of a technical organizer of the securities lending mechanism (non-banking-type service) or have a role in the transactions themselves by granting guarantees and underwriting securities lending commitments (banking-type service). In the latter case, the CSD acts not only as an agent but also as a counterparty or guarantor of its participants. This activity therefore requires a banking licence (see Chapter 12, Sections 1.4 and 2).

2.4.1.2. Intraday credit

One of the main cash liquidity management tools is intraday credit. This can be provided either by a settlement agent – which may be a central bank or a commercial bank – or by the operator of the system. This latter possibility also implies a banking license, as intraday credit is a form of lending subject to the same authorisation as longer-term loans:⁹ in Europe, both the Euroclear Bank and Clearstream Banking Luxembourg ICSDs have the required banking licenses to grant intraday credit.

Intraday credit is conventional refinancing, which is systematically collateralised by securities accepted by the entity granting the credit, i.e. “eligible securities”. For the Eurosystem central banks granting intraday credit, the eligible securities are the same as those eligible for monetary policy refinancing, which allows counterparties to use a single pool of collateral for all their transactions with the central bank, regardless of their maturity.

2.4.1.3. Auto-collateralisation

Initially developed by the Banque de France in collaboration with Sicovam/Euroclear France in the late 1990s for the RGV system, auto-collateralisation is an automated form of intraday credit. It consists in posting automatically as collateral with the central

bank either the securities that underlie the transaction (on-flow collateral), or other securities available in the buyer’s securities account (on-stock collateral), thus triggering the receipt of intraday credit by the participant exposed to a temporary liquidity shortfall. Auto-collateralisation thus makes it possible to settle a transaction even if the buyer does not have sufficient liquidity in their cash account.

Auto-collateralisation operations carried out by the national central banks in the T2S environment, such as the Banque de France since September 2016, are subject to automatic repayment during the accounting day and, if necessary, a compulsory repayment procedure at the end of the financial day. Since the deployment of T2S, auto-collateralisation is available in an increasing number of European countries (see Chapter 14, Section 2 for more information on T2S auto-collateralisation).

2.4.2. Organisational measures

The organisational measures implemented by the SSSs are intended to limit the risk of gridlock of the settlement process due to related transactions, for example in the case of successive sale/purchase transactions of similar types of securities, as well as to improve the efficiency of the settlement process during the day.

2.4.2.1. Combination of overnight and daytime settlement

The combination of overnight and daytime settlement gives rapidly participants (where possible) an overview of the status of their transactions. The overnight settlement process allows the stock of instructions already entered into the system to be verified and validated for immediate settlement with the new business day as settlement day (or a previous business day for failed settlement transactions and which are presented again on the following days, thereby improving the efficiency of settlement: see below). Overnight settlement therefore makes it possible (when it is technically possible)

⁹ For more details on central bank money vs. commercial bank money settlements, see Chapter 1.

to give participants full visibility over the status of their transactions more quickly.

After a window of technical maintenance of the system at the end of the night (usually), daytime settlement makes it possible to validate and settle (i) any new instructions as they are entered, with the current business day as the day of settlement and (ii) any transactions not settled during the overnight cycle (and of course any recycled transactions: see below).

At the end of 2017, 52% of the transaction volume (i.e. the number of transactions) processed by T2S was settled overnight, which represented around 30% of all transactions by value, all CSDs participating in T2S combined.

2.4.2.2. Optimisation algorithms

To ensure the smoothest possible settlement of the largest number of transactions, settlement engines include optimisation algorithms that determine an optimal settlement order designed to avoid gridlock resulting from securities or cash shortfalls or linked transactions (while giving precedence to the order of priorities of instructions given by participants).

2.4.2.3. Partial settlement and division of transactions

When the SSS detects a shortage of securities or cash, it may (where its rules permit and often during clearly identified time windows) settle the transaction partially, i.e. for the available amount of securities or cash. The non-settled balance of the transaction is then recycled, i.e. presented for settlement later. By allowing settlement in several stages for smaller amounts, partial settlement increases the smoothness and efficiency of settlements. Finer granularity is indeed a factor that can facilitate the settlement process.

In a real-time and gross settlement system, as is the case with T2S, partial settlement “windows” are set at specific times of the

day to allow for a snapshot of all matched instructions awaiting settlement and trigger the partial settlement of instructions up to the amount of the securities and/or cash resources available in the participants’ accounts. Amounts not settled at the end of the partial settlement windows are presented for real time settlement for their remaining balance, and then at the following partial settlement windows.

2.5. Settlement fails and market discipline

Among the validated and matched settlement instructions, some fail at the settlement stage. These failures (called fails) may be due either to a shortage of securities in the designated account of the seller/lender of securities, or to a shortage of cash in the designated account of the buyer/borrower of the securities.¹⁰

The instructions are then regarded as suspense items (which does not in any way extinguish the contractual obligations of the counterparties). Suspended instructions outstanding at the end of the accounting day can be “recycled” over a certain number of subsequent days by the system, which attempts to settle them just like any other matched instruction. Each SSS has its own rules regarding suspense items, which are part of the body of market discipline rules. Some SSSs may simply cancel pending transactions, leaving the affected participants to resend new instructions to the system. Others may allow a period of one or more days to allow defaulting participants to resolve the situation by contributing securities or cash.

ESES France recycles outstanding failed transactions, as do the other securities settlement systems that have migrated to T2S; in contrast, the French clearing house LCH SA cancels failed instructions at the end of the day and reinstates them in its daily clearing process.

In addition to the securities and/or cash borrowing services described above, certain

¹⁰ Short sales of securities, which experienced strong growth in the 2000s, led to an increase in fails due to a shortage of securities, which in turn led to the adoption of rules regulating and limiting this practice.

rules may also impose financial penalties on a participant which is late in fulfilling its obligations or force the defaulting participant to accept a compulsory buy-in of securities in the market when the transaction is not settled at the end of a predefined period.

In the case of a compulsory buy-in of securities, a third-party market player is mandated to procure the securities not delivered to the injured party; this market player then invoices the cost of the transaction to the defaulting counterparty of the initial transaction. For the financial industry this system is viewed as the most restrictive of all the available measures in case of a failure to deliver securities (cancellation of the transaction; financial indemnity/penalties against the defaulting party, etc.).

The European CSDR, adopted in July 2014 (see Chapter 12), introduces strong requirements regarding the compulsory buy-in of securities in the market in the event of a default lasting a few days, and makes them systematic – the exact duration of the periods depends on the liquidity of the security, estimated by broad categories. According to the draft technical standards implementing the provisions of CSDR sent by the ESMA to the European Commission in February 2016, and subject to the validation of these standards, CCPs will be responsible for executing buy-ins for the transactions they clear, while the buy-ins of non-cleared transactions will be managed by the parties to the transactions (whether these transactions were traded/executed on trading platforms or not). These requirements, which are to come into effect in the first half of 2020, are expected to result in significant adaptations of market practices as well as substantial IT developments for participants, CSDs and clearing houses.

The average rate and standard deviation of the suspense items observed in an SSS depend on several factors, some of which are inherent to the SSS (depending on the DvP model implemented, the efficiency

of the settlement engine, the interactions with a payment system, etc.) and others are exogenous factors (the number and value of transactions processed, the granularity of transactions, the quality of counterparties, market practices, etc.). At the end of 2017, the aggregate suspense rate (i.e. all participating CSDs combined) in T2S was around 2% in volume (number of transactions) and in value of transactions.

3. Conditions for participation in the SSS

3.1. General rules and main characteristics of participation

Not all market participants participate directly in the SSS: only some of them establish a contractual relationship with the CSD, and thus participate directly in the SSS, which allows them to open one or more securities accounts directly with the CSD. Thus, only certain categories of entities, of which a limited list is laid down by law, can become direct or indirect participants. In France (see Article L. 330-1 II of the Monetary and Financial Code), these are mainly credit institutions and investment firms, clearing houses and their members, other CSDs and certain government bodies such as the Treasury, the Banque de France and the Caisse des Dépôts et Consignations. The establishment of a restrictive list of entities and categories of entities legally entitled to participate in an SSS aims to contain the risks associated with the operations of the SSS, by ensuring that the direct participants have the financial and operational capabilities to send instructions to the SSS for potentially very large amounts and be able to meet all their obligations (including technical).

CSDR also introduces an obligation for CSDs to disclose their participation criteria, allowing fair and open access to entities belonging to the categories of entities legally entitled to participate directly in a securities settlement system. These criteria must be “transparent, objective and

non-discriminatory” (in practice, for example, they may be financial or operational), while considering risks to financial stability and the smooth functioning of markets. The objective is to strike the right balance between a sufficiently open access to the systems, while avoiding direct participants adding risk to the systems (and therefore to markets) due to financial weakness or technical or operational shortcomings.

The technical investment and the financial cost associated with direct access to the SSS make it necessary to have enough business volume to make these costs worthwhile. Small and medium-sized financial intermediaries therefore often choose to only access the SSS indirectly, by signing a contract with a direct SSS participant who will enter settlement instructions on their behalf.

Direct SSS participants can indeed send instructions to the system, for themselves or for third parties, the latter being referred to as “indirect participants” in the SSS. Indirect participants have no contractual relationship with the CSD, but only with the direct participant, who acts as their intermediary.

Participants also have the choice between opening a so-called “omnibus” account (account intended to accommodate the assets of all the clients of a given participant, excluding its own assets) or to open, also under their own responsibility, a set of so-called “segregated” accounts that will show in the books of the CSD the names of investors or categories of investors (or other financial institutions that have opted for indirect access to the CSD) opposite each “individual” account.

While the omnibus account appears in the name of the direct participant in the CSD’s records, the direct participant has no ownership interest in the account’s assets. It is to avoid any ambiguity in the event of bankruptcy of the direct participant that CSDR imposes at least a segregation between the participant’s own assets and

the assets of its clients. Within the assets of its clients, segregation or concentration in an omnibus account is a contractual choice of each client. In all cases, the direct participant must keep in its own books a register in the name of each client, and thus ensure the proper custody of clients’ assets. This system of internal segregation within intermediaries also makes possible the “waterfall” processing of corporate actions (see Chapter 12 for more information).

In France, however, a direct participant is fully responsible for the instructions that it has entered into the system, whether for its own account or on behalf of its clients; its contracts, in particular with indirect participants, cannot limit its liability in this respect (see Article L. 330-1 II of the French Monetary and Financial Code).

3.2. Links between CSDs (participation of a CSD operating an SSS in one or more other SSSs)

To allow its direct or indirect participants to trade in securities issued in another CSD (i.e. in another country, in most cases), while helping them to avoid having to become a direct or indirect participant in the issuer CSD, a CSD can set up a “link” between its SSS and that of the third party CSD: the CSD then becomes a direct participant in the SSS of the third party CSD. The operational translation of this direct link is the opening of a securities account in its name in the books of the issuer CSD. The CSD may also become an indirect participant through a direct participant (custodian): this is then an indirect link.¹¹ Between these two types of links are also the “direct operated” links, in which a custodian technically introduces the instructions for and on behalf of the CSD participating in a third party CSD and duly identified (via a “segregated” account) in the latter’s books. “Relayed” links, in which an intermediary CSD acts as a “relay” between the investing CSD and the issuer CSD, are also very common.

The harmonised technical environment of T2S facilitates the establishment of

¹¹ For the record, a financial player or an individual may go through a custodian directly to buy or sell securities issued in a State other than the one in which it is established.

links between CSDs, because settlement between the participants of two CSDs that have migrated to T2S has become similar to domestic settlement in terms of speed of processing, security and pricing. T2S thus encourages the setting up of new direct links – many European CSDs have confirmed their intention to create new links in the coming years – or the transformation of relayed links into direct links.

As a reminder (see Chapter 12), the term “investor CSD” refers to the CSD whose clients wish to process a security issued in another CSD, the “issuer CSD”. For example, if the participants of a CSD from country X want to buy/sell a security issued in the CSD of country Y, the CSD of country X is the investor CSD and the CSD of country Y is the issuer CSD. The links established by a CSD thus allow its clients to access a wider range of securities, through a single point of entry, by economically streamlining access to different markets and collateral management.

The links allow financial players to carry out cross-border transactions, in the broad sense of the term (between players from different jurisdictions or between players of the same jurisdiction over securities issued in another State) and thus contribute very significantly to the integration of financial markets. However, they carry specific risks because of their greater technical complexity and possible legal uncertainty resulting from differences in the national laws involved in these transactions.

For example, there may be uncertainty regarding the applicable law if a participant defaults. Divergences may also appear between the rules governing the various SSSs, in particular the rules on settlement finality (which have however been harmonised for all SSSs that have migrated to T2S: see Chapter 14). In this respect the harmonisation of national laws relating to the holding and transfer of securities between countries of the European Union (including within the euro area) remains a major objective in the coming years.¹²

A complete harmonisation of national laws is of course too much to hope for in the short term, since it would imply material changes in certain laws, which would have a considerable impact on the countries/markets concerned. However, incremental progress, although initially seemingly limited, is reasonably conceivable.

In addition, the links between CSDs tend to increase interdependencies within the financial markets: an operational incident or a default in one SSS could lead to other defaults or settlement failures in the SSSs with which it is associated, and thus even affect participants who were not counterparties to any transaction processed by the SSS concerned. Refer to Chapter 12 for a description of the risk management measures involved in establishing a link, in particular the legal risks.

From an operational point of view, CSDs may decide to offer via links the same services as those offered usually to their clients: depository, cash or securities lending, collateral management, custody and settlement. The choice of features offered through a link will contribute to the link’s design. CSDs may have different operating organisations; the investor CSD must have a good understanding of the functioning of the issuer CSD to assess the associated operational risk, and reduce it, if necessary, by setting up specific measures. Because of the increased legal and operational risks, CSDs must therefore design any links between SSSs in a prudent and appropriate manner. Operational issues are sometimes very closely linked to legal issues, for example reconciliation processes must be sufficiently frequent and robust to establish the holders of title to the securities.

The establishment of a link between two SSSs operated by CSDs based in different jurisdictions is not, however, the only way for banks and investment firms established in a jurisdiction to make transactions in securities issued in other country. Indeed,

¹² In this respect, the reader can refer to the work of the T2S Harmonisation Steering Group (see Chapter 14 – Section 7.1) and the work of the European Post Trade Forum (EPTF), a group of experts convened under the auspices of the European Commission and whose report was issued in May 2017 as well, as a consultation launched by the latter at the end of 2017. https://ec.europa.eu/info/sites/info/files/170515-eptf-report_en.pdf

custodians have established sometimes very extensive networks of entities established in different countries, which directly (or indirectly) participate in the SSSs operated by local CSDs, which represents an alternative access channel to markets in addition to the links between SSSs. In practice, there is currently a large majority of cross-border transactions via custodians compared to transactions via the links between SSSs.

3.3. FoP or DvP-type links

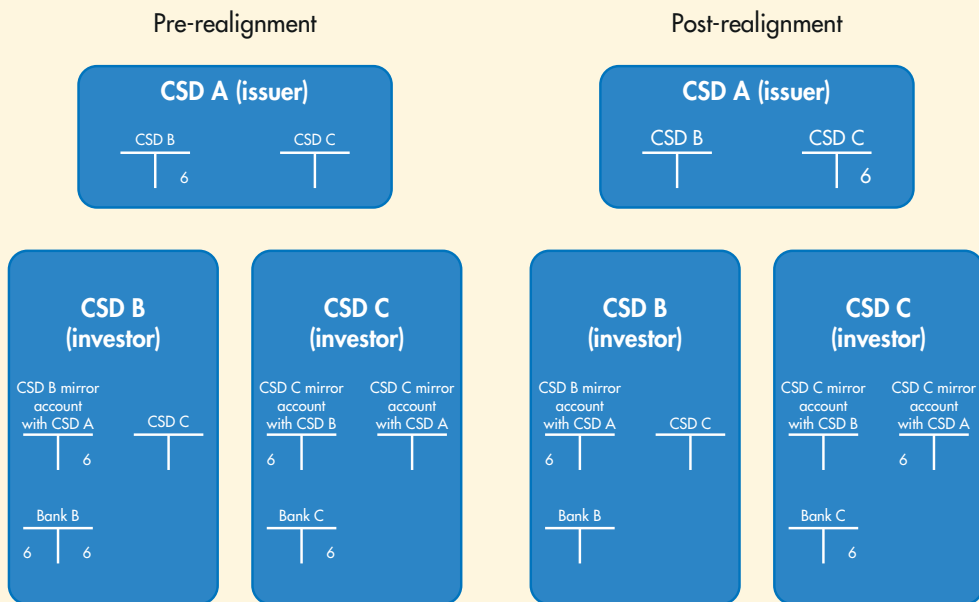
CSDs can design links between each other as FoP-only (free of payment) or FoP and DvP (delivery versus payment). FoP-only links dissociate the cash and securities legs. Although they are technically simpler to

implement for CSDs, they involve a greater operational risk in their use for transactions involving a cash leg (since its settlement is de facto completely disconnected from the settlement of the securities leg). However, this type of link is very useful for FoP transactions, i.e. with no cash leg, such as for example most collateral transfers to the Eurosystem central banks.

DvP-type links make the settlement of the cash and securities legs contingent upon the availability of sufficient cash and securities in the accounts of the two participants. They prevent any provisional transfer of securities before the transaction is final, and therefore offer greater legal certainty to the participants of both SSSs. However, they are usually more expensive to set up because

Box 4: Example of a realignment of securities accounts in the context of links between CSDs

Let us take the example of an issuer CSD A and two investor CSDs B and C. If a participant of CSD C buys securities from a participant of CSD B, the realignment consists in the transfer of securities from B’s securities account with A to C’s securities account with A, so that it effectively is C – and not B – who is the new ultimate owner of the securities in the books of the issuer CSD. At the same time, the pre-existing exposure between C and B is cancelled.



they are complex from an operational point of view. The new links established by Euroclear France to other CSDs that have migrated to T2S are DvP links, thanks to the technical harmonisation allowed by T2S, which significantly simplifies the DvP links and provides optimal technical and operational conditions. In order to ensure the finality of a transaction involving a link, the items entered on the credit and debit sides of the securities accounts held by the various CSDs of the relevant link are adjusted gradually, in accordance with a chronology that makes it possible to ensure that securities accounts of the “downstream” CSD are not credited before the securities accounts held by the “upstream” CSD (respectively the investor CSD and the issuer CSD in the case of a link involving only two CSDs). This is called a “realignment of accounts” (see Box 4).

4. Risks and oversight of SSSs

4.1. The risks associated with SSSs

The Principles for Financial Market Infrastructures (PFMI, see Chapter 18) are partially applicable to SSSs: the principles applicable to SSSs fairly broadly overlap with those applicable to the CSDs that operate them, and supplement them on certain points described below. This distinction is specific to securities settlement systems and does not apply to payment systems or financial instrument clearing systems. The distinction is explained by the very systemic nature of SSSs, and the desire to treat them in a specific way.

After the stock market crisis of 1987 and the ensuing meltdown in stock prices, the Bank for International Settlements (BIS) was concerned about the risk of contagion from securities settlement systems to payment systems and the entire financial system. Several types of risk have been identified in the functioning of markets, the most significant of which are principal risk (if the default materialises after the non-defaulting counterparty has made its payment or

delivered its securities, it is exposed to a risk of loss on the amount of the transaction) and the systemic risk that would result from a snowball effect between the participants in one or more SSSs as a result of one or more initial securities or cash settlement defaults, which could affect the stability of financial markets as a result of the liquidity crisis and loss of principal suffered by some market participants. The creation of a strong link between the delivery of securities and the payment of funds, making them contingent one upon the other and simultaneous, eliminates principal risk.

Another risk, related to the inability of the seller/lender of securities to meet its delivery obligations, typically in the event of insolvency, is the risk associated with the replacement cost: the purchaser or the borrower of securities is then exposed to an opportunity cost. The purchaser/borrower of securities may then be required to buy/borrow securities in the market, at a price that is different from the original transaction, to meet its own delivery obligations in the case of chain transactions on the same securities. Even if it may seem counter-intuitive, replacement risk, unlike credit risk (or principal risk) can never be eliminated completely (except in the case of a performance guarantee given by a clearing house for example) but merely mitigated using techniques such as securities lending.

It is fundamental for a CSD to clearly define its rights and obligations, as the operator of the SSS, and those of its participants, as well as certain key aspects of the processes. Legislation in different European countries requires payment system operators to define several “moments” in their rules, in particular when the instructions are deemed to have been entered into the system and when they become irrevocable.

The national legislative provisions (in France, Article L. 330-1 of the Monetary and Financial Code) result from the transposition of a European Directive called the Settlement Finality Directive (SFD) adopted in 1998

(SFD 1) and amended in 2009¹³ (SFD 2: see Chapter 12, Section 2). Under this Directive, a European SSS is governed by the national law of a Member State chosen by its participants, provided that at least one of the participants is established in that Member State. A legal risk could arise, for example, if the rules prescribing the finality of the settlement are not clearly established or applied uniformly in both jurisdictions in the case of cross-border transactions, creating legal uncertainty as to the applicable law. Please refer to Chapter 5 for a more detailed description of the concept of settlement finality, and the moments that delineate it.

4.2. Oversight of SSSs: the role of central banks and market authorities

The central bank of the country in which the SSS is located is usually in charge of its oversight. Because of the close interconnection between the SSS and the payment system operated by the central bank and in a context where CSDs mostly operate in central bank money, it is indeed necessary (and legitimate) for the central bank to ensure that this interconnection does not create a risk for its payment system. In addition, CSDs are an important operational vehicle for implementation of the Eurosystem's monetary policy (see Chapter 12). Lastly, in close connection with their mission of defining and implementing monetary policy, central banks aim to contribute to the stability of the financial system.

This is the case in France, where oversight of the settlement system is devolved to the Banque de France by Article L. 141-4 of the Monetary and Financial Code: "The Banque de France oversees the security of the systems used to [...] settle and deliver financial instruments." To this end, it has powers to check documents and carry out on site inspections and has been designated as the "competent authority" of the CSD which operates the French

settlement system for the purpose of implementing the European CSDR (see Chapter 12, Section 2 for a description of the division of powers between the Banque de France and the AMF and Chapter 18 for the oversight framework).

The example of the oversight of ESES France

The oversight, which aims to ensure the smooth conduct of settlement transactions, is exercised continuously. This involves regular monitoring of activity statistics, suspense rates and system availability as well as communication on any important issue (e.g. the transition to settlement on T+2, migration to T2S, tracking the system settlement rate or operational incidents impacting system availability, etc.).

In France, the oversight of the SSS is conducted by the Banque de France, jointly with the Financial Markets Authority (AMF). The Banque de France and the AMF are, pursuant to Article 11 of CSDR, "competent authorities" for the authorisation and supervision of Euroclear France, the CSD that operates the ESES France settlement system (see Chapter 12, Sections 2 and 3). Cooperation is extended to the Belgian and Dutch authorities since the CSDs of the three countries share the same settlement platform and have also delegated to their parent company, Euroclear SA (ESA), the provision of numerous support services such as IT, human resources, financial management, etc. In this context, the national authorities in charge of the regulation and oversight of CSDs have developed from 2006 onwards a framework for cooperative oversight of ESA,¹⁴ which is governed by a Memorandum of Understanding in which the Belgian authorities, namely the Banque Nationale de Belgique (BNB) and the *Autorité des services et marchés financiers* (Financial Services and Markets Authority - FSMA) have been designated as "coordinating authorities".

Formalised assessments of the system against international standards (PFMI: see Chapter 18) are carried out regularly,

¹³ Directive 98/26/EC on settlement finality in payment and securities settlement systems Directive 2009/44/EC.

¹⁴ The cooperative oversight, however, only applies to ESA's support functions.

usually every three years. The last joint assessment of ESES and the ESES CSDs (Euroclear France, Euroclear Nederland and Euroclear Belgium) was published in September 2015.¹⁵ This assessment was the result of the joint work of six authorities: the central banks and market authorities of each of the three countries in which the ESES CSDs are established.

4.3. Assessments conducted by the Eurosystem as a user

4.3.1. Assessments of SSSs and of the links between SSSs

The Eurosystem uses SSSs and the links between SSSs to allow its counterparties to provide it with collateral in support of monetary policy and intraday credit operations. To ensure that these settlement systems and the links between them do not expose it to inappropriate risks on the collateral thus posted¹⁶ (in particular via a legal or operational challenge to its access to the securities delivered to it as collateral, or technical or legal obstacles which would delay this access and could expose it to adverse market movements in the event that the securities received as collateral have to be realised) the Eurosystem conducts various cyclical and ad hoc assessments of the SSSs and the links between them.

A first set of standards established by the Eurosystem as a user was set up in 1998. It then gradually evolved and was formalised in a document called the User Assessment Framework, the latest version of which dates from January 2014¹⁷ and is based first and foremost on the work done by the national central banks to oversee SSSs and the links between SSSs, and complements it with user standards that meet the Eurosystem's legal and operational requirements.

The deployment of T2S had already simplified the requirements of the User Assessment Framework, in particular for the links established between two CSDs participating in T2S, which share a certain

number of operational characteristics (e.g. system operating days and hours) and legal features (settlement finality).

Implementation of CSDR recently led to a further substantial reduction in the Eurosystem assessment framework: the provisions of CSDR have been compared to the Eurosystem user standards and it is clear that most of them will be covered by CSDR. The Eurosystem will therefore rely heavily on the work done by the competent authorities of the CSDs and on the assurance of compliance with CSDR's requirements implicit in an authorisation; the few residual standards (not covered by CSDR) will be addressed either contractually between the national central banks and the CSDs to which they resort, or by laws or regulations in each jurisdiction. The residual standards will ensure that the national central banks, as direct participants of the CSDs, are not at legal risk and have rapid access to the collateral, whatever the situation (in particular, their property rights over securities given to them as collateral must be clear and unambiguous and must not be challenged by the liquidation of the CSD). These residual standards also lay down operating rules, including the opening dates and hours of the system. The reader can refer to Decision No. 2018-03 of the Governor of the Banque de France, published on 16 April 2018,¹⁸ for more details on this new, simplified approach.

4.3.2. Assessments of tripartite agents

CSDs providing tripartite collateral management services may also become eligible for Eurosystem operations as "tripartite agents" if their triparty repo model (see Chapter 12, Section 3) meets the Eurosystem criteria. The monetary policy counterparties of a national central bank of the Eurosystem may then post securities as collateral to said central bank via these triparty repo services.

The Eurosystem criteria were consolidated in 2017 and published on the ECB's website.¹⁹ They form a body of standards

¹⁵ <https://www.banque-france.fr>

¹⁶ Monetary policy decisions by the Governing Council of the ECB are implemented in a decentralised manner, i.e. by the national central banks of the Eurosystem for counterparties established in their jurisdiction, with nevertheless a pooling of income and losses.

¹⁷ <https://www.ecb.europa.eu>

¹⁸ <https://publications.banque-france.fr>

¹⁹ <https://www.ecb.europa.eu>

designed to ensure, among other things, the following:

- central banks can realise (sell) with great legal certainty the securities which are given to them in triparty repo, i.e. will not see their rights of ownership questioned by obstacles of a legal or operational order if they are required to acquire full ownership and/or sell the securities in the event of default by a counterparty;
- the overall value of all securities posted within the framework of a triparty repo cannot decline in an uncontrolled manner, which could lead to insufficient collateralisation of a counterparty's exposures at the central bank. For example, in the event of an imminent coupon payment of a bond (which leads to a temporary decrease in the value of the bond), collateral substitution mechanisms are provided to ensure the constancy of the value of securities posted as collateral;
- triparty repo tools must allow the collateralisation of Eurosystem eligible securities only, the list of which is published daily on the ECB's website;
- tripartite agents, who are made aware of the Eurosystem valuation of the securities eligible for refinancing, must ensure the confidentiality of these valuations and not use them for purposes other than the sole management of the triparty repo tool when it is used with the Eurosystem.