

THE ESCB-CESR STANDARDS FOR SECURITIES CLEARING AND SETTLEMENT IN THE EUROPEAN UNION

ARTICLES

The ESCB-CESR standards for securities clearing and settlement in the European Union

It is essential for central banks and securities regulators that the securities clearing and settlement infrastructure functions smoothly. Public sector involvement in securities clearing and settlement is associated with defining risk management measures that can contribute to the reduction of systemic risk potential. The relevant international standard-setting bodies in the field of securities settlement are the Committee on Payment and Settlement Systems (CPSS) of the central banks of the G10 countries and the International Organization of Securities Commissions (IOSCO). In 2001 the CPSS and IOSCO published "Recommendations for Securities Settlement Systems". The ESCB and the Committee of European Securities Regulators (CESR) decided to work together to adapt the CPSS-IOSCO Recommendations to the EU context. In October 2004 they published a report entitled "Standards for securities clearing and settlement in the European Union".¹ It is envisaged that the ESCB-CESR standards will be used as a common tool by the competent authorities (central banks, securities regulators and, where appropriate, banking supervisors). The standards have been developed on the basis of a risk-based functional approach. They address a number of detailed technical and legal aspects of securities settlement activities, with the ultimate aim of mitigating the risks – legal, credit, liquidity, custody and operational – arising in such activities. Sections I and II of this article provide an overview of securities settlement in the European Union and argue the need for standards. Sections III and IV describe the general features of the ESCB-CESR requirements, grouping the standards according to the risk that they are designed to mitigate. Section V looks at the open issues and the follow-up work required.

I SECURITIES SETTLEMENT IN THE EUROPEAN UNION

In 2003, the central securities depositories (CSDs) of the EU settled euro-denominated securities at an amount of more than €300 trillion. This represents 30 times the GDP of the EU. Weaknesses in the clearing and settlement process can be a source of systemic disturbances to both securities markets and payment systems. The sheer size of the amounts involved makes the smooth functioning of the securities clearing and settlement infrastructure an important element for the stability of the financial system.

WHAT IS SECURITIES SETTLEMENT?

Trades agreed in financial markets are followed by a process of settlement. In trading securities, the counterparties typically agree to exchange securities for cash on a given date and at a given price. In settling, the obligations acquired by the counterparties are discharged by transferring securities from the seller to the buyer and cash from the buyer to the seller. In some markets, transactions are netted before settlement. Infrastructures for clearing and settlement are

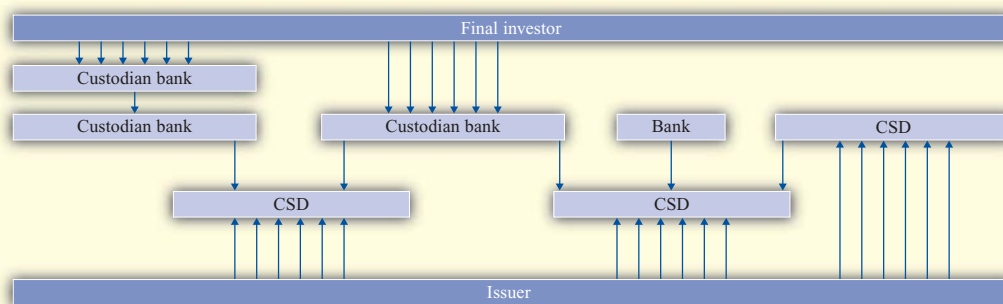
put in place in order to ensure that this process is conducted in a safe and efficient manner.

The securities settlement infrastructure brings together issuers (which obtain finance by placing equities and debt) and investors (which acquire these financial instruments and may exchange them in secondary markets). To maximise liquidity and simplify settlement procedures, every issue of a given financial instrument is normally placed in a CSD. Investors hold their securities with custodians, which have in turn opened accounts at a CSD. The diagram below illustrates various possible combinations of institutions between the issuer and the final investor which register securities on their books.

The diagram illustrates the key role played by CSDs. They have a notary function, ensuring that the rights of the investors as a whole match the obligations of the issuer for each issue. The final delivery of securities occurs in the CSD's books, unless buyer and seller use the same custodian and the custodian settles

¹ The report is available at <http://www.ecb.int>

Stylised diagram of securities settlement infrastructure



Note: Downward arrows mean “holding an account with” while upward arrows mean “placing an issue in”.

the trade in its books (a process known as “internalisation of settlement”). When securities are traded in exchange for funds, CSDs also ensure the smooth transfer of the related funds in the relevant payment system.

A distinction is often made between domestic CSDs, which mainly serve a single market/currency, and international CSDs (ICSDs), which serve a multiplicity of markets and currencies. A similar distinction is made between local and global custodians. Local custodians provide access to their local market, while global custodians provide a single point of access to multiple markets. Global custodians often act as local custodians for the market of the country in which they are incorporated.

WHO SUPPLIES SECURITIES CLEARING AND SETTLEMENT SERVICES IN THE EU?

In the EU, securities settlement services are supplied by three kinds of institution: domestic CSDs, ICSDs and custodians.

In most cases, securities are issued only in CSDs or ICSDs. Domestic bonds and equities are issued in CSDs, and international bonds in ICSDs. Centralising the issuance of a given type of security places CSDs and ICSDs in the advantageous position of being able to concentrate custody and settlement activity in that type of security.

However, settlement does not always take place in the system in which the securities are issued. Already in the 1970s the demand for settling EU securities from one single account (rather than working with multiple systems) led ICSDs to establish links with the CSDs in which the securities had been issued. Such links allowed ICSDs to “import” a given security from a CSD and settle it within the ICSD, with no need to register a transfer of ownership at the CSD level. At present, ICSDs settle more domestic bonds issued in CSDs than international bonds issued in the ICSDs themselves. A few large custodians are also reported to process larger values than the smaller CSDs.

The various service providers are therefore competing for custody and settlement business, with certain providers specialising in certain market niches. CSDs provide services mainly to local players, while ICSDs and custodian banks have a more international clientele. Domestic bonds are settled mainly in ICSDs and CSDs², international bonds in ICSDs and equities largely in the books of CSDs and custodian banks.

2 For example, the government bonds of Germany, the Netherlands, Austria, Finland, Portugal and Ireland are settled predominantly in one particular ICSD, rather than in the CSD in which they have been issued. The government bonds of the Czech Republic, Greece, Spain, France, Italy, Latvia, Lithuania, Hungary, Malta, Poland, Slovenia and Slovakia are settled predominantly in the CSD in which they have been issued.

In recent years there has been a process of consolidation among some of these service providers. For example, mergers have taken place between CSDs and ICSDs, giving rise to the creation of cross-border groups. Many CSDs have also established links with one another, although their use has so far been fairly limited. One ICSD is owned and governed by custodians. CSDs, ICSDs and custodians are thus not entirely independent competitors, but entities which, in many cases, are customers or owners of one another.

The level of risk assumed by the various providers varies according to whether or not they act as intermediaries in the settlement process. ICSDs and custodian banks perform banking functions by providing cash credit and securities lending to participants in order to facilitate the settlement process. They therefore become exposed to the failure of one of their participants to return the credit provided. With only one exception, CSDs do not provide credit facilities and thus do not bear any credit risk.

A more specific feature of securities settlement in the EU is doubtless the presence of ICSDs. While there is a clear distinction between the activities and risks of CSDs on the one hand and custodian banks on the other, ICSDs are something of a hybrid, with some features of CSDs (the issuance of securities) and some features of custodian banks (the provision of banking services). ICSDs account for 40% of the total value settled by CSDs/ICSDs in the euro area. Although ICSDs settle securities denominated in multiple currencies, 80% of transactions settled are denominated in euro.

2 THE NEED FOR STANDARDS

SYSTEMIC RISK IN SECURITIES CLEARING AND SETTLEMENT

Securities clearing and settlement is characterised by the presence of systemic risk: the risk that a financial or operational problem at any of the institutions that perform critical

functions in the settlement process or at one of their major users could result in the subsequent failure of other participants. Systemic risk is a form of negative externality, i.e. a situation in which economic agents do not fully internalise all of the costs associated with their actions themselves, expecting the authorities to intervene. Externalities normally arise because participants or operators of securities clearing and settlement systems have insufficient regard for the potential losses that others would incur in the event of their own failure.

Public sector involvement in securities clearing and settlement can contribute to the reduction of systemic risk. By setting standards the public sector can define the risk management measures that need to be put in place to reduce the likelihood of a chain reaction of settlement failures.

THE RESPONSIBILITIES OF CENTRAL BANKS AND SECURITIES REGULATORS AND THEIR INTEREST IN SMOOTH AND EFFICIENT SECURITIES SETTLEMENT

Central banks have an interest in the smooth and efficient functioning of securities settlement on account of their responsibility for monetary policy, payment systems and financial stability. In the case of the Eurosystem, all of the credit which it provides to its counterparties has to be collateralised. It does not matter whether the credit is provided in the context of monetary policy operations (overnight credit) or whether it serves to facilitate the smooth settlement of payment systems (intraday credit). Over 95% of the collateral received by the Eurosystem takes the form of securities, meaning that if CSDs and ICSDs are not functioning the Eurosystem cannot properly conduct its monetary policy operations and TARGET cannot function smoothly. Just as payment systems are dependent on CSDs, the reverse is also true: for CSDs to settle securities the corresponding payments have to take place in a payment system. Finally, a smooth-functioning securities clearing and settlement infrastructure is important for financial stability because of the

very large values handled and the dependence of financial markets on it.

Many securities regulators in the EU have explicit legal responsibilities for regulating and supervising CSDs. The three main objectives of securities regulators are in fact to protect investors, to ensure that markets are fair, efficient and transparent, and to reduce systemic risk. Where a CSD is a bank, the banking supervisor also needs to be involved.

THE CPSS-IOSCO STANDARDS

Within the public sector, the relevant international standard-setting bodies are the Committee on Payment and Settlement Systems (CPSS) of the central banks of the G10 countries and the International Organization of Securities Commissions (IOSCO). The CPSS-IOSCO published their “Recommendations for Securities Settlement Systems (SSSs)” in November 2001 and subsequently an “Assessment Methodology” in November 2002. The Recommendations provide a broad definition of SSSs and encourage central banks, securities regulators and, where appropriate, banking supervisors at the domestic level to work together to determine the appropriate scope of application of the Recommendations and to develop an action plan for their implementation. The Recommendations are one of the 12 sets of standards designated by the Financial Stability Forum (FSF) as key for sound financial systems and deserving of priority implementation. These 12 key sets of standards are broadly accepted as representing minimum requirements for good practice.

For their part, EU regulators and overseers started from a situation in which market structures and legal frameworks were not harmonised at the EU level. The ESCB and CESR therefore agreed to work together in order to adapt the CPSS-IOSCO Recommendations to the EU context. The result of this joint project is the report entitled “Standards for securities clearing and settlement in the European Union”, adopted by

the Governing Council of the ECB and the CESR in October 2004. This joint project – which is still ongoing – is the first joint project undertaken by central banks and securities regulators at the EU level.

3 GENERAL FEATURES OF THE ESCB-CESR STANDARDS

NATURE OF THE ESCB-CESR STANDARDS

At present, neither the market structure nor the legal framework for securities post-trading activities are fully harmonised at the EU level. The necessary harmonisation can probably only be achieved by means of an EU directive. In the absence of such a legislative measure at the start of their work, the ESCB and CESR decided to develop a set of technical standards based on the CPSS-IOSCO Recommendations for SSSs, as it is in the common interest of all parties involved in securities settlement to ensure that it functions smoothly, safely and efficiently. Against this background, the ESCB-CESR standards aim at providing the competent authorities (overseers, regulators and supervisors) with a tool to promote the safety and efficiency of clearing and settlement activities in the EU and, in particular, to ensure that the risks associated with such activities are properly addressed, irrespective of the status of the institution providing the service.

The ESCB-CESR standards do not have Community law status and are not intended to pre-empt any future decisions which the EU institutions may take at the legislative level.

APPLICATION OF THE ESCB-CESR STANDARDS

As mentioned above, it is envisaged that the ESCB-CESR standards will be used as a tool to assist the competent authorities in promoting the safety and efficiency of clearing and settlement activities in the EU. They will provide the relevant authorities with a commonly accepted approach for their respective regulation, oversight and supervisory practices. When applied, they will serve as an effective benchmark for delivering an internationally

recognised quality label, as they are based on and are consistent with the CPSS-IOSCO Recommendations for securities settlement systems. Compliance with the ESCB-CESR standards would automatically imply compliance with the CPSS-IOSCO Recommendations.

Each regulator, supervisor and overseer will use the same set of standards. Applying the standards in as uniform a manner as possible across the EU is expected to lead to a level playing-field, greater certainty for regulated entities, enhanced efficiency and improved confidence in the internal market. The EU authorities will share the results of the level of compliance with the standards and thus seek their uniform implementation. However, the existence of the ESCB-CESR standards does not automatically preclude the national authorities from imposing additional measures within their competence (e.g. prudential or market functioning rules) in order to take account of specific features of their domestic markets that may affect financial stability and efficiency. However, it is anticipated that such measures will be kept to a minimum.

Contrary to a number of concerns expressed by outside observers, the ESCB-CESR standards impose additional requirements – i.e. over and above those contained in the CPSS-IOSCO Recommendations – only in three clearly justified sets of circumstances. First, in a number of cases the current EU practice already exceeds the requirements set out in the CPSS-IOSCO Recommendations. In such cases, the ESCB-CESR standards may appear more stringent, but in effect they merely reflect a higher level of safety on the part of European SSSs. Second, in some cases there are specific (legal) characteristics of the European markets that need to be addressed for the purpose of ensuring the safe and smooth functioning of securities settlement. In such cases, the resulting safety outweighs the cost of achieving it. Finally, in a few instances requirements exceeding those contained in the CPSS-IOSCO

Recommendations have been put forward with the aim of facilitating financial integration.

SCOPE OF THE ESCB-CESR STANDARDS

The ESCB-CESR standards have been developed in accordance with a risk-based functional approach. In other words, they are intended to address the risks associated with all relevant functions related to the securities clearing and settlement business, irrespective of the legal status of the institutions assuming these risks. The overall regulatory requirements applicable to different institutions will depend on the overall risks associated with the activities that they perform. For instance, the granting of credit by an institution that performs a notary function (i.e. a CSD) is not equivalent to the granting of credit by an institution specialised for that purpose (i.e. a bank). As already stated, the overall risk profile of an institution is considered.

Although the title of the standards suggests that they address both the “clearing” and “settlement” of securities in the EU, closer inspection reveals that their main focus is on settlement activities. In effect this replicates the approach adopted by the CPSS-IOSCO, which tackled the issue of clearing in a separate report on central counterparties³.

ORGANISATIONAL ASPECTS OF THE WORK

The report on ESCB-CESR standards has been drawn up by a joint working group composed of representatives of both the ESCB and the CESR. Each of these two bodies has 25 member institutions,⁴ one from each Member State. As the joint working group started its activities in October 2001, it was initially composed of 32 institutions (15 national central banks, 15 securities regulators, the ECB and the European Commission). Following EU

³ “Recommendations for Central Counterparties”, Committee on Payment and Settlement Systems and Technical Committee of the International Organization of Securities Commissions, November 2004.

⁴ In fact, the CESR has additional members (observers) from the regulatory bodies of the EEA non-EU members.

enlargement, the size of the group increased to over 50 institutions.

So far, the working group has conducted two formal public consultations, two open hearings on the premises of the CESR and an ad hoc consultation of a target group of concerned market participants. The work of the ESCB-CESR working group has been conducted in association not only with the European Commission, but also with the Banking Supervisory Committee and the recently created Committee of European Banking Supervisors.

4 CONTENT OF THE ESCB-CESR STANDARDS

The ESCB-CESR standards, like the CPSS-IOSCO Recommendations for SSSs, address a number of detailed technical and legal aspects of securities settlement activities, with the ultimate aim of mitigating the risks arising in those activities. The types of risk commonly identified in securities settlement are legal, credit, liquidity, custody and operational risk.

This section presents a brief overview of selected requirements set out in the ESCB-CESR standards, grouped according to the risk that they are designed to mitigate.

REQUIREMENTS RELATING TO LEGAL RISK

Legal risk is the risk that a party will suffer a loss because laws or regulations do not support the rules of the SSS, the performance of related settlement arrangements or the property rights and other interests held through the settlement system. Legal risk also arises if the application of laws and regulations is unclear – for example if there is a conflict of laws and it is not a priori clear which law is applicable.

Standard 1 (Legal framework) addresses a number of legal aspects of securities clearing and settlement. At the most basic level, all related rights, liabilities and obligations should be clearly stated, understandable, public and accessible. Legal validity and enforceability

are particularly important in the case of netting, collateral realisation and the entitlement to securities, especially in the event of insolvency on the part of a system participant or operator. In addition, for the purposes of systemic risk mitigation, a harmonisation of the rules of different SSSs should be promoted in order to minimise any discrepancies resulting from different national rules and legal frameworks.

Most of these requirements have already been identified in the CPSS-IOSCO Recommendations. In effect, the ESCB-CESR standard goes beyond the global recommendation in only two main areas. On the one hand, it refers to the need for the designation of the systems managed by the CSDs under the Settlement Finality Directive and promotes the harmonisation of EU rules (e.g. transfer of ownership versus transfer of interest on the asset). On the other hand, it requires additional transparency on the part of CSDs, central counterparties (CCPs) and, where relevant, significant custodians⁵.

REQUIREMENTS RELATING TO CREDIT RISK

Credit risk, in the context of securities settlement, is broadly defined as the risk that a counterparty will not settle an obligation at full value, either when it becomes due or at any time thereafter. Credit risk includes replacement cost risk, principal risk and the risk of settlement bank failure. Replacement cost risk is the risk that a counterparty to an outstanding transaction for completion at a future date will fail to perform on the settlement date. This failure may leave the solvent party with an open market position or deny the solvent party unrealised gains on the position. The resulting exposure is the cost of replacing, at current market prices, the original transaction. Principal risk is the risk that the seller delivers securities but does not receive payment or, alternatively, that the buyer makes payment but does not receive the securities. In such an

⁵ For the purposes of the ESCB-CESR standards “significant custodian” is provisionally defined as a custodian that manages significant arrangements for settling securities transactions.

event, the full principal value of the securities or funds transferred is at risk. Risk of settlement bank failure is the risk of the failure of an entity that maintains accounts with the settlement agent in order to settle payment obligations arising from securities transfers, both on its own behalf and for other market participants.

These different facets of credit risk are addressed in a number of ESCB-CESR standards, including Standard 9 (Credit and liquidity risk controls). One of the most evident sources of credit risk is the fact that some CSDs are, subject to national legislation, allowed to grant credit to their participants. In such cases, CSDs should, for systemic stability reasons, limit those credit activities exclusively to supporting securities settlement and asset servicing. Credit exposures (encompassing both intraday and overnight credit) should be fully collateralised whenever practicable. For the well-identified cases of non-collateralised credit exposures, CSDs should institute other kinds of prescribed risk control measures. Significant custodians' risk mitigation policies should be scrutinised – again with the aim of containing systemic risks linked to their securities settlement activity – to ensure that they are commensurate with the risks which those custodians potentially create for the financial system.

Credit risks related to the lending of securities are addressed in Standard 5 (Securities lending). Securities lending and borrowing is encouraged insofar as it serves as a method for expediting securities settlement and reducing settlement failures. However, in some cases the CSD may end up assuming an undesirable level of risk by acting as principal in a centralised securities lending facility. If so, it should apply adequate risk management measures in line with the requirements set out in Standard 9 (Credit and liquidity risk controls). By contrast with the CPSS-IOSCO recommendation on securities lending, the ESCB-CESR standard emphasises the benefit of establishing centralised securities lending facilities to

reduce settlement failures. At the same time, it recognises that bilateral lending can also contribute to a lower level of settlement failures. The choice between a centralised securities lending facility and bilateral lending arrangements should be based on specific market conditions, taking into consideration both the level of settlement failures and the efficiency of the securities lending market.

Settlement failures – and thus credit risk – can also be significantly reduced by implementing properly devised trade confirmation and settlement matching procedures. As stipulated in Standard 2 (Trade confirmation and settlement matching), the confirmation of trades between direct market participants should occur as soon as possible after trade execution, and no later than that trading day (T+0). Settlement instructions should be matched as soon as possible, and by no later than the day before the specified settlement date. These requirements are in line with the CPSS-IOSCO approach.

Delivery versus payment (DVP) is a settlement mechanism that ensures that delivery of securities occurs if, and only if, payment takes place and vice versa. Through a correctly defined and implemented DVP mechanism the principal risk can be eliminated. Standard 7 (Delivery versus payment (DVP)) stipulates that the technical, legal and contractual framework of an SSS ought to ensure DVP. The length of time between the blocking of the securities (and/or cash payment) and the moment when deliveries become final should be minimised. By contrast with the CPSS-IOSCO recommendation, the standard emphasises the importance of achieving efficient and sound DVP at the EU level. In addition, it advocates that significant custodians should institute settlement procedures that minimise principal risk to the greatest possible extent.

Another source of credit risk could be a failure of the settlement bank (cash settlement agent). A settlement bank is an entity that maintains

accounts with the settlement agent in order to settle payment obligations arising from securities transfers, both on its own behalf and for other market participants. The safest way of settling cash payments is to settle on the accounts of the relevant central bank, as stipulated in Standard 10 (Cash settlement assets). However, where the use of central bank money is not practicable or feasible (e.g. when transactions are denominated in a currency which is different from the currency of the country in which the settlement takes place), commercial bank money may be used. In such a case, adequate risk measures must be put in place to protect participants from potential losses and liquidity pressures arising from the failure of the cash settlement agent. These requirements do not differ significantly from the CPSS-IOSCO requirements.

In general terms, credit (and liquidity) risk should be avoided by CSDs to the greatest possible extent, as specified in Standard 6 (Central securities depositories (CSDs)). This is due to the fact that CSDs uniquely combine the provision of final settlement with safeguarding the integrity of immobilised/dematerialised⁶ securities issues on behalf of the issuer (“notary function”). However, the working group faced the challenge of there not being a common definition of a CSD at the EU level. The ESCB-CESR standard provides a more detailed description of the functions and role of the CSDs than the CPSS-IOSCO recommendation, especially in the European context. Furthermore, among the measures for preserving the integrity of the issue, the standard proposes robust accounting standards, double-entry bookkeeping and end-to-end audit trails.

In some cases, mainly for the purpose of settling cross-border transactions, links between CSDs have been created. These are legal and technical arrangements and procedures that enable securities to be transferred between two or more CSDs through a book-entry process. Any credit risk related to settlement via links is mitigated by the

measures suggested in Standard 19 (Risks in cross-system links). For instance, the establishment of a link should not jeopardise the length of the settlement cycle and the achievement of DVP with intraday finality, should not enable provisional transfers via a link and should ensure that any credit extensions between CSDs are fully secured and subject to limits. By contrast with the CPSS-IOSCO recommendation, the ESCB-CESR standard stipulates that links should enable participants to settle on an intraday DVP basis. The standard also contains a number of specific requirements in respect of relayed links⁷ established by CSDs.

REQUIREMENTS RELATING TO LIQUIDITY RISK

Liquidity risk is broadly defined as the risk that a counterparty will not settle an obligation at full value when due, but on some unspecified date thereafter.

Liquidity pressures may, inter alia, arise from inadequate arrangements for achieving intraday settlement finality. Standards 8 (Timing of settlement finality) and 10 (Cash settlement assets) state that finality should be defined clearly and be provided either on a real-time basis and/or by multiple batch processing during the settlement day, depending on market needs. In order not to block the achievement of intraday finality in a particular system, the central banks and other cash settlement agents should design efficient mechanisms for cash payments that make settlement with intraday finality possible. This requirement is more stringent than that of the CPSS-IOSCO: ESCB-CESR Standard 8 (Timing of settlement finality) calls for finality during the day, while

⁶ “Immobilisation” refers to the placement of physical certificates for securities and financial instruments in a CSD so that subsequent transfers can be made by book entry, i.e. by debits from and credits to holders’ accounts at the depository. “Dematerialisation”, on the other hand, refers to the elimination of physical certificates or documents of title that represent ownership of securities so that securities exist only as accounting records.

⁷ “Relayed link” refers to a contractual and technical arrangement that allows two CSDs not directly connected to each other to channel securities transactions or transfers through a third or more CSD(s) acting as intermediary/intermediaries.

the CPSS-IOSCO recommendation advocates achievement of finality only at the end of the day. Intraday finality in Europe is important for achieving interoperability and ensuring that, once transferred between systems, securities can be reused on the same settlement day. Another element introduced by the same standard concerns the connection with payment systems. The timing of afternoon settlement batches should take into account the TARGET closing time so that participants have the opportunity to react in accordance with their liquidity needs.

REQUIREMENTS RELATING TO CUSTODY RISK

Custody risk is the risk of loss on securities in safekeeping (custody) as a result of the custodian's insolvency, negligence, misuse of assets, fraud, poor administration or inadequate record-keeping.

Standard 12 (Protection of customers' securities) deals explicitly with this type of risk. An entity holding securities in custody should employ robust accounting procedures and standards, and should segregate customers' securities from its own securities in its books in order to ensure that customers' securities are protected, particularly against claims of the entity's creditors. Segregation of customers' securities can be done by opening nominee accounts or, where this is not possible under the national legal framework, by employing other bookkeeping techniques. In addition, the standard strictly prohibits securities debit balances or securities creation⁸ by the entities holding securities in custody. By contrast with the CPSS-IOSCO recommendation, the ESCB-CESR standard requires the intermediary to obtain a customer's explicit consent before it can use the customer's securities for its own business, e.g. for securities lending or as collateral for its own credit exposures.

REQUIREMENTS RELATING TO OPERATIONAL RISK

Operational risk is the risk that deficiencies in information systems or internal controls,

human error or management failure will result in unexpected losses.

As is outlined in Standard 11 (Operational reliability), operational risk policies and procedures should be clearly defined and frequently reviewed, updated and tested in order to ensure that they remain up to date. More specifically, business continuity plans and backup facilities should be established. In this way it can be ensured that the system is able, as soon as possible after the disruption and not later than two hours after its occurrence, to resume business activities with a reasonable degree of certainty, a high level of integrity and sufficient capacity. The standard complements the CPSS-IOSCO recommendation by providing further clarification on the outsourcing of clearing and settlement activities. For instance, CSDs and CCPs should only outsource operations or functions to third parties once they have obtained prior approval from the competent authorities. The outsourcing entity remains liable vis-à-vis the competent authorities, as required under the relevant national law. The outsourcing entity should also ensure that its participants are aware of the outsourcing.

Operational risk can also result from inefficient – e.g. manually intensive – procedures. Thus, Standard 16 (Communication procedures, messaging standards and straight-through processing (STP)) advocates the application of international communication procedures and standards relating to securities messages, securities identification processes and counterparty identification. Furthermore, service providers should work towards implementing STP in a manner that is consistent with efforts to achieve greater interoperability between systems, so that market participants can move swiftly and easily from one system

⁸ "Securities creation" is an accounting or bookkeeping activity within a CSD that results in the total value of holdings of a particular security recorded on participants' accounts in the CSD exceeding the total value of the original issue of that security.

to another. The ESCB-CESR standard goes beyond the CPSS-IOSCO recommendation in urging market participants to work on plans that move markets toward interoperability and STP in the most efficient way.

Another concern with regard to the efficiency of settlement procedures relates to dematerialisation of securities. As is stated in Standard 6 (Central securities depositories (CSDs)), securities should, as far as possible, be immobilised or dematerialised and transferred by book entry in a CSD. The existence of securities in a non-physical form decreases physical safety concerns and the possibility of human error.

Management failure, which is also deemed a factor that may distort operational reliability, can be best prevented by implementing appropriate governance arrangements, as implied by Standard 13 (Governance).

OTHER REQUIREMENTS

Apart from the specific risks described above, the ESCB-CESR standards also address a number of issues relating to efficiency considerations. For instance, well-designed and implemented governance arrangements (Standard 13 (Governance)) contribute to the safe and efficient functioning of a settlement system or arrangement. By contrast with the CPSS-IOSCO recommendation, the standard discusses potential conflicts of interest between the operator of a system and its participants, as well as those that can arise within a CSD or CCP, and requires that these conflicts be identified and managed.

The issue of efficiency is also addressed in the provisions of Standard 15 (Efficiency). It is likely that a market participant's operations will be more efficient if the participant is able to clear and settle its trade transactions in a timely and efficient fashion and have access to its funds and securities without undue delay.

In addition, market participants can make informed decisions and better oversee their

risk exposure if they have the information necessary to evaluate the risks and prices/fees associated with the CSDs', CCPs' and, where relevant, significant custodians' clearing and settlement services (Standard 17 (Transparency)).

An improvement in the efficiency of the EU markets as a whole is expected to result from increased interoperability. For its part, interoperability should be achieved by standardising both the technical aspects of securities processing and business practices (Standard 15 (Efficiency)). By contrast with the CPSS-IOSCO recommendation, the ESCB-CESR standard recognises the importance of efficiency not only at the domestic level, but also in the context of European integration. Interoperability across systems would allow systems to communicate and process securities transactions without additional effort on the part of market participants.

A concrete example of standardisation of business practices is the further harmonisation and/or shortening of settlement cycles (Standard 3 (Settlement cycles and operating times)). More specifically, it is advocated that CSDs and, where relevant, CCPs should harmonise their operating days and hours and be open at least during TARGET opening times for transactions denominated in euro. It is also important for the smooth functioning of the European financial markets that the operating days of settlement systems be compatible with the operating days of TARGET (Standard 8 (Timing of settlement finality)). The automation and interoperability of trade confirmation and settlement matching systems is advocated in Standard 2 (Trade confirmation and settlement matching).

EU securities settlement as a whole would also benefit from improved national and cross-border cooperation among competent authorities. Standard 18 (Regulation, supervision and oversight) is intended for central banks, securities regulators and banking supervisors. Entities providing securities clearing and

settlement should be subject to transparent, effective and consistent regulation and supervision. Securities clearing and settlement systems, by contrast, should be subject to comparably transparent, effective and consistent central bank oversight. In comparison with the CPSS-IOSCO recommendation, the ESCB-CESR standard recognises existing EU coordination schemes, based on the principle of mutual recognition, which apply in other fields of European financial regulation. However, in the areas that are not covered by the European legislation, the relevant authorities will enter into negotiations on coordinating these activities with a view to agreeing formal memoranda of understanding (MoUs).

The ESCB-CESR standards also address the issue of fair treatment of participants in securities clearing and settlement, inter alia through the requirements set out in Standard 14 (Access). In comparison with the CPSS-IOSCO recommendation, the ESCB-CESR standard states that limitation of access on grounds other than risk to the CSD or CCP should be prohibited. Both access and exit criteria should be clearly stated and publicly disclosed.

5 OPEN ISSUES AND FOLLOW-UP

It is envisaged that the present set of standards will become enforceable once the assessment methodology has been developed and an analysis of the impact of the standards has been undertaken.

The process of elaborating the standards has revealed a number of open issues. In developing the assessment methodology, the working group is conducting further analysis of these open issues. For instance, the relationship between the banking supervisory framework and those standards dealing with credit risk is being investigated. Another topic currently being explored is the practical organisation of the cooperation between relevant (national) authorities. A complete list

of open issues is contained in paragraph 27 of the introduction to the ESCB-CESR report published in October 2004.

The open issues are being analysed in close cooperation with various groups of market participants: CSDs, CCP clearing houses, custodian banks, savings and cooperative banks and public banks. Communication is taking place via various channels and in various fora – for instance on a bilateral basis, in small group settings, at targeted meetings with market participants that are most affected, at open hearings for all interested parties and, naturally, via regular written consultations.

As already stated, the working group has been cooperating closely with other relevant authorities such as the European Commission, the Committee of European Banking Supervisors and the Banking Supervisory Committee. Appropriate communication channels have also been established with the relevant committee of the European Parliament.

Once the open issues have been analysed, the working group will attempt to draw up the assessment methodology, which will be comparable in content to that published by the CPSS-IOSCO.⁹ In addition, there will be a particular focus on those aspects of (CCP) clearing that are not addressed in sufficient detail in the current set of standards. The final report is expected to be published towards the end of 2005.

To conclude, the ESCB-CESR report covers a number of very sensitive issues. The pressure to adopt standards stems from the EU's commitment to international harmonisation in order to prevent contagion in financial crises. Securities settlement is, in fact, regarded by the Financial Stability Forum as one of the

⁹ Assessment methodology for "Recommendations for Securities Settlement Systems", Committee on Payment and Settlement Systems and Technical Committee of the International Organization of Securities Commissions, November 2002.

12 key areas that should be given priority in the process of implementing the relevant international standards (the CPSS-IOSCO Recommendations). In the absence of EU legislation, aspects such as the scope of application of the standards have, in fact, been left to the discretion of local authorities (in this case, EU central banks and securities regulators) and have proven to be among the most delicate in practice. In addition, the adoption of common standards is expected to foster EU financial market integration.

In this context, it cannot be stressed enough that the standards do not intend to pre-empt or replace a directive or any other initiative which may be implemented in the field of clearing and settlement. If there were to be any change in European legislation, the standards would be amended accordingly to reflect such a change. In effect, a joint working group involving two bodies such as the ESCB and the CESR, bringing together a broad array of national authorities, could also be seen as a pioneering initiative that may prove a suitable model for future cooperation in the domain of financial markets.