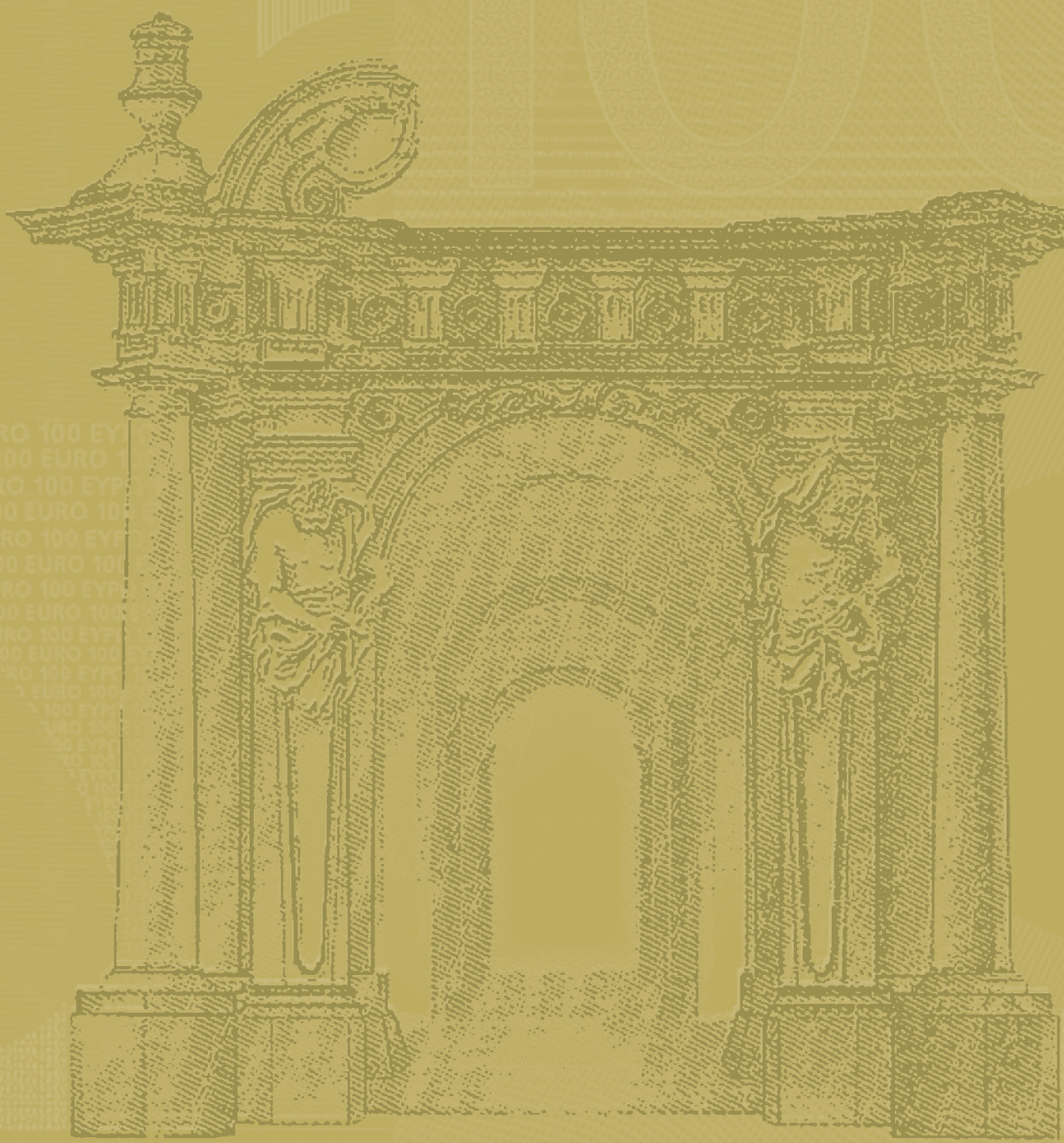
EUROPEAN CENTRAL BANK

OCCASIONAL PAPER SERIES

NO. 21 / OCTOBER 2004

GOVERNANCE OF SECURITIES CLEARING AND SETTLEMENT SYSTEMS



by D. Russo, T. Hart, M. C. Malaguti and C. Papathanassiou

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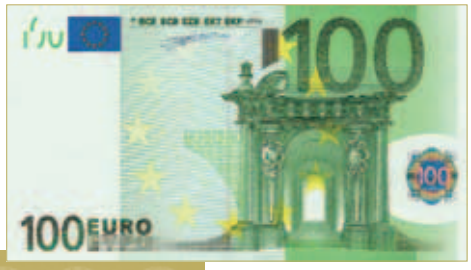

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1 The authors wish to thank Andrea Corcoran of the US Commodity Futures Trading Commission; Patricia White of the US Federal Reserve Board of Washington; Matthew Etherfield of the UK Financial Services Authority; Koenraad De Geest of the European Central Bank; and an anonymous referee for their comments and suggestions during the preparation of this paper. The authors wish to thank Mike Moss of the European Central Bank for his invaluable assistance in editing the paper. The views expressed herein are solely those of the authors and do not represent the views of the European Central Bank, the International Organization of Securities Commissions, or any of their respective offices, divisions or members.

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ISSN 1607-1484 (print)
ISSN 1725-6534 (online)

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INTRODUCTION

Over the past few years, numerous securities exchanges have altered their ownership structures by transforming themselves from mutualised, member-owned companies into for-profit, shareholder-owned companies. Within Europe, the adoption of the euro, legal and regulatory changes adopted pursuant to the European Commission's Financial Services Action Plan, and the resulting market integration have also caused alliances and mergers among exchanges and other institutions involved in the post-trade processing of securities transactions to flourish. These recent trends in market integration and consolidation have facilitated an increase in cross-border trading and have brought significant increases in market efficiency: markets are more liquid and provide a wider range of products at lower costs than in the past. The growth in "collateralised transactions" (including repos and securities lending), many of which involve counterparties located in different jurisdictions, has also fuelled growth in cross-border transactions.

Yet, market integration and consolidation create conditions in which financial turmoil can spread with greater speed and virulence. An integrated and consolidated market structure increases the importance of the integrity of clearing and settlement systems because these systems tie markets and participants together. This necessitates, among other things, that clearing and settlement processes be robust and efficient. Increasing the efficiency of clearing and settlement systems allows market participants to optimise the use of liquidity and reduces the risk of market disruption and systemic risk.

As part of this ongoing reorganisation, securities clearing and settlement systems, i.e. central securities depositories (CSDs)[1] and central counterparty clearing houses (CCPs),[2] are increasingly being incorporated into company groups, either on a vertical basis with an exchange or on a horizontal basis with other CSDs and CCPs. This process of "demutualisation" and consolidation has prompted a significant volume of work on the governance of the new for-profit exchanges and on the mechanisms by which a for-profit exchange should fulfil its self-regulatory functions.[3] However, little work has been done on the governance of CSDs and CCPs.[4] The governance structure of a clearing and settlement system should address not only the needs and interests of the different stakeholders in the system, but also the national, transnational and Community interests in the operation of the system and the public interest[5] in the minimisation of systemic risk. It should also ensure that the ongoing reorganisation of the financial infrastructure does not increase the overall risk in the financial system as a whole. Governance provides one means by which the objectives of the system may be pre-specified, its performance monitored, and the effects of potential conflicts of interest between stakeholders minimised.[6] Hence, proper

1 In this paper, a CSD is an institution that holds securities, thus enabling securities transactions to be processed by means of book entries. Physical securities may be immobilised by the depository or securities may be dematerialised (so that they exist only as electronic records). Unless otherwise noted, references in this paper to CSDs include the international central securities depositories, Euroclear and Clearstream.

2 In this paper, a CCP is an entity that interposes itself between the counterparties to contracts traded in one or more financial markets, becoming the buyer to every seller and the seller to every buyer.

3 IOSCO Technical Committee, "Issues Paper on Exchange Demutualization" (June 2001); R. Lee, "The Future of Securities Exchanges" (February 2002); B. Steil, "Changes in the Ownership and Governance of Securities Exchanges: Causes and Consequences" (2002); and M. Blume, "The Structure of the US Equity Markets" (March 2002).

4 In this paper, the term "corporate governance" is used to refer to the internal corporate structures and mechanisms by which decisions are taken in relation to the operation of a clearing or settlement system. The term "governance" is used to refer to all internal and external structures, mechanisms, regulations, norms and practices which bear on corporate decision-making within clearing and settlement system operators.

5 CSDs and CCPs are imbued with a public interest because their operations support (i) access by economic actors to capital and (ii) risk management within the financial system, and are therefore fundamental to the functioning of the real economy and to the achievement of broader societal policies and goals.

6 In this paper, the term "conflict of interest" refers generally to situations where there is an incompatibility between the concerns or aims of different persons or groups of persons. It also may refer, in a particular case, to a situation where a person has interests that are incompatible (or not totally aligned) with the interests of other persons, yet that person is called upon to make decisions in an official capacity that relate to those incompatible interests.

governance should create a framework and provide the incentives for the board(s) of directors and management to pursue objectives that are in the interests of the system, customers and the public and should facilitate the effective monitoring of their performance.

Against this background, two issues are considered in this paper.

The first relates to *conflicts of interest* typically arising in the securities settlement infrastructure and the mechanisms for their resolution. The governance arrangements for a clearing or settlement system must address not only the conflicts of interest that are common to the corporate governance of all corporate entities, but also the public interest and the corresponding interests of regulatory authorities. In the context of the ongoing reorganisation of the clearing and settlement infrastructure within Europe, governance arrangements must also address a number of conflicts of interest unique to operators of clearing and settlement systems. First, especially with reference to CCPs and CSDs offering banking services in addition to core settlement services, it is important that corporate governance mechanisms contribute to *full independence of decisions concerning risk management*. In particular, corporate governance mechanisms can contribute to a clear separation of risk management decisions from other day-to-day decisions relating to the business of the system operator. Second, the vertical and horizontal integration among trading, clearing and settlement systems into a single entity or financial group calls for an investigation into potential *conflicts of interest between the different entities within the financial group and mechanisms for their resolution*. Third, the horizontal integration at the level of exchanges, central counterparties and central securities depositories, by increasing the number of markets served by each integrated settlement system, introduces or increases the need also to take into account the interests of *non-resident customers and shareholders*. Lastly, the emergence of business models that consolidate activities across competitive markets creates the need to investigate whether and to what extent *governance mechanisms can contribute to preventing or mitigating the potential for the abuse of monopoly positions* in the provision of some services.

The second set of issues relates to the *actions that authorities can take* to ensure that adequate corporate governance mechanisms are adopted by securities clearing and/or settlement systems. The interest of payment and settlement system regulators and overseers internationally in issues concerning governance is relatively recent. The first international "oversight" standard on governance was only formulated in 2001 in the Core Principles for Systemically Important Payment Systems of the Committee on Payment and Settlement Systems (CPSS) relating to institutions active in the operation of large-value payment systems. This standard was followed up by the adoption of an international standard on governance for securities settlement systems (SSSs) by CPSS-IOSCO. In particular, the recommendation on governance for SSSs calls for governance arrangements for central securities depositories and central counterparties to fulfil public interest requirements and to promote the objectives of owners and users. The European System of Central Banks (ESCB) and the Committee of European Securities Regulators (CESR) are currently considering how to adapt this recommendation in the European context.[7] CPSS-IOSCO also is now finalizing new, more specific Recommendations for central counterparties that also address governance arrangements for CCPs. The importance of appropriate SSS corporate governance arrangements for innovation and competition has also been stressed in the first Giovannini Report, a report of a group of experts appointed by the European Commission to address issues concerning securities transfers, and in a report

7 See "ESCB-CESR Standards for Securities Clearing and Settlement Systems in the European Union: consultative report" (http://www.ecb.int/pub/cons/cesr2003/ecbcesr_report.pdf).

of the European Parliament. Furthermore, the Group of Thirty (G30), a private sector body, has also developed recommendations on SSS governance and regulation. Lastly, the recent Communication from the Commission to the Council and the European Parliament on Clearing and Settlement in the European Union dated 28 April 2004 (COM (2004) 312 final) envisages the adoption of a framework Directive addressing *inter alia* appropriate governance arrangements for securities settlement systems and central counterparties. The Commission also takes the view that governance arrangements applicable to intermediaries should be consistent with those envisaged for securities clearing and settlement systems. An overview of these various initiatives is provided in Annex I. All of the international standards adopted to date reflect the fact that corporate governance mechanisms for securities settlement systems must be complemented by adequate transparency, requirements for effective governance irrespective of the ownership structure (whether mutual or demutualised), appropriate oversight, and regulation. Standards and reports regarding the governance of European securities clearing and settlement systems also generally address competition concerns and the need for greater efficiency in securities clearing and settlement within Europe. The reports also note that the increased consolidation and cross-border operation of securities settlement systems may require greater cooperation and practical protocols among relevant authorities.

The usual mechanisms by which authorities intervene to address governance issues range from disclosure requirements to specific and direct regulatory requirements. *Disclosure or transparency* of corporate governance arrangements is already a requirement in almost all the recommendations on governance or transparency that the authorities (IOSCO, CPSS-IOSCO, CESR, ESCB-CESR) have formulated to date. It is important to highlight in this context that the existence of increasingly complex mechanisms for corporate governance may require the disclosure of more precise and detailed information than that provided today. As far as *regulation (e.g. binding standard-setting) on governance* is concerned, the policy question for European authorities is whether a specific model of corporate governance should be prescribed or whether general requirements should be set that could then be incorporated or reflected in the various existing governance models. In this respect, it seems that there is no single model of corporate governance that, by definition or *a priori*, is the most appropriate for European securities clearing and settlement systems, as authorities are not usually disposed to impose specific structures on commercial enterprises. Several combinations of corporate governance mechanisms and regulatory requirements may provide an effective system of governance. In this respect, an approach that sets out requirements to be reflected within the model of corporate governance as instituted in a jurisdiction (i.e. essentially, clear representation of the interests of the various stakeholders, clear mechanisms for resolution of conflicts and adequate risk management controls) seems to be preferable. While this conclusion is embodied in IOSCO, CPSS-IOSCO and ESCB-CESR recommendations on governance and in the conclusions of the Giovannini Reports, it is not completely in line with the preference for non-profit, public utility-oriented models expressed in the European Parliament Report on Clearing and Settlement (see Annex I).

This paper is organised as follows: Section 1 provides a description of the existing general approaches to corporate governance. Section 2 identifies determinants of the corporate governance structures and mechanisms of securities clearing and settlement systems. Section 3 addresses potential conflicts of interest among providers of clearing and settlement services and the governance mechanisms instituted to address them. Section 4 provides an overview of authorities' concerns and other general public policy responses relating to the governance of securities clearing and settlement systems. It discusses the necessity to complete the internal market within

the Community with regard to securities clearing and settlement systems and an approach to harmonise the mechanisms governing those systems to further achieve that goal.

I GENERAL APPROACHES TO CORPORATE GOVERNANCE

In general, in stock corporations, the relationship among shareholders, management and board(s) of director is characterised by the separation of ownership and management control.[8] Although shareholders are a company's economic owners, in public corporations, they generally do not take part in the management of the company, but entrust it to the board(s) of directors and executive managers. Entrusting executive management with the day-to-day decisions incidental to the operation of the company is efficient. This separation of ownership and management control, however, also gives rise to significant risks of corporate mismanagement because of actual or potential conflicts of interest between management, the board(s) of directors and shareholders. To address these actual and potential conflicts, the system of corporate governance of a stock corporation creates a system of checks and balances throughout the corporate decision-making processes or may require that certain decisions be put to a vote of the shareholders. In this sense, corporate governance is a "system by which companies are directed and controlled."[9]

Systems of corporate governance can generally be placed into two categories that can be distinguished according to the kind of interests that are taken into account in corporate decision-making. The first system is referred to as the "stakeholder model" and is used most prominently in continental European countries. The second system is referred to as the "shareholder model" and is used most prominently in the United States and the United Kingdom.

The corporation's overriding goal in the stakeholder model is to balance conflicting interests among all the stakeholders in the company. Implicit in this model is a presumption that shareholder value in the long term will be maximised if corporations contribute to broad societal goals. Stakeholders include the shareholders, creditors, suppliers, employees and customers. In a stakeholder model, the interests of stakeholders are taken into account and are sometimes represented, as in the case of the German Corporations Act (Aktiengesetz), in the structure of the company to make sure that the company meets these broader goals.

The corporation's overriding goal in the shareholder model is to maximise shareholder value. This goal is manifested in law by means of fiduciary duties owed by the board of directors to shareholders coupled with the right of shareholders to bring an action in the case of a breach of those duties. The shareholders are the residual claimants on the assets of the company and therefore management's primary duty to the company's shareholders is to increase the company's value and thus the value of their shares. Other stakeholders generally receive a fixed return and their claims must be satisfied before any distribution to shareholders in the event the company is subject to bankruptcy proceedings. Under this model, the board of directors monitors corporate affairs to maximise the value of the corporation. The board takes account of the interests of other stakeholders only as a factor in its deliberations as to what is in the long-term interest of shareholders and there is a presumption that enhancing shareholder value will further other societal objectives.

Relevant differences already emerge from a rough comparison of the two models. In the

8 A. Berle and G. Means, "The Modern Corporation and Private Property", New York, Harcourt, Brace & World, Inc. (1932 and 1968); M. Jensen and W. Meckling, "Theory of the Firm: Managerial Behaviour, Agency Costs, and Ownership Structure", in 3 Journ. Fin. Econ. 305 (1976); E. Fama, "Agency Problems and the Theory of the Firm", in 88 Journ. Pol. Econ. 288 (1980); A. Schleifer and R. W. Vishny, "A Survey of Corporate Governance", 52 J. Fin., pp. 737-754 (1997).

9 This definition is given by the Cadbury Committee in its final report "The Financial Aspects of Corporate Governance" of December 1992. The "Report of the High Level Group of Company Law Experts" on a modern regulatory framework for company law in Europe of 4 November 2002 (the "Winter Report") considers corporate governance as a system rooted partly in company law and partly in wider laws, practices and market structures (see page 44). See also the "OECD Principles of Corporate Governance" (1999), as revised in 2004, which notes that "corporate governance involves a set of relationships between a company's management, its board, its shareholders and other stakeholders."

shareholder model, the fact that the board is required to take into account the interests of the economic owners of a company (i.e. the shareholders) and is only held accountable to them could lead to fewer conflicts of interest at the level of the board of directors than in the stakeholder model. The stakeholder model, on the other hand, while potentially leading to greater conflicts of interest within corporate decision-making processes, may result in corporate policies that contribute more directly to broad social policies and objectives. In this sense, a country with a stakeholder model uses its corporate governance policies to achieve societal objectives not solely related to the day-to-day operations and objectives of companies.

The model of corporate governance chosen by a jurisdiction is generally reflected in its company law, which sets out binding legal requirements relating to the management and operation of companies. Additionally, public or private organisations in most jurisdictions have adopted one or more corporate governance codes, which may or may not be legally binding.[10] Governance requirements may also be addressed in the standards that must be met to list the securities of a company on an organised securities market. However, notwithstanding the proliferation of national codes and principles relating to corporate governance, there remains a certain level of dissatisfaction internationally regarding corporate governance practices generally and a considerable amount of work is ongoing both at national and international levels in this area. Governance failures, particularly relating to the relationship of companies to their external auditors, played a role in some recent high-profile incidents of securities fraud and have prompted an extensive national and international review of governance arrangements concerning the relationship of companies to their auditors and of arrangements for regulation and oversight of the auditing profession generally. The European Commission also recently proposed a new Directive on the statutory audit of annual accounts and consolidated accounts of companies in the European Union that includes governance requirements for the relationship between companies and their external auditors.[11]

International recommendations and standards on the governance of securities settlement systems (e.g. CPSS-IOSCO Recommendation 13), without expressing any preference for a specific model of corporate governance, have bridged the differences between the shareholder and stakeholder models by requiring in all cases that customers' interests and the public interest be properly considered in board decision-making. This may be achieved through internal corporate governance structures or through more general, external governance mechanisms, e.g., regulatory requirements. This approach to governance of clearing and settlement systems reflects that stakeholders' interests are pronounced if a company's insolvency would have a strongly adverse impact on a public market, as would be the case in the event of the insolvency of an operator of a securities clearing or settlement system.

10 See the list of codes and principles maintained by the European Corporate Governance Institute at http://www.ecgi.org/codes/index.htm. See also the Organization for Economic Cooperation and Development's "Principles of Corporate Governance" (2004), which are the internationally recognised standards relating to corporate governance, at http://www.oecd.org/dataoecd/32/18/31557724.pdf.; "Principles for Auditor Oversight", IOSCO Technical Committee (October 2002); "Principles of Auditor Independence and the Role of Corporate Governance in Monitoring an Auditor's Independence", IOSCO Technical Committee (October 2002); the work of the International Federation of Accountants on the development of international standards on auditing at http://www.ifac.org; and the work of the European Commission on a new Directive on the statutory audit of annual accounts at http://europa.eu.int/comm/internal_market/auditing/officialdocs_en.htm. This paper does not provide a complete review of all the general work in the field of corporate governance.

11 The board of directors of a CSD or CCP has a particularly heavy responsibility to oversee the accounting and auditing processes of the organisation. A CSD, for example, should conduct a periodic audit to reconcile the books of the CSD with the books of the issuer or the official registrar to verify that the total number of securities reflected on the books of the CSD equals the number of shares issued on the books of the issuer, as CPSS-IOSCO Recommendations for securities settlement systems prescribe. Appropriate internal procedures at board level relating both to the internal and external accounting function are necessary to ensure that the system operator makes adequate ongoing disclosure to shareholders, customers and the public relating to its financial condition, that the external auditors are independent, and that the external audit is accurate and objective.

2 DETERMINANTS OF CORPORATE GOVERNANCE STRUCTURES AND MECHANISMS OF SECURITIES CLEARING AND SETTLEMENT SYSTEMS

2.1 THE LEGAL AND REGULATORY STRUCTURE OF SECURITIES CLEARING AND SETTLEMENT SYSTEMS

The corporate form of CSDs currently varies across Europe. Most CSDs are commercial entities, while four CSDs are organised as banks: Clearstream Banking Luxembourg, the national CSD for Luxembourg and an ICSD; Clearstream Banking Frankfurt, the national CSD for Germany; Euroclear Bank, an ICSD; and Keler, the national CSD for Hungary. All are specifically authorised or licensed to operate as CSDs under the national law of the jurisdiction in which they operate. The legislation of many Member States requires that a CSD be a commercial entity. The choice of corporate form has obvious implications for both the organisation of corporate governance and the regulation of the CSD.

A non-bank CSD would adopt the general corporate governance mechanisms of the jurisdiction in which it operates and would comply with any specific corporate governance requirements that constitute conditions for the maintenance of its licence or authorisation to operate as a CSD. The general corporate governance mechanisms and the conditions relating to corporate governance for maintaining a CSD licence vary from Member State to Member State. Member States generally impose prudential requirements on non-bank CSDs resembling in many respects those imposed upon banks or investment firms, including a requirement that their operations be subjected to periodic review and inspections. The regulatory authority that would grant this non-bank CSD licence may vary depending on the general institutional arrangements for the regulation of financial services adopted by a jurisdiction. In jurisdictions with a single financial services regulator, the single regulator would generally issue the CSD's licence in its role as securities regulator. In jurisdictions that have a so-called "twin peaks" model of financial services regulation in which one authority (generally the central bank or an arm thereof) has competence for the licensing and prudential supervision of both banks and investment firms, while another authority (the securities regulator) has competence over market regulation and supervision and compliance with rules governing the conduct of business, the securities regulator would generally grant the CSD's licence to operate. However, in some jurisdictions, either the Ministry of Finance or the prudential regulator, or both, may authorise or license CSDs or may have some explicit or implicit right to give input into the granting of the CSD's licence or into its regulation, supervision or oversight. Lastly, in jurisdictions that have adopted a sectoral model of financial services regulation in which there are separate and independent authorities for the banking, securities and insurance sectors, the securities regulator generally issues the CSD's operating licence and would have the primary competence for its regulation. Additionally, however, in all jurisdictions, the central bank generally has either an explicit or an implicit competence relating to the CSD for government bonds and a strong interest in the efficacy of the securities settlement arrangements generally. The efficacy of these arrangements is critical to an effective implementation of the central bank's monetary policy operations and to its operation of payment systems.

If a CSD were to be organised as a bank, it would generally adopt the general corporate governance mechanisms of the jurisdiction in which it operates, as well as the specific corporate governance mechanisms generally employed by banks in the jurisdiction. Its compliance with these corporate governance requirements would normally be subject to supervision and audit by the banking supervisor. Proposed directors of these bank CSDs would generally be subject to fitness and properness tests and would be approved by the banking supervisor. Bank examiners would routinely audit the bank CSD regarding its capital adequacy and the efficacy of its internal management reporting system in relation to its risk management practices and of other internal controls. This is not to suggest that the regulatory regime applicable to bank CSDs is

superior to that applicable to non-bank CSDs. As mentioned previously, non-bank CSDs are generally subject to the same kind of prudential requirements as bank CSDs and their operations are also subjected to periodic inspections and reviews by regulators. Theoretically, with a banking licence, the CSD could offer banking services beyond the core functions incidental to the depository and settlement services typically offered by a CSD, such as cash and securities lending and collateral management services. However, national legislation or the licence or authorisation of the CSD may prohibit or constrain the provision of non-core services by the CSD.[12]

As with CSDs, the corporate form of CCPs currently varies across Europe. All operate as commercial entities except LCH.Clearnet, S.A., a subsidiary of LCH.Clearnet Group Limited, which operates as a bank. The same general considerations regarding the corporate governance of CSDs also apply with respect to CCPs.

2.2 THE OWNERSHIP STRUCTURE

The ownership structure of a securities clearing and settlement system has obvious implications for its corporate governance as the equity owners ultimately control the composition of the board of directors, subject to any regulatory requirements regarding board composition. The ownership structure of securities clearing and settlement systems varies considerably around the world. The system may be owned by customers that are the main participants in the system's operations or by third parties and may be operated either on a non-profit or a for-profit basis. The system may also be owned by other entities involved in trade execution, clearing, settlement or the guaranteeing of securities transactions, and may be incorporated into a group structure either as a partially or wholly owned subsidiary.

The table in Annex II shows that, in the fifteen Member States of the European Union prior to the accession of new Member States on 1 May 2004, the CSDs of twelve Member States are subsidiary entities owned within a company group, while the CSDs of three Member States (Austria, Denmark and Sweden) are held independent of a company group. Of the twelve CSDs held within a company group (including, for Belgium, both Euroclear Bank and Euronext CIK), eight are held by a company group organised around the official stock exchange of the jurisdictions in which they operate (or its holding company) and four (Euroclear Bank for Belgium and for Irish government bonds, Euroclear France, CrestCo for the United Kingdom and for Irish equities, and Euroclear Nederland) are organised around the ICSD, Euroclear. The other ICSD, Clearstream Luxembourg, is held within a company group centred on the Deutsche Börse. The holding of a CSD within a company group centred on the regulated markets of a jurisdiction generally reflects the creation of a vertical silo for trade execution, clearing and settlement, generally on a national basis. The holding of national CSDs within the Euroclear group reflects a horizontal functional consolidation at the level of the CSDs.

The CSDs in the ten countries admitted to the European Union on 1 May 2004, many of which were organised after the fall of the Berlin Wall in 1989, are generally owned by a governmental entity (the Ministry of Finance or the national central bank) or by governmental entities and the official exchanges.

Among the CCPs in Europe, five are commercial entities operating as divisions of the exchanges for which they provide central counterparty services. Four of these five

12 The issue of the ownership of a CSD offering these non-core services is somewhat controversial. Given its place at the heart of the financial infrastructure of the securities industry, both CPSS/IOSCO, as the international standard-setter for securities settlement systems, and ESCB/CESR, as the European standard-setter for those systems, have adopted strict standards regarding the risks that CSDs should take and the management of those risks. The board of directors of a CSD bears the primary responsibility for ensuring that any non-core services it offers and its risk management programme regarding those services comply with these international and Community standards.

exchanges (Euronext Lisbon, the Helsinki Exchanges, MEFF in Spain and Stockholmsbörsen) are held within a company group, while the remaining one (the Wiener Börse) is an independent entity. Four CCPs (Eurex Clearing in Germany, ADECH in Greece, CC&G in Italy and FUTOP Clearing in Denmark) are subsidiary commercial entities owned within a company group or by an exchange. Clearing Bank Hanover is a commercial entity independent of any exchange or other company group. LCH.Clearnet is owned 45.1% by exchanges, 45.1% by system participants, and the balance by the Euroclear Group. Keler, which provides both depository and central counterparty services in Hungary, is owned by the Hungarian NCB (Magyar Nemzeti Bank) and the official Hungarian exchanges.

2.3 THE SERVICES PROVIDED BY THE SECURITIES CLEARING OR SETTLEMENT SYSTEM

2.3.1 THE SERVICES PROVIDED BY CSDS

CSDs typically provide securities account maintenance, registration services, depository services and settlement services. The national CSD is often the official registrar for the issuers of equities, government bonds and other financial instruments within its jurisdiction. Other services provided by CSDs are not entirely uniform. Examples of other services include: securities numbering (using ISIN codes), administration of corporate actions, interest payment and tax withholding services, collateral management (for equities settlement, repos, or derivatives transactions), cash transfers, foreign exchange services, securities lending (as agents for CSD participants as securities borrower and securities lender), trade matching and confirmation services, order routing services, settlement and other services across links with an ICSD or other national CSDs, and the provision of other information and data services. As a general principle, these services are provided without extending unsecured credit to service recipients. If credit is extended by a CSD to a system participant, it is generally subject to both collateral requirements and limits (see CPSS-IOSCO Recommendation 9).

The greater the extent of services provided by a CSD and the greater the operational complexity in providing those services, the greater the burden on the CSD's board of directors. The board of directors is ultimately responsible for approving the operational aspects of the services provided by the CSD, for organising an internal management reporting system through which the board can remain apprised of the CSD's operations and performance, for ensuring that any risks undertaken by the CSD are properly managed, and for ensuring that the services provided by the CSD interface appropriately with other service providers along the value chain of securities settlement (i.e. other CSDs, ICSDs, CCPs, custodians, exchanges and other trading platforms, settlement banks, and registrars).

2.3.2 THE SERVICES PROVIDED BY CCPS

An exchange generally undertakes to provide a broad array of services relating to trade execution, clearing, settlement and the dissemination of trading information and data. When a CCP is a division of an exchange, it generally focuses on the provision of central counterparty services and the related risk management and audit programmes, although sometimes the clearing house division of an exchange may provide services normally offered by other divisions of an exchange in other jurisdictions. When the exchange is one legal entity, which division of the exchange provides a particular service is not a significant issue; the legal entity as a whole is liable for all risks and liabilities undertaken by the exchange and the clearing house. In general, however, exchanges, outside the clearing house division, do not incur significant amounts of debt (except perhaps for real estate and IT) and do not extend a significant amount of credit to their customers or other recipients of their services. Credit risk is undertaken principally through the clearing

house operations. Consequently, the fact that a CCP is a division of an exchange does not add materially to the risks undertaken by the exchange as a CCP and is generally not viewed as more problematic from a risk management perspective. In fact, it may permit risks associated with market operation and clearing to be better coordinated, a factor that may be particularly important in derivatives markets.

If a CCP is held within a company group, generally the CCP focuses on the provision of its central counterparty services and its related risk management and audit programmes. In some cases, however, a CCP may undertake to provide trade matching and confirmation services or other data and information services. In these cases, the kind of services provided by the CCP may have more significance. A company group may conclude that it should conduct only core central counterparty services in the CCP so that the CCP, as a separate legal entity, will be insulated from liabilities associated with other services offered within the group. Independent CCPs also focus on the provision of core central counterparty services and their related risk management and audit programmes, but may offer other services to enhance their competitiveness vis-à-vis other service providers. Whatever the structure in which a CCP is held, it is incumbent upon the CCP's board of directors to ensure that any risks associated with the provision of non-core CCP services will not interfere with or jeopardise the CCP's provision of its core central counterparty services.

2.3.3 THE GENERAL CORPORATE GOVERNANCE MECHANISMS

The corporate governance mechanisms adopted by a securities clearing or settlement system generally reflect the corporate governance mechanisms employed in the jurisdiction, e.g. relating to board structure and the use of specialised board committees. The system will also be subject to the same accounting standards as other corporations within its jurisdiction and the board of directors will have the same degree of responsibility for ensuring that the processes by which the accounts of the system are stated are sound as the boards of corporations generally. Although there are no best practices specifically concerning the corporate governance of clearing and settlement systems, there are best practice recommendations in all EU countries relating to corporations generally or specifically to listed companies. In most cases, the exchanges in each jurisdiction reflect the best practice recommendations in their standards for listing a security for trading on the exchange. Securities clearing and settlement systems may or may not be subject to these best practice recommendations. However, securities clearing and settlement systems operating in a particular jurisdiction should adopt the corporate governance standards or best practices recommended for companies in that jurisdiction as such standards or practices evolve over time. More specifically, securities clearing and settlement systems should adopt the best practices recommended for companies whose securities are publicly listed for trading on an official market in the jurisdiction, whether or not the securities of the system operator are in fact listed for trading. In particular, securities settlement systems should adopt the highest standards of corporate governance with regard to the relationship between the system operator and its external auditors and should adopt a conservative approach in addressing the treatment of any accounting issues relating to the maintenance of its books. Corporate governance best practices may have to be supplemented, however, to meet more specific governance objectives of the clearing or settlement system, including risk management and regulatory policy objectives.

3 CONFLICTS OF INTEREST IN, AND GOVERNANCE MECHANISMS FOR, SECURITIES CLEARING AND SETTLEMENT SYSTEMS

Certain conflicts of interest that arise in the governance of a securities clearing and settlement system are common to those arising in the corporate governance of companies generally, i.e. the typical conflicts discussed in the corporate governance literature between owners and managers. However, other conflicts of interest arise in the governance of securities clearing and settlement systems by virtue of the interests of two other interested groups that must be taken into account in the decision-making processes relating to the operation of the system, i.e. the customers[13] and the public authorities interest.

Corporate governance arrangements generally create a system of internal checks and balances to ensure the *accountability* of board members and executive management. As noted previously, CSDs and CCPs generally adopt the general corporate governance mechanisms common to the jurisdiction in which they are organised. One basic objective of these mechanisms is to permit the shareholders of the corporation to evaluate the performance of the board of directors and the executive management so that they can be held to account.

As noted earlier, two basic systems of corporate governance predominate: one based on a single board structure and the other based on a dual board structure composed of a supervisory board and a management board. The single board in single board systems and the supervisory board in dual board systems are generally elected by vote of the owners or shareholders.[14] In jurisdictions with dual board structures, the management board is generally elected by the supervisory board. In CSDs and CCPs, the supervisory board usually has competence, e.g. to oversee the management generally, to resolve conflicts of interest with management, and to review and approve financial statements/annual audit reports. It also reviews basic policies relating to internal controls, the systems of internal reporting to management, and risk management procedures. In single board systems, management directors are supervised by independent, non-management directors. Committees of non-management directors generally fulfil the functions allocated to the supervisory board in dual board systems. Examples of typical board committees include: nominating committees (responsible for nominating new members to the board); compensation committees (responsible for setting the compensation of members of management); and audit committees (responsible for the board's relationship with the corporation's external auditors).[15] Nomination, remuneration and audit committees should be composed of independent directors, as stressed in the Winter Report.

The potential conflicts of interest between large and minority shareholders present another classic problem of corporate governance that may be addressed in standard corporate governance arrangements. This can be accomplished, for example, by means of clauses in the company statutes to provide minority shareholders with the opportunity to elect candidates of their choice to a limited number of board seats, e.g. by weighting voting rights differently with respect to certain seats. The ability to elect a member of the board assures the minority shareholders that they can be kept informed of the activities of the company and that they will have an opportunity to have their views expressed and taken into account at board meetings.

13 The term "customers" refers to both system participants and their customers.

14 However, in some jurisdictions with dual board structures, the supervisory board may elect its own new members.

15 Many jurisdictions have recently been evaluating the proper role, organisation and functioning of the audit committee, particularly in listed companies. See, for example, "Standards Relating to Listed Company Audit Committees", US SEC Release No 33-82209 (April 2003) at http://www.sec.gov/rules/final/33-8220.htm and the European Commission's proposal for a Directive on the statutory audit of annual accounts and consolidated accounts of companies in the EU at http://europa.eu.int/comm/internal_market/auditing/officialdocs_en.htm. See also "Principles for Ongoing Disclosure and Material Development Reporting by Listed Entities", IOSCO Technical Committee (October 2002); "Principles of Auditor Independence and the Role of Corporate Governance in Monitoring an Auditor's Independence", IOSCO Technical Committee (October 2002); and "Principles for Auditor Oversight", IOSCO Technical Committee (October 2002).

Notwithstanding the variations in the organisation of corporate governance across jurisdictions, the basic system of checks and balances in typical corporate governance arrangements allows owners to exercise oversight and control over the board of directors and the board of directors, in turn, to exercise oversight and control over executive management. The unique features of governance arrangements for securities settlement systems relate to steps taken to incorporate into this basic scheme mechanisms to provide for oversight and control over the board of directors and executive management by customers and the public authorities, acting in the public interest. Authorities' requirements in this regard may deal specifically with corporate governance or may consist of other types of regulation or requirements complementing corporate governance, such as competition law requirements. In this respect, governance of securities clearing and settlement systems reflects a matrix of internal and external, and private and public mechanisms of control and oversight.

3.1 MECHANISMS TO ADDRESS THE INTERESTS OF CUSTOMERS

Several mechanisms are commonly used to require consideration of the interests of customers in board decision-making:

– A first mechanism is the organisation of *user-ownership* of the CSD or CCP. As the customers in this case will determine who will be elected to the board of directors, the user-owners are generally assured that the board members they elect will take their interests into account in their deliberations and be responsive to their concerns.[16] The ownership structure of a CSD or CCP is generally determined at the time of the organisation of the system operator. However, unless arrangements are made to offer an ownership position to new participants that begin to use the system subsequent to its organisation, new customers may have difficulty obtaining an ownership position reflecting their level of use of the system.

– A second mechanism is the establishment of *board composition requirements* by which certain seats are reserved for representatives of customers, including non-resident customers. This mechanism is similar to that used to protect the interests of minority shareholders discussed earlier. Board representation assures customers that they can be kept informed of the activities of the system operator and that they will have an opportunity to have their views expressed and taken into account in board decision-making. Board members representing customers can also act as "witnesses" to the internal dialogue within the system operator relating to system operations. LCH.Clearnet Group Limited is unique in setting aside board seats for representatives of the trading platforms for which it clears.

– A third mechanism intended to contribute to an adequate consideration of customers' interests, as well as sound and adequate risk management, is *the use of advisory committees*. Advisory committees are generally composed of user representatives

16 An example of user-ownership is the CSD for equity securities and the CCP for equities, US government debt instruments, mortgage-backed securities, and emerging market debt instruments in the United States. These have been organised as subsidiaries and affiliates of the Depository Trust & Clearing Corporation (DTCC) that is owned by the principal customers of its subsidiaries' services. Section 17A(b)(3)(C) of the US Securities Exchange Act of 1934 requires that the rules of a clearing agency assure a fair representation of customers in the selection of its directors and in the administration of its affairs. The SEC is also empowered to determine that representation is fair if customers are afforded a reasonable opportunity to acquire the voting stock of the clearing agency, directly or indirectly, in reasonable proportion to their use of the clearing agency. In effect, while the US Congress did not require that securities clearing agencies be user-owned, it stated a clear policy preference for user-ownership. In response, the US securities industries organised a user-owned organisation to clear and settle most securities transactions. Only clearing houses for futures and options were not included within the structure of the DTCC. See also US SEC Release No 34-16900, 45 F.R. 41920 (17 June 1980) regarding SEC standards for the registration of clearing agencies. An example of user-ownership in Europe is the case of Euroclear plc and Euroclear Bank, the operator of the Euroclear System, also owned by its primary customers.

and a board representative and facilitate a dialogue between customers and the board.

– A last mechanism is for the board of directors to solicit the views of customers on the development of new initiatives regarding the services provided by the CSD or CCP through the publication of *public consultation documents*.

3.2 MECHANISMS TO ADDRESS THE PUBLIC INTEREST

The public interest in the operation of securities clearing and settlement systems is generally protected through the regulatory requirements of the competent authorities. In all jurisdictions, a licence or authorisation is required to provide securities clearing and settlement services. The requirements to obtain such a licence or authorisation are laid down in laws or regulations. These laws and regulations typically address the following matters that bear on the corporate governance of the system operator:

– requirements relating to the company form, i.e. that system operators must be a company limited by shares or a bank;

– a review of the company statutes and by-laws;

– a fitness and properness review of members of the board of directors and executive management;

– control of shareholdings and changes in shareholdings; and

– a review of the operational plan, internal control arrangements, system rules and risk management programme of the system operator.[17]

Some competent authorities specifically take into account the arrangements to manage conflicts of interest in the operation of the system.[18] However, although a review of corporate governance arrangements *per se* may not be specifically addressed in the requirements for authorisation of all competent authorities, such a review is implicitly undertaken through an examination of the company statutes, the by-laws, the operational plan, internal control arrangements and system rules. The competent authorities also generally receive periodic reports from system operators and have a right of inspection through which governance arrangements can be reviewed on an ongoing basis. Lastly, the competent authority may have authority to review decisions relating to the fees charged by the system operator.[19]

In some jurisdictions, board composition requirements may also be used to address public interest concerns by reserving seats on the board for members designated to represent the public interest. Such requirements may be imposed by regulation or be voluntarily adopted by the CSD or CCP itself. Furthermore, such public interest directors may be nominated by the board of directors or be appointed by a public official.

17 The laws and regulations applicable to securities clearing and settlement systems also generally include substantive provisions relating to the operation of those systems, such as the specification of operating hours, the kind of securities that may be listed within the system, requirements relating to system access, minimum capital requirements and record-keeping requirements, among others.

18 See, for example, Section 2.4 of the UK Financial Services Authority Handbook on *Recognised Investment Exchanges and Recognised Clearing Houses*.

19 However, this review generally does not rise to the level of a rate-making review of the kind undertaken with respect to the charges of a public utility. Rather, the competent authority generally reviews decisions relating to fee-setting to determine that the system operator has set fees within a reasonable range. See, for example, US Securities Exchange Act of 1934, Section 17A(b)(3)(D) and Article 81(3) of the Italian Legislative Decree 58 of 24 February 1998 - Consolidated Law on Financial Intermediation, pursuant to Articles 8 and 21 of Law 52 of 6 February 1996 (as amended by Legislative Decree 37 of 6 February 2004). See also Recommendation 15, CPSS/IOSCO, "Recommendations for securities settlement systems" (2001); and Recommendation 11, CPSS/IOSCO, "Recommendations for central counterparties" (2004).

3.3 SPECIFIC CASES OF CONFLICTS OF INTEREST

3.1.1 POTENTIAL CONFLICTS RELATING TO RISK MANAGEMENT

The main function of a CCP is to undertake and manage credit risk vis-à-vis both parties to a securities transaction; that is, it is a mechanism to establish or enhance the creditworthiness of system participants to facilitate trading on a market. A CCP by definition interposes itself into a nexus of risk contracts and must manage those risks. Consequently, the management of risk represents a critical function in a CCP. As a failure in a CCP's risk management programme may affect other linked and interdependent systems, there is a public interest in the quality and management of a CCP's risk management programme and effective governance arrangements represent one component of this programme. In this respect, governance arrangements should address some specific concerns. This is particularly relevant in cases in which the CCP is not a separate, specialised legal entity, but is a division of an exchange.

The main issues can be summarised as follows. First, it is important that the effectiveness of risk management decisions not be impaired by extraneous considerations relating to the other business activities of the CCP. This requires, on one hand, a clear and legally sound separation/segregation of the financial resources of the CCP used for the management of the risks stemming from each of the CCP's various activities.[20] On the other hand, it is necessary that the decision-making processes governing the application of the CCP's default procedures be absolutely independent and that those responsible for the decisions be fully accountable. Second, to the extent that the CCP's customers own the CCP and contribute financial resources to its default fund, the decision-making processes relating to the declaration of a default and the use of the default fund must be organised in such a manner as to eliminate customers' improper influence on, or ability improperly to delay, decisions addressing a default at the time of the default.

CSDs generally do not undertake credit risk to system participants incident to their provision of core settlement services, although they may organize collateral arrangements or guarantee funds to minimize the credit risk undertaken by system participants. If, however, the operator of a securities settlement system offers in addition banking and other non-core services, such as collateralised or uncollateralised credit lines, then the CSD undertakes credit and liquidity risks. If those other non-core services are profitable, CSDs have an incentive to maximise the level of the non-core services they offer in order to increase their profits and to reduce the costs relating to the management of the risks associated with these services. A tension may exist between this profit maximisation objective and the necessity to assure the uninterrupted provision of CSD core services in all market foreseeable conditions. Credit and liquidity risks related to the non-core banking services could indeed have spillover effects on the core settlement services and, thus, jeopardise the integrity of the system. Therefore, robust risk management should be part of the governance arrangements to ensure that core settlement functions are not jeopardised.

The competent authorities generally review these risk management arrangements as part of their review of the corporate governance arrangements and internal rules and controls of the system operator to protect the public interest by verifying the integrity of these arrangements.

3.3.2 FINANCIAL GROUP-RELATED ISSUES

One result of the recent consolidation within the trading, clearing and settlement infrastructure within Europe has been the formation of

20 This is not meant to suggest that separate financial resources must be maintained for each type of product cleared by a CCP. Where risks are adequately managed, cross-product clearing may create efficiencies for the benefit of customers.

complex financial groups whose operations cut across the entire value chain of the trading, clearing and settlement processes for securities transactions. A CSD or CCP held within a financial group faces unique issues of corporate governance arising from actual or potential conflicts of interest due to the possibility that management of the parent institution will pursue the interests of the parent company or other affiliates at the expense of the interests of the CSD or CCP. Consideration of the corporate governance mechanisms of a CSD held within a company group generally requires an analysis of the corporate governance mechanisms in place within the entire group structure, but particularly of those at the level of the parent company, where decisions on the general policies and business strategies of the entire group may be taken.

The typical case of a financial group in the securities settlement infrastructure is that of a vertically integrated silo where a stock exchange is also the owner of the clearing and the settlement system. A few examples of conflicts of interest that might arise in the operation of a vertically integrated silo can be outlined:

First, decisions concerning the distribution of profits or investments in systems can privilege the stock exchange over the securities settlement system and its customers.

Second, to the extent that the IT infrastructure for trading, clearing and settlement is based on a single IT system used by the financial group, it is possible that investments in superior systems that are available for securities settlement systems will not be made, thereby impairing the efficiency of the settlement system and increasing costs to customers. In other words, a single IT infrastructure is not necessarily more efficient than three separate "specialised" infrastructures.

Third, a policy of price bundling can lead to a subsidisation of the provision of one service (e.g. trade execution services) through the charging of inflated fees for other services (e.g. post-trade processing). In this way, the fixed costs relating to one service can be recovered through charges for other services. This practice may be facilitated if the other service is provided under monopoly or quasi-monopoly conditions. The same problem however may also arise when a single institution provides services of a different nature, making use or not of the same infrastructure. This is the case when a CSD provides credit or securities lending facilities.

Fourth, obstacles to a horizontal consolidation of the post-trade processing infrastructure, either domestically or cross-border, may be thrown up to the extent that such a consolidation would impair the competitive position of the stock exchange.

Fifth, the provision of netting or central counterparty services by a CCP outside the financial group may be prevented if the CCP would be in competition with the CSD. Extensive use of a CCP may indeed reduce the number and volume of transactions settled within the CSD, as well as the need for participants in the CSD to make use of other (e.g. banking) facilities provided by the CSD.

Sixth, in the event of a default, the system operator may make decisions that favour financially one class of persons, such as owners, exchange members or domestic members, at the expense of other persons, such as non-owners or non-domestic customers.

Horizontal groups may also face similar, additional conflicts of interest relative to entities that act on a stand-alone basis.

Because the formation of these financial groups is relatively recent, no specific mechanisms have yet been developed to address the particular conflicts of interest that they may face. Moreover, it is not clear that the traditional corporate governance arrangements and the

supplemental governance arrangements that have been developed relating to securities clearing and settlement systems generally, as described earlier, are adequate to ensure that these conflicts of interest are appropriately resolved. Consequently, further consideration by the public authorities of the implications of the formation of these financial groups and the adequacy of their governance arrangements would be appropriate.

3.3.3 CONFLICTS OF INTEREST BETWEEN DOMESTIC AND NON-RESIDENT CUSTOMERS AND PARTICIPANTS

The increase in cross-border trading that has accompanied efforts to complete the internal market within Europe has also raised new issues relating to the interests of non-resident customers and system participants vis-à-vis those of domestic customers and participants. In general, the issues concerning adequate representation of the interests of non-domestic participants are similar in nature to the issues normally arising to ensure adequate representation of "minority" groups.

Given the current consolidation of the securities settlement infrastructure within the European Union, CSDs and CCPs established in one Member State may primarily serve participants and customers from other Member States or other countries. Particularly if the shareholders of the settlement system are residents of the Member State in which the system is established, mechanisms should be instituted in the system's decision-making processes to take into account the needs and interests of those non-domestic participants and customers. Such mechanisms should be designed to ensure that the interests and needs of non-domestic participants and customers are given consideration equal to those of domestic participants and customers. In particular, non-domestic participants should be adequately represented on the board or in other decision-making and advisory groups.[21]

In Section 1, reference was made to best practice recommendations relating to governance to be followed by domestic companies. While, over the last decade, there has been considerable convergence in these best practice recommendations within the EU, there remain some substantial differences in the ownership structure of listed companies within the EU which bear significantly on the mechanisms employed in particular jurisdictions to protect the rights of minority shareholders and to provide transparency relating to corporate governance arrangements. These best practice recommendations also do not adequately address the unique needs and interests of non-domestic customers of securities clearing and settlement systems. In order to enhance governance at Community level, there are ongoing efforts to provide for a collective responsibility of board members for financial statements and key non-financial information, to increase transparency regarding intra-group relations and transactions with related parties, and to improve disclosures concerning corporate governance practices. As regards the corporate governance of securities clearing and settlement systems, these initiatives should refer more explicitly to the fact that, if stakeholders are in different countries, the need for clarity about the responsibility of the board members and non-executive directors and about corporate governance in general is more pronounced.

3.3.4 CONFLICTS AMONG PUBLIC AND PRIVATE INTERESTS

The monopoly or quasi-monopoly position of a securities clearing or settlement system has implications for both the public interest and

21 The relevant competent authorities should also consider in advance optimal arrangements to address the cross-border implications of a default, e.g. the manner in which liquidity might be provided on a cross-border basis to system participants and customers.

customers' interests. In the policy debate regarding the ongoing reorganisation of the securities settlement infrastructure in Europe, two main issues in this respect have drawn the attention of public authorities.

The first issue relates to developments in the kinds of services offered by institutions active in the securities settlement infrastructure. Some settlement systems are now offering services that were historically offered by other kinds of service providers under different conditions of competition. For example, an (I)CSD, which has the legal status of a bank, mainly provides settlement services, but has also begun to provide other services, such as credit and collateral management services, that were historically and are still offered by banks or global custodians. An ICSD, in such a position, may bundle or tie its provision of banking services to the use of its settlement services. However, the banks and custodians which are in competition with the ICSDs in relation to these banking services may not be able to do so under equivalent conditions of competition due to variations in their regulation or legal status vis-à-vis the ICSD. Another example of bundling or tying of services is the case of a stock exchange that requires that transactions executed on the exchange be settled solely in an affiliated CSD. This can be due partly to legal barriers, e.g. fiscal barriers or local regulations, or to "rigidity" in the IT infrastructure (or an absence of standardisation) that can prevent or make much more costly the provision of similar services by other companies.

The second issue relates to the fact that a financial group can create artificial and anti-competitive links among the different services provided by the group. For instance, the use of a CSD can be reserved only to participants in an affiliated stock exchange.

As is the case with regard to the formation of financial groups generally discussed previously, it is unclear whether existing governance arrangements relating to securities clearing and settlement systems are sufficient, in themselves, to resolve the public interest issues that have arisen as a result of the consolidation within the settlement infrastructure. System operators compete within the existing legal and regulatory framework for securities clearing and settlement systems and can legitimately seek to obtain an advantage over their competitors as long as their operations comply with those laws and regulations. Current competition requirements may constrain certain kinds of anti-competitive behaviour, but in the absence of a harmonised regulatory regime at European level, it is unclear whether equivalent competitive conditions among the various kinds of service providers within the securities clearing and settlement infrastructure can be obtained given the disparities among the current national regulations of the Member States.

4 OTHER GENERAL POLICY APPROACHES BY AUTHORITIES RELATING TO SYSTEM GOVERNANCE

4.1 TRANSPARENCY

The system of governance of entities subject to regulation and oversight, such as securities clearing and settlement systems, differs from the corporate governance mechanisms of unregulated firms both in scope and objectives. Therefore, while unregulated firms may voluntarily disclose corporate governance arrangements or be required to disclose corporate governance arrangements pursuant to the listing standards of exchanges or securities regulations applicable to issuers, public authorities should require that corporate governance arrangements for securities clearing and settlement systems be transparent, that measures be taken to organise a dialogue between customers/participants and the board, and that the board be accountable, internally and externally, for its decisions. Transparency of corporate governance arrangements contributes essential information to customers for their evaluation of the risks associated with the use of the system. Authorities' requirements may be of a dual nature: soft law, in the form of recommendations and best practice guidance, or specific laws and regulations.

Securities clearing and settlement systems generally disclose their corporate governance arrangements as well as their ownership structure in their annual reports and on their websites. Disclosure of corporate governance arrangements may be made in fulfilment of regulatory requirements, e.g. those relating to licensing or authorisation; in fulfilment of requirements imposed by stock exchanges where the system operator is listed; or voluntarily for business reasons. Some systems have published reports demonstrating their compliance with market-initiated recommendations, such as the G30's action plan for clearing and settlement of 2003. Many securities settlement systems also have published a disclosure framework report for securities settlement systems adopted by the BIS/IOSCO in 1997. While corporate governance is not addressed as a specific topic in this disclosure framework, it provides relevant corporate governance information through the systems' answers to questions regarding its organisation and ownership structure. Through answers to questions on the systems' rules and procedures, the systems provide information about the core of their corporate governance mechanisms.

The relevant websites generally provide information regarding the ownership structure, percentage shareholdings, board structures, the work and composition of internal committees, and, in some cases, the financial group structure. Although the current disclosure practices relating to corporate governance provide a good deal of information to the public, certain deficiencies are also apparent.

First, the information currently posted by securities clearing and settlement systems relating to governance varies considerably from system to system. Some systems post detailed governance information, while the disclosures by others are terse and lacking in detail. As the corporate governance arrangements of systems bear significantly on any assessment of whether the system is properly taking the public interest into account in its decision-making processes, a system should properly make disclosures to demonstrate the manner in which the public interest is considered in its corporate governance arrangements. At a minimum, clear disclosures should be made relating to the risk management programme of the system and the manner in which conflicts of interest between owners, the board of directors, the customers and the public authorities interest are addressed.[22] Moreover, when customers groups are established to represent the interests of the customers, the following should be made clear

22 Disclosures relating to risk management should be adequate to permit participants and customers to assess the risks associated with using the system and should cover, for example, the sources and extent of funds available to cover a participant default, the sequence in which funds from different sources will be assessed to cover a default, the rights and liabilities of the system and of defaulting and non-defaulting participants upon a default, the mechanisms used to safeguard the customer funds and collateral of non-defaulting participants, and the implications of the insolvency of a system participant or customer on the rights and liabilities of other participants and customers.

ex ante: (i) the criteria used to select the participants in the customers group; (ii) its precise functions; and (iii) the extent of the impact of the work of these groups on the decision-making process. In particular, where the advice of the customers group has not been followed, it would be worthwhile for clearing and settlement systems to make the reasons transparent.

Second, disclosures relating to corporate governance of securities clearing and settlement systems held within a financial group often only describe the corporate governance arrangements at the level of the parent company. Given the public interest in the operation of these systems, specific disclosures should be made concerning corporate governance at the level of the system. Furthermore, any relationships or agreements between members of the financial group which bear on the financial condition of the system or on its ongoing ability to fulfil its intended functions in the market in which it operates should also be disclosed.

Third, disclosures now made voluntarily or at the discretion of the system may be updated only at irregular intervals and may, at a given point in time, become stale and outdated. To evaluate the risks associated with using a system, customers and public authorities should have current accurate information at all times regarding the corporate governance of the system, particularly relating to its risk management programme.

Fourth, the adequacy or accuracy of these voluntary disclosures may be questioned, as competitors sometimes complain about the quality of the disclosures of other systems.

To address these deficiencies, it would be advisable for competent authorities to develop specific standards relating to the disclosure of corporate governance arrangements by securities clearing and settlement systems. The development of standards might appropriately be included in the work of the joint working group of the European System of Central Banks and the Committee of European Securities Regulators relating to the regulation, supervision and oversight of clearing and settlement in the Community. As noted previously however, looking forward, a strong case can be made for the development of harmonised requirements relating to the authorisation and regulation of securities clearing and settlement systems within the EU. Requirements relating to the transparency of corporate governance could easily be incorporated into such a harmonised regime as a condition for obtaining and maintaining an authorisation or licence to operate.

4.2 REQUIREMENT FOR EFFECTIVE GOVERNANCE IRRESPECTIVE OF THE OWNERSHIP STRUCTURE

The corporate governance arrangements of a securities settlement system are effective when those arrangements lead to sound business decisions and to an appropriate balancing of the interests of the various stakeholders in corporate decision-making. *The issue is not so much whether the system operator uses a particular corporate governance mechanism to achieve this balancing of interests, but whether the combination of mechanisms adopted by the system operator in the aggregate prompt or cause an appropriate balancing of those interests.* As the legal form of an entity operating a CSD or CCP may be a bank or a non-bank, corporate governance mechanisms may take various forms. In the absence of further harmonization at Community level, public authorities should focus on the effectiveness of the corporate governance mechanisms chosen by a system operator, rather than on the form of the legal entity. Furthermore, public authorities should in fact focus on whether system operators achieve sound management of the system and on whether system operators promote the public policy objectives of the public authorities, such as the promotion of efficiency, technological innovation, transparency, and fair competition while leaving it to the market itself to develop

the overall structure of the settlement infrastructure.

As shown in Annex II, the ownership structure of CSDs and CCPs may take several forms ranging from user-owned entities to for-profit, publicly traded entities. It is for the business judgement of the entities themselves to decide whether they should attract a particular type of investor through a particular ownership structure, and not for regulators, as the second Giovannini Report points out. The authorities should not discourage particular ownership structures if they adequately take account of the interests of customers and the public authorities interest. This is particularly the case since the legal form in which CSDs and CCPs may incorporate varies from banks to stock corporations depending on the jurisdiction.

In addition, public authorities have policy concerns in ensuring that risks relating to non-core services of CSDs and CCPs do not impair their core clearing and settlement activities. If the corporate governance code in a jurisdiction is not legally binding, but is a voluntary code (as in the case of the German Corporate Governance Code), and the jurisdiction requires a company to explain the reasons why it has not complied with the voluntary code, authorities should be vested with powers to request from a CSD or CCP an explanation as to why its corporate governance mechanisms are adequate, taking into account its size, its ownership structure, the types of markets it serves, and the geographical scope of its services (i.e. domestic or cross-border).

4.3 COMPETITION ISSUES

Public authorities also have an interest in ensuring that securities settlement system operators do not engage in anti-competitive behaviour and do not abuse their dominant position in the market-place to the detriment of customers and other competitors. Public authorities' policy objectives relate to fair pricing, fair and objective access and exit criteria, cost efficiencies and establishing adequate service levels for customers and participants. Free and fair competition in general promotes both cost efficiencies and innovation. Business practices of system operators that unreasonably restrict competition may prevent the organisation of optimal clearing and settlement arrangements at the expense of customers and to the detriment of the broader economy.

Article 82 of the Treaty establishing the European Community prohibits an abuse of a dominant position in the Community or a substantial part of it to the extent that it affects trade between the Member States. Determining whether an undertaking holds a dominant position requires a definition of the relevant market, both from a geographical perspective and from the standpoint of the product or service, and an examination of the position of the undertaking in respect to that market. A dominant position is a position of economic strength enjoyed by an undertaking which enables it to prevent effective competition being maintained on the relevant market by giving it the power to behave to an appreciable extent independently of its competitors, customers and ultimately its consumers.[23] The fact that the dominant position results from the conferral of special or exclusive rights by a Member State does not obviate the prohibition in Article 82.[24] As noted earlier, because CCPs and CSDs are granted special or exclusive rights to provide clearing and settlement services in the jurisdictions in which they operate, and because of the economies of scale associated with their operations, they often acquire a dominant position on those markets. A dominant position clearly would result, for example, if a CSD were the only entity authorised as a CSD within a jurisdiction and national law required local issuers to use the CSD as a registrar for its

23 See Case T-128/98, Aéroports de Paris v Commission (2000), ECR II-3929, §147. See generally K. Lenaerts & P. Van Nuffel, "Constitutional Law of the European Union" (R. Bray, Ed), Sweet and Maxwell (London 1999), p. 198.

24 See Case 311/84, CBEM v CLT and IPB (1985), ECR 3261, §18.

dematerialised securities. In such circumstances, the use of the services of the CSD represents the only manner to obtain rights in securities registered at the CSD vis-à-vis the issuer and effectively requires all traders to access in some manner the services of the CSD.[25] Similarly, market rules may require, for legitimate reasons relating to market operation, that all trades on a particular market be submitted to a single CCP. Obviously, such a CCP has a monopoly and a dominant position with respect to the provision of central counterparty services on that market.[26]

Moreover, it is clear that several practices in which CSDs or CCPs may attempt to engage would constitute an abuse of a dominant position. For example, the following practices generally would constitute an abuse of a dominant position if not undertaken for legitimate reasons relating to the proper operation of the capital markets:

- A CSD's denial of access to settlement services to traders that execute trades on non-favoured execution platforms to benefit a trade execution platform operated by its affiliate within a financial group.[27]

- A CSD's denial of access to downstream competitors that require access to the settlement services of the CSD to effectively compete on downstream markets, i.e. a CSD's denial of access to a settlement system to an ICSD, another CSD, or a custodian which competed with the CSD or a group affiliate on the market of the CSD or another market.

- A CSD's or CCP's tying of the pricing of, or access to, settlement or clearing services to the use of other services provided by an affiliate within a financial group (e.g. the trade execution services of an exchange or other trading platform).

- Subsidising the provision of other services through the pricing of settlement or central counterparty services (using fees charged for clearing to subsidise the operation of an exchange or other trading platform).[28]

One way to avoid abuses of a dominant position in the securities settlement infrastructure is to put in place rules which allow for open access to the infrastructure. A right of open access is provided for in the new Directive on markets in financial instruments.[29] Open access ensures the right of investment firms to have access to clearing and settlement facilities outside the Member State of their establishment on the same objective, transparent and non-discriminatory grounds as domestic ones. The Directive requires that regulated markets allow their members or participants to clear and settle their transactions through the clearing and settlement service providers chosen by them. Regulatory authorities may obviate that choice only if the necessary links between the chosen system and other necessary systems do not exist to ensure efficient and economic settlement of the transaction or the technical conditions relating to the services to be provided by the service provider chosen by the member or participant are not such as to allow a smooth and orderly functioning of the market.

4.4 OVERSIGHT

The competence of the various public authorities that have an interest in securities settlement systems is generally defined in law or legislation. Sometimes, however, a public authority may not have an explicit competence

25 The Giovannini Group recommended that the practice of requiring issuers to use the local CSD should be abandoned in favour of allowing the issuer to choose the CSD which will act as the registrar or depository for its shares. This would also have the effect of allowing an issuer to choose the regulator that would be responsible for regulation and oversight of its registrar and depository relationships.

26 See Case 311/84, CBEM v CLT and IPB (1985), ECR 3261, §23-25.

27 This would constitute the application of dissimilar conditions to equivalent transactions with other trading parties as described in Article 82 (c). See Case C-163/99, Portugal v Commission (2001), ECR I-2613, §46.

28 See Case T-175/99, UPS Europe v Commission, Rec. (2002), p.II-1915, §62.

29 Official Journal L145/1, 30.4.2004, Articles 34 and 35.

regarding settlement systems, but by tradition or practice is involved formally or informally in the regulation or oversight of settlement systems. This is often the case with respect to central banks, which may have no explicitly stated competence over securities settlement systems, but may influence their operations as a user, e.g. in its monetary policy operations or through the operation of a large-value payment system. By tradition, if not by explicit competence, central banks often take an interest in every aspect of their jurisdiction's economy in their monetary policy assessment. Also by tradition, central banks take an interest in any risk in the financial system that may have systemic consequences and in the operation of government bond markets.

Even if an explicit competence over particular matters is expressly conferred on a particular public authority by law or legislation, it is incumbent upon all interested public authorities to cooperate in the regulation and oversight of securities clearing and settlement systems. To give an example, competition law authorities must assess whether agreements on prices in the settlement infrastructure are consistent with competition law requirements and policies. Nevertheless, the fairness of pricing policies of settlement service providers and the effect of prices on access to the settlement infrastructure are issues for regulators as well as central banks in their capacity as overseers.[30] In this regard, it is essential that all interested public authorities organise their activities such that the supervision and oversight of settlement systems addresses the legitimate concerns of each of the public authorities effectively. This is particularly so where systems are linked cross-border and the public authorities of multiple jurisdictions have an interest in the operation of the linked systems. Cooperation among authorities in this regard may be formal or informal, provided that it is effective, transparent and clear.

4.5 COMPLETING THE INTERNAL MARKET RELATING TO SECURITIES CLEARING AND SETTLEMENT

Given the national variations and the inadequacies in current governance arrangements relating to securities clearing and settlement in the Community, EU institutions, in cooperation with competent national authorities, should consider the development of a harmonised regime which would address the public interest in, and which would ensure equivalent conditions of competition for the operation of, the securities settlement infrastructure. Obtaining equivalent conditions of competition in this field should result in the most optimal clearing and settlement arrangements within Europe and would complete the internal market relating to securities clearing and settlement, as contemplated by the Treaty establishing the European Community.

One approach to developing such a harmonised regime would be to use the regulatory model reflected in the Consolidated Banking Directive[31] and the Directive on Markets in Financial Instruments (formerly the Investment Services Directive)[32] – that is, a minimum substantive harmonisation of regulatory requirements, including requirements relating to corporate governance, with respect to each post-trade processing service provided along the value chain of securities clearing and

30 The organisation of competence for the competition law aspects of clearing organisations in the United States is interesting in this regard. In the United States, when approving the authorisation of a clearing organisation, the Securities and Exchange Commission and the Commodity Futures Trading Commission are required to assess the impact of the proposed operations of the clearing organisation on competition. An authorisation of a clearing organisation carries with it a conclusion that any negative effects of its proposed operations on competition are justifiable in the context of the operation of the market. These determinations by the market authorities do not obviate the competence of the US Department of Justice to enforce the antitrust laws of the United States, but the Justice Department would likely give great weight to the conclusions of the market authority relating to the effects of the clearing organisation's operations on competition. See Securities Exchange Act of 1934, §17A(b)(3)(I) and US Commodity Exchange Act, §7A-1(c)(2)(N) and 7A-1(3).

31 Official Journal L 126, 26.5.2000, p.1.

32 Official Journal L 145, 30.4.2004, p.1.

settlement sufficient to justify mutual recognition of the regulatory authorisations to provide such service granted in each Member State; the availability of a passport to provide each such service throughout the Community based on a home country authorisation; regulation and oversight by the home country regulator or supervisor; and a requirement that home and host national authorities cooperate and share information relating to the regulation of the operations of the service provider. The objective of such a harmonised regime should be to ensure that each kind of service provided along the value chain of securities clearing and settlement is regulated in a substantively similar way throughout the Community, thereby obtaining equivalent conditions of competition with respect to the provision of each service.

The challenge in this regard is that the same service may currently be provided by entities with different kinds of regulatory authorisations, subject to different kinds of regulatory requirements, and with varying national institutional arrangements for their regulation and oversight. Consequently, it may prove difficult to "segregate out" the various kinds of services provided from a regulatory perspective. If such a regulatory segregation of services cannot be obtained such that the same service may continue to be provided under different kinds of regulatory authorisations, the regulatory requirements relating to that service under each kind of authorisation would need to be coordinated and harmonised, as was done in the case of the investment services activities of banks and investment firms under the Banking Directive and the Directive on Markets in Financial Instruments. Any Community instrument in this field should also provide for appropriate oversight authority over securities clearing and settlement systems by the European System of Central Banks and other national central banks within the Community relating to their monetary policy operations and their operation of large-value payment systems and should take into account existing Community instruments relating to clearing and settlement, such as the Settlement Finality Directive.[33]

Consideration of appropriate conditions of competition within the settlement infrastructure would also need to give due weight to factors relating to the proper functioning of markets, which, in some cases, may require that competition in the provision of post-trade processing services be limited or constrained. Any harmonisation of regulatory requirements in this field would also need to take account of the interests of the respective national authorities in the operation of their national markets, which may, in some areas, justify a derogation from the concept of "home control." Given these challenges, the development of such a harmonised regime would require a high degree of dialogue and consultation among the EU institutions, the competent national authorities and the industry regarding the appropriate evolution of the governance and regulation of post-trade processing services within the Community.

Another approach to developing a harmonised corporate governance regime could be to use the two existing business entities – the European Company Statute and the European Economic Interest Grouping (EEIG) – that have been created at the European level to facilitate cross-border activities. The advantage of these forms is that they are subject to a minimum of transparent and common corporate governance rules laid down in two European Regulations. In that respect, public authorities should promote the use of the European Company Statute introduced by Council Regulation (EC) No 2157/2001 in 2001. The European Company Statute is a form of public limited-liability company with a registered office in the EU. The novelty is that the registered office may be transferred to another Member State without winding-up. This company form may be used, in particular, to create a group of CCPs and/or CSDs as a result of a merger or to form a

33 Official Journal L 166, 11.6.1998, p.45.

holding company. Alternatively, public authorities could also encourage the setting-up of a European Economic Interest Grouping introduced by Council Regulation (EEC) No 2137/85 in 1985. This Regulation introduced a legal entity designed to facilitate cooperation among business enterprises in various Member States. The difference from the European Company Statute is that the EEIG may only promote the business activity of the members but may not be formed for the purpose of making profits for itself, as it is subject to certain restrictions, the most important ones being that it cannot hold shares nor exercise management or supervision over its members. This business form could be used to carry out activities ancillary to those of its members, such as part of clearing, settlement and other post-trading services in a group composed of member CSDs and CCPs.

5 CONCLUSIONS

In the context of securities clearing and settlement systems, the nature of governance arrangements acquires a dimension that goes beyond their traditional function in corporate law. They constitute a tool for regulators and central banks to achieve their respective policy goals relating to market operation, market integrity and systemic stability.

In the light of the foregoing analysis, and pending a further evolution in the regulation of securities clearing and settlement in the Community, the following conclusions can be drawn.

Whatever the model of corporate governance used in a jurisdiction, securities clearing and settlement systems should adopt and ensure effective implementation of *high corporate governance standards or best practices* adopted by or recommended for companies in the jurisdiction in which they operate, as such standards or practices evolve over time. Generally, this would imply that securities clearing and settlement systems at a minimum should adopt and implement the best practices recommended for listed companies. Additionally, a securities clearing or settlement system should adopt *corporate governance mechanisms adequate to address the interests of customers and the public authorities* in the operation of the system. Such mechanisms may include traditional mechanisms of corporate governance in the jurisdiction, e.g. the appointment of independent board members and the use of specialised board committees, such as an audit committee, or may be mechanisms that have developed specifically in the context of securities settlement systems, e.g. the use of board advisory committees or public consultation documents. Such mechanisms should be organised so that the criteria followed to select members of the board or participants in specialised committees are established *ex ante*. Board members should also take into account the interests of customers and the public authorities in board decisions, in particular those relating to system access criteria, fair pricing, the adequacy of service levels, the integrity of the risk management system, the need for innovation and efficiency, and the achievement of the policy objectives of competent authorities.

Securities clearing and settlement systems should *make adequate disclosures* regarding their corporate governance arrangements so that customers and the public authorities can ascertain the manner in which conflicts of interest among owners, the board, customers and the public authorities are prevented, resolved or mitigated. Securities clearing or settlement systems operated by an entity held within a financial group should disclose the governance arrangements in place at the level of the system operator as well as any relationships within the financial group that bear on the financial condition of the system operator or on the ability of the system operator to fulfil its functions in the markets which it serves. Disclosure should also include detailed information on the selection, composition, rules and procedures of advisory bodies and their impact on management decisions. Furthermore, public authorities should consider the implications of the formation of these financial groups within the clearing and settlement infrastructure and the adequacy of their governance arrangements.

Corporate governance arrangements of securities clearing and settlement systems should be subject to *adequate regulation and oversight*. In this respect, the company statutes, the by-laws, the professional qualifications of members of the boards of directors of system operators, shareholdings and changes in shareholdings, the rules of the system, the general system of internal controls, and the risk management programme of the system should be subject to review or oversight by a competent authority. Regulation, oversight, competition law and governance arrangements should ensure that services are provided to customers under fair and equitable conditions of access; that the risk management programmes of system operators are effective; that risk management decisions are not affected by considerations

extraneous to the risk management function; and that, to the maximum extent possible, functional service providers compete in equivalent conditions of competition.

Looking forward, the adoption of a harmonised regulatory regime for securities clearing and settlement systems should be considered to complete the internal market within the Community and to better achieve the policy goals identified in this paper relating to the governance of those systems.

ANNEX I STANDARDS AND RECOMMENDATIONS RELATING TO THE CORPORATE GOVERNANCE OF PAYMENT AND SECURITIES SETTLEMENT SYSTEMS

I.1 CPSS CORE PRINCIPLES FOR PAYMENT SYSTEMS, JANUARY 2001

Core Principle X acknowledges the importance of effective, accountable and transparent governance for all central bank-owned, privately-owned and jointly-owned payment systems owing to the interdependence among participants that those systems create. Each of these types of systems requires a different type of governance. Sound governance bears on all other recommendations of the report because it should ensure their implementation. For both to operate effectively, payment systems and securities settlement systems that use each other's services or that are operationally linked must be governed effectively and in a manner that permits an effective operation of the linked systems as a whole. Good governance of linked payment and securities settlement systems works to ensure that standards applicable to each of them can be implemented in a manner that permits the systems to meet the needs of the community they serve.

The CPSS Core Principles identify written objectives, reporting lines, clear lines of responsibility, qualified management entrusted with supervision of operations, risk management and audit functions as the tools of a sound governance system. Sound governance presupposes that appropriate resources have been devoted to these functions. Accountability is achieved through management's obligation to justify major decisions and actions to other parties. The Core Principles identify representation of owners on the governing body of the system and consultation as tools to address the concerns of non-shareholder stakeholders. However, these two mechanisms are not intended to be mutually exclusive. Transparency is achieved through the public disclosure of certain types of information regarding management, organisational and governance structure, and risk management and control systems.

Central banks should make transparent to customers and the public when they are acting as owners, as a user, and as an overseer relating to the operation of a payment system. They should take into account the needs of the customers in their decision-making processes through informal dialogue or consultations with customers.

Privately owned systems are generally owned by their customers, which are usually banks, and are generally organised as a cooperative. Since the board of directors of the cooperative is appointed by the owners, and often are employees of owner banks, board members of privately owned payment systems may face conflicts of interest in properly monitoring the system and may have a bias towards the institution that appointed them. Board members should resolve such conflicts of interest by giving precedence to the needs of all customers, not just their employers.

Jointly owned systems must have corporate governance mechanisms that address the concerns identified for both central bank-owned systems and privately owned systems identified previously.

I.2 CPSS-IOSCO RECOMMENDATIONS FOR SSSS, NOVEMBER 2001

CPSS/IOSCO Recommendation 13 defines corporate governance as arrangements that "encompass the relationships between management and owners and other interested parties, including customers and the authorities representing the public interest." It requires that governance arrangements for both central securities depositories and central counterparties fulfil public interest requirements in addition to promoting the objectives of owners and customers. This recommendation acknowledges that no single set of corporate governance arrangements is appropriate for all securities settlement systems, but identifies as key components of a corporate governance structure: the ownership structure, the composition of the board, the reporting lines between management and the

board, and the processes that make management accountable for its performance. Recommendation 14 on access also relates to governance. It requires that participants be given access to a system according to objective and publicly disclosed criteria relating to technical, business and risk management expertise; the legal powers; and the financial resources of the applicant seeking access to the system. Recommendation 17 also addresses transparency requirements and Recommendation 18 addresses the need for appropriate regulation and oversight.

I.3 ESCB-CESR STANDARD ON GOVERNANCE, 2004

The ESCB-CESR Standards focus on the clarity of rules, laws and procedures applicable to securities settlement systems. The Standards are addressed primarily to securities settlement system operators, but also to entities offering similar services, such as custodians with a dominant position in a particular market. This approach is consistent with the European Union's functional approach to the regulation of financial services.

ESCB-CESR Standard 13 on governance reflects and is consistent with the CPSS/IOSCO Recommendation on governance, but adds enhanced and more specific requirements relating to governance. The ESCB-CESR Standard specifically gives system operators an implicit duty to take into account relevant public policy objectives in the present European context and to ensure the safety and efficiency of European securities markets. It also concludes that the management of system operators should be subject to fitness and properness requirements consistent with other regulated financial firms within Europe. In addition, it emphasises the need for some form of user input into the decision-making process of the system, such as a formal consultation process with customers. Lastly, it requires that predefined procedures for identifying and managing potential conflicts of interest be incorporated into system governance arrangements.

I.4 CPSS-IOSCO RECOMMENDATIONS FOR CENTRAL COUNTERPARTIES, MARCH 2004

CPSS-IOSCO released for public consultation its report on "Recommendations for Central Counterparties" in March 2004. Recommendation 12 addresses governance of central counterparties stating that: "Governance arrangements for a CCP should be effective, clear and transparent to fulfil public interest requirements and to support the objectives of owners and customers. In particular, they should promote the effectiveness of the CCP's risk management procedures."

In its discussion of this Recommendation, CPSS-IOSCO focuses on the public interest in the governance of CCPs, noting that "because their activities are subject to significant economies of scale, many are sole providers of services to the market they serve. Therefore, their performance is a critical determinant of the safety and efficiency of those markets, which is a matter of public interest." Rather than expressing a preference for a particular set of governance arrangements, CPSS-IOSCO focuses on the objectives that should be achieved or accomplished through governance arrangements. A clear emphasis is placed on the need for transparency relating to the governance arrangements and on the accountability of the board of directors and senior managers. A special emphasis is placed on governance arrangements relating to the management of the risks undertaken by the CCP, as appropriate risk management mechanisms are critical to the prevention of systemic risk. Governance arrangements relating to risk management are particularly important because the interests of a CCP, participants, exchanges and trading platform providers, owners and the public related to risk management are different and may be conflicting. Appropriate governance arrangements for CCPs must therefore include clear mechanisms to balance the interests and

possible conflicts of the relevant parties involved in risk management and default procedures.

I.5 G30 GLOBAL CLEARING AND SETTLEMENT, A PLAN OF ACTION, JANUARY 2003

The Group of Thirty, a private body that brings together representatives of both private sector and public sector bodies, recently adopted an action plan for the development of the global securities settlement infrastructure. The G30's action plan is based on, and builds upon, the CPSS/IOSCO Recommendations. While the CPSS/IOSCO Recommendations represent an international standard that all jurisdictions of the world should immediately take steps to implement, the G30's action plan lays out a plan for the development of the securities settlement infrastructure in more developed jurisdictions over a period of five years. The following four recommendations of the G30 may be compared with the CPSS/IOSCO Recommendation which inspired their adoption:

– Recommendation 17 imposes a duty of care on each board member of a securities settlement system, and on the organisations appointing them, to balance the conflicting interests of all stakeholders in the operation of the system.

– Recommendation 18 calls for the granting of fair and non-discriminatory access to securities settlement systems to qualified customers and for the removal of existing barriers, including legal and regulatory barriers, which do not serve to mitigate risks, enhance systemic safety or meet public policy objectives. It also calls for boards of directors and public authorities to put in place procedures and programmes to evaluate on an ongoing basis the safety of securities settlement systems and the risks arising from their operation.

– Recommendation 19 urges securities settlement systems to adopt by-laws that organise appropriate board representation of different stakeholder interests. The report states a preference that customers' interests, notwithstanding their disparity, also be taken into account in the governance arrangements of both user-owned and non-user-owned systems.

· Recommendation 20 recommends that consistent and transparent regulation and oversight of securities settlement systems be instituted internationally regarding the operation of cross-border systems. This Recommendation calls for a harmonisation of oversight and supervision standards in developed countries, beyond the CPSS-IOSCO Recommendations, based on the functions performed by a service provider and not the legal form of the service provider in order to create equivalent conditions of competition. As noted previously, this Recommendation is related to governance in that regulation creates the framework within which corporate governance arrangements are organised.

I.6 CROSS-BORDER CLEARING AND SETTLEMENT IN THE EUROPEAN UNION (THE GIOVANNINI REPORTS), 2001 AND 2003

The "Report on cross-border clearing and settlement arrangements in the European Union" (November 2001; the first Giovannini Report) noted that each of the 19 CSDs and two ICSDs in Europe have varying governance arrangements. While the first Giovannini Report did not devote a specific chapter to governance, the report included governance as one of the areas in which the efficacy of proposals for the development of the European securities infrastructure should be assessed. In the Giovannini Group's public consultation questionnaire, governance issues feature prominently as an area in which public policy objectives should be developed on a priority basis. The questionnaire also raised the issue whether governance arrangements should differ

for profit and non-profit organisations and for user-owned and non-user-owned systems.

The "Second Report on cross-border clearing and settlement arrangements in the European Union" (April 2003; second Giovannini Report) made reference to governance as a mechanism to ensure an appropriate level of innovation. The report identified that appropriate governance ensures that management and owners take into account the needs of the customers of the system. Governance arrangements are less crucial where there is competition among service providers; where there is competition in the provision of services, customers have a variety of choices, and system operators have strong incentives to meet the needs of their existing and potential customers.

In the absence of competition, adequate governance arrangements become even more significant in providing safeguards that the interests of all customers are properly addressed or taken into account by CSDs and CCPs. The report also underscores that, in a consolidation of CSDs or CCPs, great emphasis should be placed on the adequacy of the governance arrangements of the consolidated entity. If governance arrangements are not sufficient to remedy the disadvantages arising from the consolidation or from the lack of competition in the market-place, consideration should be given to separating those functions where competition is not important (such as depository functionalities) from functions for which competition is beneficial (such as settlement functionalities). The report stresses further the role of appropriate governance arrangements where the same intermediaries are both customers and owners of non-profit CSDs and CCPs. The report suggests assessing existing systems against standards, starting with the CPSS/IOSCO Recommendations.

As a general remark, respondents to the public consultation launched by the Giovannini Group did not enumerate governance arrangements among the fifteen barriers to efficient clearing and settlement arrangements in the EU. The second Giovannini Report in 2003, however, reiterated the conclusions of the first Giovannini Report that governance issues feature prominently as an area in which public policy objectives should be developed on a priority basis.

I.7 COMMISSION COMMUNICATION ON CLEARING AND SETTLEMENT, 2002 AND 2004

The Commission, in its 2002 Communication on Clearing and Settlement issued following the publication of the first Giovanni Report, also focused on the removal of distortions of and restraints on competition in the clearing and settlement infrastructure and announced that it was conducting an in-depth inquiry into the observance of competition policy by clearing and settlement service providers.

The 2004 Communication on Clearing and Settlement (COM (2004) 312 final) following the publication of the second Giovannini Report focused on appropriate governance measures without a preference for a particular model. The Commission has envisaged laying down high-level principles in a framework Directive specifying that transparent governance arrangements is a major objective for securities settlement systems, central counterparties, as well as intermediaries offering settlement services. In order to address competition concerns, the Commission has envisaged imposing a separation of settlement services from ancillary banking and other non-core services in terms of accounting and pricing. Since July 2004, the Commission has chaired an Advisory and Monitoring Group on EU Clearing and Settlement, called CESAME, that will form an interface between the private and public sectors, advise the Commission on technical issues and liaise with experts and think-tanks.

I.8 EUROPEAN PARLIAMENT REPORT ON CLEARING AND SETTLEMENT, 2002

Following the first Giovannini Report, in 2002 the EU Parliament published a "Report on Clearing and Settlement", which concluded that effective corporate governance mechanisms are possible policy tools to address issues emanating from particular corporate structures and to enhance the stability of financial markets.

ANNEX II EUROPEAN CSDS AND CCPS

II.1 Organisational information on CSDs in the European Union

Member State	CSD	Corporate form	Ownership structure
Austria	OeKB AG	Bank	User-owned, with the majority being owned by leading Austrian banks
Belgium	Euroclear Bank International CSD Euronext – CIK	Bank Commercial entity	User-owned group. Euroclear Group. Euroclear plc owned by Euronext, the former shareholders of Sicovam and CrestCo, and third parties. Euroclear Bank owned by its users. Exchange-owned, by Euronext Brussels. Euronext Group is a public company whose shareholders include the former shareholders of the Paris, Brussels, Porto and Amsterdam Exchanges and institutional and retail investors. In February 2004, Euroclear Bank acquired the book-entry settlement system of CIK
Cyprus	CDCR	Division of the Cyprus Stock Exchange	Exchange-owned, by Cyprus Stock Exchange, which is a public limited company
Czech Republic	UNIVYC/ Securities Centre RM-SYSTEM/ Securities Centre SKD	Public limited company Public limited company Not a distinct legal entity	100% ownership by the leading Czech IT firm that carried out the voucher privatisation Exchange-owned (Prague Stock Exchange) NCB-owned (Česká národní banka)
Denmark	VP A/S	Non-profit commercial entity	User-owned. Owners comprise banks, stockbroking companies, bond-issuing companies, Danmarks Nationalbank, share issuers and institutional investors
Estonia	ECSD	Public limited company	Exchange-owned (Tallinn Stock Exchange, owned by the HEX Group)
Finland[1]	APK	Commercial entity	Group-owned. OM Hex Group, public company.[2] Since 31 December 2003, OM HEX Group has been owned by: Investor AB (11.3%); Swedish state (6.9%); Nordea (5.7%); Robur Funds (5.5%); Fidelity Funds (5.2%); AMF Pension (3.8%); Förenings Sparbanken (3.2%); Didner & Gerge aktiefond (3.0%); SEB Funds (2.7%); Alecta (2.6%); Olof Stenhammar & companies (2.6%); other Swedish owners (25.8%); other non-Swedish owners (21.7%)
France	Euroclear France	Commercial entity	Part of the Euroclear Group (see Belgium)
Germany	Clearstream Banking Frankfurt	Bank	Group-owned by the Deutsche Börse Group, public company. At the time of the initial listing of the parent company, several German banks held significant stakes, with the balance floated to the public
Greece[3]	Central Securities Depositary S.A.	Commercial entity	Majority owned by exchanges and their related financial groups, including: Athens Exchange S.A.; Hellenic Exchanges S.A.; banks listed on the ATHEX; portfolio management companies; mutual funds; and brokerage firms
Hungary	KELER	Public limited company	Owned by the Hungarian NCB (50%), Budapest Stock Exchange (25%) and Budapest Commodities Exchange (25%)
Italy	Monte Titoli spa	Commercial entity	Exchange-owned group, owned by the Gruppo Borsa Italiana, itself owned by the principal Italian banks as well as domestic and international institutional investors

1) APK also operates the CSDs in Estonia and Latvia.
2) The HEX Group merged with OM AB of Sweden in September 2003.
3) There are other systems that are not covered in this table.

II.1 Organisational information on CSDs in the European Union (cont')

Member State	CSD	Corporate form	Ownership structure
Ireland[4]	CRESTCo/ Euroclear Bank	Commercial entity/bank	Part of the Euroclear Group. The group is user-owned (see Belgium)
Latvia	VNS LCD-DENOS	Not a distinct legal entity Public limited company	NCB-owned (Latvijas Banka) Exchange-owned (Riga Stock Exchange, which is now owned by the HEX Group)
Lithuania	CSDL	Public company	Owned by Lietuvos bankas (majority shareholder), the Ministry of Finance and the National Stock Exchange of Lithuania
Luxembourg	Clearstream Banking Luxembourg	Bank	Group-owned by the Deutsche Börse Group, public company. At the time of the initial listing of the parent company, several German banks held significant stakes, with the balance floated to the public
Malta	CSD	Division of the Malta Stock Exchange	Exchange-owned (Malta Stock Exchange, which is government-owned)
Netherlands	Euroclear NL	Commercial entity	Part of the Euroclear Group (see Belgium)
Poland	KDPW CRBS-SKARBNET	Public limited company Not a distinct legal entity	Owned in equal parts by the State Treasury, Warsaw Stock Exchange and Narodowy Bank Polski NCB-owned (Narodowy Bank Polski)
Portugal	Interbolsa	Commercial entity	Exchange-owed within the Euronext Group (see Belgium)
Slovakia	NBS-CR SC BSSE	Not a distinct legal entity State-owned joint stock company Division of Bratislava Stock Exchange	NCB-owned (Národná banka Slovenska) Established by the Ministry of Finance as a joint stock company with a 100% share of the state Exchange-owned (Bratislava Stock Exchange, a public limited company, with private banks as main shareholders)
Slovenia	KDD FEBSS	Public limited company Not a distinct legal entity	User-owned (KDD members: credit institutions and securities intermediaries; Banka Slovenije also a minor shareholder) NCB-owned (Banka Slovenije)
Spain	IBERCLEAR	Commercial entity	Group-owned by Bolsas y Mercados Españoles (BME), owned by the former shareholders of the operating companies of the exchanges of Madrid, Barcelona, Valencia and Bilbao, MEFF Holdings (derivatives), AIAF (corporate bonds), Senaf (government bonds), Iberclear, and the citrus exchange
Sweden	VPC	Commercial entity	VPC is owned 98.6% by the four Nordic banks: Förenings Sparbanken, Nordea Bank Sweden, SEB and Svenska Handelsbanken. 1.4% owned by other securities companies
United Kingdom	CRESTCo	Commercial entity	Part of the Euroclear Group. The group is user-owned (see Belgium)

4) For securities issued by Irish entities. There is also the NTMA for the settlement of short-term public debt.

II.2 Organisational information on CCPs in the European Union

Member State	CCP	Corporate form	Ownership structure	Instruments and products cleared
Austria	Wiener Börse	Commercial entity	Austrian banks and other users	Derivatives
Belgium	LCH.Clearnet S.A., a subsidiary of LCH.Clearnet Group Limited	Bank	LCH.Clearnet Group Limited is owned: 45.1% by exchanges; 45.1% by former members of LCH; and 9.8% by Euroclear. Of the 45.1% owned by exchanges, Euronext owns 41.5%, but its voting rights are limited to 24.9%	Equities and bonds; interest rate & commodity futures and options; equity & index futures & options; OTC-traded bonds and repos
Denmark	FUTOP Clearing, a division of Copenhagen Stock Exchange	Commercial entity	User-owned, principally by leading Danish banks: Danske Bank AS; Nordea AB; Nykredit AS; Sydbank A/S. No other shareholder owns over 5%	Derivatives
Finland	Helsinki Exchanges	Commercial entity	Group-owned by the OM HEX Group (see under APK in the previous table)	Derivatives
France	LCH.Clearnet S.A., a subsidiary of LCH.Clearnet Group Limited	Bank	See Belgium	See Belgium
Germany	EUREX Clearing AG	Commercial entity	Public company, owned in equal parts by Deutsche Börse AG and the Swiss Exchange	Equities, derivatives, repos and bonds
	Clearing Bank Hanover	Commercial entity	Three German banks and one Norwegian bank	Agricultural and energy products
Greece	ADECH	Commercial entity	Athens Securities Exchange, Athens Derivatives Exchange and institutional investors	Derivatives and repos
Hungary	KELER	Public limited company	Owned by Magyar Nemzeti Bank (50%), Budapest Stock Exchange (25%) and the Budapest Commodities Exchange (25%)	Derivatives and cash instruments
Italy	Cassa di Compensazione e Garanzia (CC&G)	Commercial entity	Since 1999 the Italian Stock Exchange (72.73%), the remaining 27.27% being held by five banks	Exchange-traded derivatives and equities since 2003
Netherlands	LCH.Clearnet S.A., a subsidiary of LCH.Clearnet Group Limited	Bank	See Belgium	See Belgium
Poland	KDPW	Public limited company	Owned in equal parts by the State Treasury, Warsaw Stock Exchange and Narodowy Bank Polski	Derivatives, treasury bonds , equities, and other securities
Portugal	Euronext Lisbon	Commercial entity, division of Euronext Lisbon	Euronext NV, a public company	Derivatives
Spain	MEFF	Commercial entity, division of MEFF Exchange	Group-owned by Bolsas y Mercados Españoles (BME) (see Iberclear in the previous table)	Derivatives
Sweden	Stockholmsbörsen AB, division of OM AB	Commercial entity	Group-owned by OM HEX Group (see Finland)	Derivatives
United Kingdom	LCH.Clearnet Ltd, a subsidiary of LCH.Clearnet Group Limited	Commercial entity	See Belgium	Equities, derivatives, repos and swaps

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