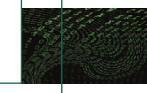
The National Bank of Poland
(Narodowy Bank Polski)

The National Depository for Securities SA
(Krajowy Depozyt Papierów Wartościowych SA)

The Warsaw Stock Exchange
(Giełda Papierów Wartościowych w Warszawie SA)

Securities Settlement Systems in Poland and the European Union



Warsaw 2009

Prepared by:

NBP
Narodowy Bank Polski
The National Bank of Poland

kdpw
The National Depository for Securities SA
(Krajowy Depozyt Papierów Wartościowych SA)

GIEŁDA PAPIERÓW WARTOŚCIOWYCH w Warszawie
The Warsaw Stock Exchange
(Giełda Papierów Wartościowych w Warszawie SA)

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This publication is available on the following websites:
www.nbp.pl, www.kdpw.com.pl, www.gpw.pl

Graphic design:
Edytor Serwis, tel. 022 620 39 79, www.edytor-serwis.com.pl

Printing:
Drukarnia NBP

Published by:
Narodowy Bank Polski
Departament Edukacji i Wydawnictw
00-919 Warszawa, ul. Świętokrzyska 11/21
tel. 022 653 23 35, faks 022 653 13 21

ISBN 978–83–901094–6–6

A word to the Reader

NBP
Narodowy Bank Polski

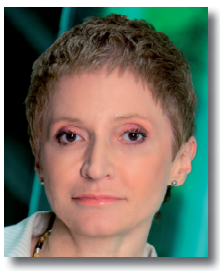
I would like to invite you to read this study, which has been prepared with the cooperation of three institutions, i.e. the National Bank of Poland, the National Depository for Securities (KDPW), and the Warsaw Stock Exchange. Each of those institutions plays a different but extremely important role in the financial market, and each of them shares an interest in the rapid development of post-trading services in Poland, including their harmonisation with EU standards. The secure and effective operation of securities settlement systems is very important to enable the NBP to implement such tasks, as carrying out monetary policy operations, organising monetary settlements and acting for the stability of the financial system. The development of this area of the capital market largely depends on the knowledge financial market participants have in this respect, yet access to such knowledge is difficult owing to the limited number of studies on the subject available in the Polish market., I would therefore like to express my hope that this study will be of interest to all those who are involved in the development of the Polish financial market and are interested in this subject matter.

***Adam Tochmański** has worked at the National Bank of Poland since 1987; head of the Department of Banks' Accounts in 1992 - 1998; head of the Payment Systems Department since 1998. Secretary of the Payment Systems Council at the NBP from the moment it was established. Member of the Supervisory Board of the National Depository for Securities (KDPW) since 1995.*

kdpw

I am delighted to present you with this study, alongside the other institutions,. I hope that it will contribute to broadening the knowledge of the core post-trading processes which take place in the capital market, and to the understanding of their significance for the efficient functioning of the capital market. As one of the major institutions in the capital market infrastructure in Poland, the National Depository for Securities SA (KDPW) actively participates in measures aimed to support and develop this market. This includes getting involved in initiatives which promote issues related to its functioning and infrastructure. Those measures reflect a deep belief that broadening the knowledge of the present and potential capital market participants is extremely important for its development. I would like to express my hope that this study will be a valuable source of information for all persons interested in the functioning of the financial market.

***Elżbieta Pustoła** has been the President of the Management Board of the National Depository for Securities SA (KDPW) since November 1994 (i.e. from the very beginning of the existence of the company). She has also been a member of the Bureau of the Coordination Committee for the Development of the Stock Exchange Trading System, a member of the Payment Systems Council and of the Capital Market Standards Development Council. Secretary of the European Central Securities Depositories Association since 25 May 2007.*



GIEŁDA PAPIERÓW WARTOŚCIOWYCH w Warszawie

The youthful Polish capital market is the most dynamic market in Central and Eastern Europe. Such a position has been achieved thanks to many factors. Undoubtedly, an important role was played by the fact that the market in Poland developed in a comprehensive way, i.e. it covered the entire value chain, which included both the area of stock exchange trading, as well as the area of clearing and settlement. The Polish experience also confirms the importance and significance of knowledge and its dissemination for the development of the securities market. Irrespective of the level already achieved, knowledge of the capital market requires broadening. In particular, issues related to the clearing and settlement of securities are still commonly perceived as a mysterious topic. In the light of these reflections, the involvement of the Warsaw Stock Exchange in the common initiative to develop this report seems obvious. The parts of the report prepared by the WSE pertain to stock exchange issues. I would like to express my hope that they have contributed to presenting a full and in-depth picture of the Polish market.

***dr Lidia Adamska** has been holding managerial positions at the Warsaw Stock Exchange since 1994, also as head of the Strategic Planning Department. Member of the Management Board of the Warsaw Stock Exchange since June 2006.*

Authors

Beata Wróbel has worked at the National Bank of Poland since 1999; she has been head of the Securities Settlement Systems Division at the Payment Systems Department for five years now; before that, she worked at the Large-Value Payment Systems Division, also at the PSD. Graduated from the Cracow University of Economics in the field of Finance and Banking, and completed post-graduate European studies at the University of Warsaw.

NBP
Narodowy Bank Polski

Karolina Nakoneczny has worked at the National Bank of Poland since 2004 as a specialist in the Securities Settlement Systems Division of the Payment Systems Department. Graduated from the Faculty of Law and Administration at the University of Warsaw and from the Post-graduate Program in European Law at the University of Warsaw.

NBP
Narodowy Bank Polski

Małgorzata Kapis has worked at the National Bank of Poland since 1986. She has been the head of the Securities Registration Division in the Domestic Operations Department for 14 years now. Graduated from the Faculty of Economic Sciences at the University of Warsaw.

NBP
Narodowy Bank Polski

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NBP
Narodowy Bank Polski

Anna Zielińska has worked at the National Depository for Securities SA (KDPW) for 12 years now. She has been a Senior Specialist at the International Relations and Harmonisation Department since 2007; before that, she worked, among others, at the Research and Development Department of KDPW. Graduated from the Warsaw School of Economics in the field Finance and Banking, and from post-graduate European studies at the University of Warsaw.

kdpw

Elżbieta Budrewicz has worked at the Warsaw Stock Exchange for over 10 years. Currently a Senior Specialist at the Research and Strategic Information Department; before that, she worked at the Strategic Planning Department. Graduated from the Warsaw School of Economics in the field of Finance and Banking, and from Post-graduate Studies in the Valuation Method of Limited Companies at the Warsaw School of Economics.

GIEŁDA PAPIERÓW WARTOŚCIOWYCH w Warszawie

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List of abbreviations

Abbreviation	English name	Polish name
ANNA	Association of National Numbering Agencies	–
AS	Ancillary System	–
ASI	Ancillary System Interface	–
BIC	Bank Identifier Code	–
BIS	Bank for International Settlements	–
CA	Corporate Action	–
CBF	Clearstream Banking Frankfurt	–
CBL	Clearstream Banking Luxembourg	–
CCBM	Correspondent Central Banking Model	–
CCBM2	Collateral Central Bank Management	–
CCB	Correspondent Central Bank	–
CCP	Central Counterparty	–
CESAME	Clearing and Settlement Advisory and Monitoring Experts' Group	–
CESR	Committee of European Securities Regulators	–
CeTO	Central Table of Offers	Centralna Tabela Ofert
CPSS	Committee on Payment and Settlement Systems	–
CRBS	Central Register of Treasury Bills	Centralny Rejestr Bonów Skarbowych
CSD	Central Securities Depository	–
CoC	European Code of Conduct for Clearing and Settlement, Code of Conduct	–

Abbreviation	English name	Polish name
COGESI	Contact Group on Euro Securities Infrastructure	–
DFS	Detailed Functional Specifications	–
DSP NBP	Payment Systems Department in NBP	Departament Systemu Płatniczego w NBP
DSPW	Treasury Securities Dealers	–
DTCC	The Depository Trust & Clearing Corporation	–
DvP	Delivery versus Payment	–
EACH	European Association of Central Counterparty Clearing Houses	–
EC	European Commission	–
ECB	European Central Bank	–
ECAF	Eurosystem credit assessment framework	–
ECAI	External credit assessment institutions	–
ECMI	European Capital Markets Institute	–
ECGI	European Corporate Governance Institute	–
ECOFIN	Economic and Financial Affairs Council	–
ECSA	European Credit Sector Associations	–
ECSDA	European Central Securities Depositories Association	–
EEA	European Economic Area	–
EFC	Economic and Financial Committee	–
EMI	European Monetary Institute	–
EMU	Economic and Monetary Union	–

Abbreviation	English name	Polish name
ESF	European Securities Forum	–
ESC	European Securities Committee	–
ESCB	European System of Central Banks	–
ESDI	Electronic System for the Distribution of Information	Elektroniczny System Dystrybucji Informacji
ESME	European Securities Markets Expert Group	–
ESRC	European Securities Regulators Committee	–
EU	European Union	–
FCD	Financial Collateral Directive	–
FESCO	Forum of European Securities Commissions	–
FESE	Federation of European Securities Exchanges	–
FISCO	Fiscal Compliance Group	–
FoP	Free of payment	–
FSAP	Financial Services Action Plan	–
FSC	Financial Services Committee	–
FSPG	Financial Services Policy Group	–
G-10	Group of Ten	–
G-30	Group of Thirty	–
GCM	General clearing member	–
HCB	Home Central Bank	–
ICAS	In-house credit assessment systems	–
ICSD	International Central Securities Depository	–
IIMG	Inter-institutional Monitoring Group	–

Abbreviation	English name	Polish name
IMF	International Monetary Fund	–
IOSCO	International Organization of Securities Commissions	–
IPO	Initial public offering	–
IRB	Internal ratings-based systems	–
ISD	Investment Services Directive	–
ISDA	International Swap & Derivatives Association	–
ISIN	International Securities Identifying Number	–
ISSA	International Securities Services Association	–
KERM	Economic Committee of the Council of Ministers	Komitet Ekonomiczny Rady Ministrów
KDPW system	Securities Settlement System in KDPW	–
KDPW	National Depository for Securities	Krajowy Depozyt Papierów Wartościowych SA
KNF	Financial Supervision Authority	Komisja Nadzoru Finansowego
KNUiFE	Insurance and Pension Funds Supervisory Commission	Komisja Nadzoru Ubezpieczeń i Funduszy Emerytalnych
KPWiG	Securities and Exchange Commission	Komisja Papierów Wartościowych i Giełd
KRM	Committee of the Council of Ministers	Komitet Rady Ministrów
LCG	Legal Certainty Group	–
MiFID	Markets in Financial Instruments Directive	–
MIG	Market Implementation Group	–
MOG	Monitoring Group	–
MOU	Memorandum of Understanding	–

Abbreviation	English name	Polish name
MTF	Multilateral Trading Facility	–
NBP	National Bank of Poland	Narodowy Bank Polski
NIK	Customer Identification Number	Numer Identyfikacyjny Klienta
NMPG	National Market Practice Group	–
OCM	Ordinary clearing member	–
OECD	Organization for Economic Co-operation and Development	–
OeKB	Oesterreichische Kontrollbank AG	–
OFE	Open pension fund	Otwarty fundusz emerytalny
OTC	Over-the-counter	–
PI	Payment Interface	–
PRIMA	Place of the Relevant Intermediary Approach	–
PTE	Pension fund management company	powszechne towarzystwo emerytalne
RBD	Council of Custodian Banks	Rada Banków Depozytariuszy
RBP	NBP Bills Register	Rejestr Bonów Pieniężnych
RCCP	CPSS-IOSCO Recommendations for central counterparties	–
RPW	Register of Securities	Rejestr Papierów Wartościowych
RRK	Capital Market Council	Rada Rynku Kapitałowego
RRRF	Financial Market Development Council	Rada Rozwoju Rynku Finansowego
RSSS	CPSS-IOSCO Recommendations for Securities Settement Systems	–

Abbreviation	English name	Polish name
RT	Rating tools	–
RTGS	Real Time Gross Settlement	–
SEG	Association of Stock Exchange Issuers	Stowarzyszenie Emitentów Giełdowych
SFD	Settlement Finality Directive	–
SMPG	Securities Market Practice Group	–
SORBNET	PLN payment system, operated by the NBP	–
SORBNET-EURO	EURO payment system, operated by the NBP	–
SPO	Secondary public offering	–
S&R	Settlement and Reconciliation	–
SSP	Single Shared Platform	–
SSS	Securities Settlement System	–
STP	Straight-through-processing	–
TARGET	Trans-European Automated Real-time Gross Settlement Express Transfer system	–
TFI	Investment fund management company	Towarzystwo funduszy inwestycyjnych
T2S	TARGET2-Securities	–
UNIDROIT	International Institute for the Unification of Private Law	–
WSE/GPW	Warsaw Stock Exchange	Giełda Papierów Wartościowych w Warszawie SA
ZBP	Polish Bank Association	Związek Banków Polskich
ZSZR	Integrated Risk Management System	Zintegrowany System Zarządzania Ryzykiem
ZUS	Social Security Office	Zakład Ubezpieczeń Społecznych

Introduction

Among the processes which take place in the capital market, the depository, clearing and settlement functions are less noticeable than trading, and knowledge about the functioning of securities depositories and clearing and settlement systems is definitely less common than the knowledge of stock exchanges. Yet the role of post-trading processes cannot be overestimated. Sometimes, post-trading infrastructure is compared to the water and sewage system of a big city: nobody notices its significance when everything functions properly, but if it fails many citizens are painfully affected. The same is true for the clearing and settlement systems for transactions in securities. As long as they function effectively and in line with the highest security standards, they attract little attention, but should they fail, the systemic risk in the capital market would increase suddenly and many market participants could incur losses.

The purpose of this study then is to systematise and disseminate knowledge about the processes taking place in the capital market, with particular emphasis on the depository, clearing and settlement functions and the awareness of the significance of those processes for the proper functioning of the financial market.

This study is presented in a period, which is particularly interesting owing to the intensity, observed in recent years, of initiatives aimed to improve the effectiveness, competitiveness and security of the functioning of post-trading infrastructure in the European Union. This results mainly from increased interest in this kind of activity on the part of various EU organisations which bring together market participants as well as capital market regulators and supervisors. That interest is in turn caused by the attempts to create a common EU financial market and the need to eliminate the existing barriers in conducting effective cross-border clearing and settlement at EU level, which would lead to equal fees for the clearing and settlement of cross-border transactions and domestic transactions.

It must be pointed out that Poland has a developed and modern depository, clearing and settlement infrastructure at a European level. Furthermore, the participants of the Polish market actively participate in a number of EU initiatives aimed at increasing the efficiency and security of the post-trading infrastructure through the harmonisation of regulations, market practice and operating systems.

This study consists of three chapters. The first chapter presents theoretical knowledge about the main processes which take place in the capital market and in entities which participate in those processes, taking into account Polish solutions in particular. The Reader may thus become acquainted with the principles governing the issue of securities, registration and deposit of securities, as well as their trading, clearing and settlement. Moreover, the Reader may find information on the role played in the capital market by issuers, investors, investment firms and banks, trading platform operators, clearing houses and central counterparties, securities depositories as well as supervisors, regulators, and central banks.

The second chapter presents the history and the present condition of the depository, clearing and settlement infrastructure in the EU Member States, including Poland. First, the Reader becomes acquainted with the history of the establishment of central counterparties and securities depositories in EU Member States; the entities which currently play the most important role in this respect are presented, as well as the trends in their activities, and the regulatory and supervisory aspects at the EU level. The second part of the chapter presents the history and functioning of securities depositories which handle the registration, depositing, clearing and settlement of transactions in financial instruments executed in Poland.

The third chapter is dedicated to the trends in the functioning of clearing houses, central counterparties and securities depositories across the world and in the European Union over recent years. In particular, the chapter presents the role of various international and EU institutions and bodies and the initiatives they take to enhance the security, effectiveness and harmonisation of the manner of carrying out post-trading services, and presents the contribution of Polish institutions to those initiatives. Against this background, the strategy for the development of the Polish capital market infrastructure is presented.

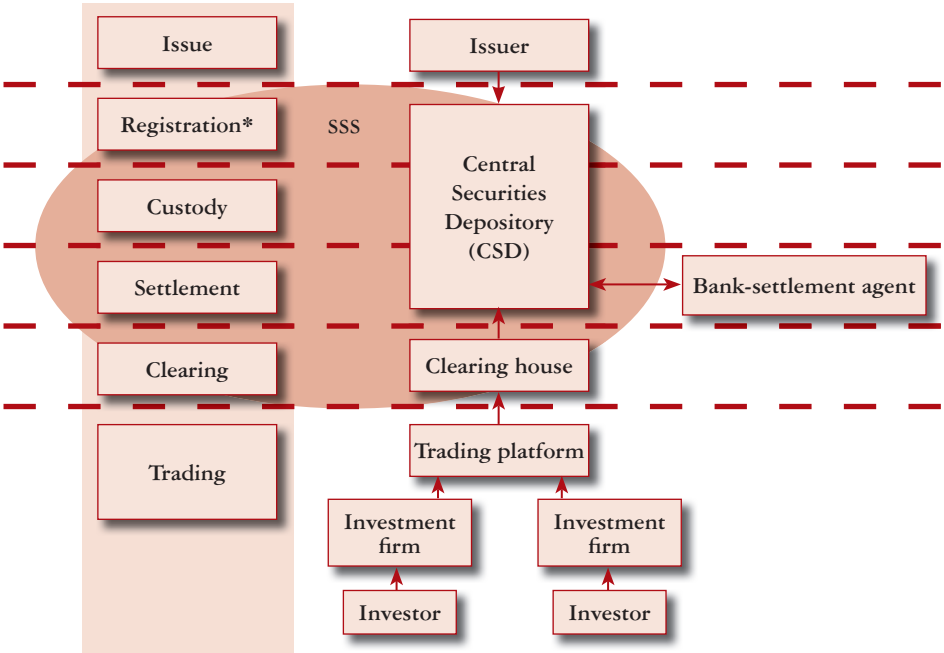
Chapter 1

Description of processes taking place in the capital market and of entities participating in these processes

1.1. Major capital market processes

The basic processes which take place in the capital market concentrate on the creation of a security and on the transfer of rights arising under a security between investors. In this respect, the capital market[1] is divided into the primary market and the secondary market. The primary market encompasses the issue and sale of securities to investors by entities authorised to issue them. In the primary market, the issuer obtains capital. The secondary market, on the other hand, includes the trading in securities issued, i.e. sale and purchase transactions in securities between investors. Such transactions may be executed

Diagram 1. Basic processes which take place in the capital market, and participating entities



* For the sake of simplicity, the diagram does not include the concept of depositing, which is analogous to registration and refers to entrusting paper-form securities to an institution which provides depository services.

Source: NBP.

[1] The capital market – a segment of the financial market where securities with original maturity of more than one year are traded. The original maturity of one year is the usually adopted line of division between the money market and the capital market.

in organised trading (e.g. at the stock exchange) or outside it. The securities of a given issuer are traded without the participation of the issuer.

The servicing of processes related to dematerialised securities turnover covers trading in securities (the execution of a transaction between investors), and post-trading activities, in particular the clearing of the transaction, i.e. establishing the amounts of mutual obligations of the trading parties, and settlement, i.e. the transfer of securities and funds between the accounts of the trading parties. Institutional solutions which serve the safekeeping and custody of securities and the clearing and settlement of transactions in securities are referred to as the securities settlement system (SSS)[2]. Diagram 1 presents the basic processes which take place in the capital market, and entities which take part in them.

1.1.1. Issue of securities

The range of financial instruments, which also include securities traded in a given capital market, depends on the legal regulations in force in that market and may therefore differ in individual markets.

In Poland, pursuant to the securities law[3], financial instruments include securities and any of the following instruments other than securities: units in collective investment undertakings, money market instruments, futures contracts, forward contracts, swaps, options, commodities futures[4], and other instruments admitted to trading on a regulated market (or sought to be admitted).

Securities include shares, bonds, pre-emptive rights, rights to shares, subscription warrants, depositary receipts, mortgage bonds, investment certificates and other transferable financial instruments listed in the Act on Trading in Financial Instruments[5], including derivative rights. Securities may take a certificated (paper) form, or they may be dematerialised. Dematerialisation means that the securities only exist as an electronic entry in the system of a depository

[2] *Securities Settlement System – The full set of institutional arrangements for confirmation, clearance and settlement of securities trades and safekeeping of securities (Recommendations for securities settlement systems,* CPSS-IOSCO, November 2001). The definition of the securities settlement system laid down in the text does not cover the confirmation of transaction terms and conditions due to the fact that this is often considered part of the process of transaction clearing, similarly as the matching of orders (French comparison).

[3] Article 2 section 1 of the Act of 29 July 2005 on Trading in Financial Instruments (Journal of Laws of 2005, No. 183, item 1538).

[4] Property rights whose price depends whether directly or indirectly on the value of items of a specified type, specified types of energy, measurements and allowances of production or pollution emissions.

[5] Act of 29 July 2005 on Trading in Financial Instruments (Journal of Laws of 2005, No. 183, item 1538).

for securities or as an entry in the IT system of an investment firm or bank. Securities traded in the regulated market in Poland only exist in dematerialised form, and are registered in the securities settlement system, managed by the National Depository for Securities SA (*Krajowy Depozyt Papierów Wartościowych SA*, KDPW).

Next, in accordance with the nomenclature which follows from the practice of trading in financial instruments, the category of derivative instruments needs to be outlined. Derivatives are financial instruments whose value depends on the value of an underlying instrument or asset (e.g. shares, currencies, interest rates, commodities). These include instruments other than securities (which are not issued), such as futures and forward contracts, options and swaps. This category also includes derivative rights, which are securities[6].

1.1.1.1 Goals and benefits of issue[7]

The primary purpose of the issue of securities (mainly shares and bonds) is to obtain funds for the financing of activities and further development of the company. An issuer who decides to issue securities via a public offering combined with a share listing in the regulated market or a Multilateral Trading Facility (MTF) may obtain additional benefits such as a greater reliability and prestige of the company, a marketing effect through the promotion of the company, obtaining a market value of the company and ensuring a greater liquidity of securities held by investors. The securities issue may be used by the company to motivate employees and managers through the offering of blocks of shares to them as part of incentive programs.

The purpose of creating or offering derivative instruments by the market operator organising trading in those instruments is to extend the range of financial instruments offered, which allows investors to use various investment strategies. These include hedging against the risk of the price change of an underlying instrument or asset, assuming risk by using price fluctuations to earn profits (speculation), and earning profits without taking risk by using differences in the valuation of the derivative and the underlying instrument/asset (arbitration).

[6] Structured certificates, which are traded on the WSE, are examples of derivative rights.

[7] M. Poślad, S. Thiel, T. Zwoliński, *Akcje i obligacje korporacyjne – oferta publiczna i rynek regulowany* [Shares and corporate bonds – public offering and the regulated market], KPWiG, Warszawa 2006, p. 27, and Bogdan Duszek, *Jak pozyskać kapitał z giełdy?* [How to obtain capital from the stock market?], GPW, Warszawa 2007, p. 7.

1.1.1.2 The issue process

In terms of the way in which securities are offered, their issue may take place through a public offering[8] or by means of a private placement.

Where a public limited company is being established, this is referred to as the issue of founders' shares. Subsequent issues of shares related to the increase of share capital may be carried out by means of a public offering or under a private placement. Similarly, bonds may be issued under a private placement or in a public offering.

The public offering of securities

A public offering is a communication in any form and by any means – made within the Republic of Poland and addressed to at least 100 investors or to an unspecified addressee – which contains sufficient information on the securities to be offered and the terms and conditions of their acquisition, so as to enable an investor to decide to purchase these securities[9]. The issuer (an entity which issues securities on its own behalf) participates in the issue of securities in a public offering[10]. In order to carry out the public offering of securities, the issuer employs an investment firm (coordinator of the issue process) and an independent auditor (who examines the financial statements). Depending on the degree of complexity of the offer, the issuer may additionally[11] employ legal and financial advisors, public relations and investor relations companies, as well as a standby underwriter (who purchases the securities which have not been subscribed on its own account) or a committed underwriter (who purchases securities on its own account in order to sell them further)[12].

The public offering or the introduction of securities to public trading in the regulated market may be carried out on the basis of a prospectus, an information memorandum or, in specific cases, without the necessity to prepare listing particulars.

[8] When a public offering is conducted for the first time, it is referred to as an initial public offering (IPO); a subsequent public offering is referred to as the secondary public offering (SPO).

[9] Art. 3 of the Act of 29 July 2005 on Public Offering and Conditions Governing the Admission of Financial Instruments to Organised Trading and Public Companies (Journal of Laws of 2005, No. 184, item 1539).

[10] A public offering may also be conducted by the owner of securities.

[11] M. Poślad, S. Thiel, T. Zwoliński, *Akcje i obligacje korporacyjne – oferta publiczna i rynek regulowany* [Shares and corporate bonds – public offering and the regulated market], KPWiG, Warszawa 2006, p. 66.

[12] A standby underwriting agreement or a firm commitment underwriting agreement is concluded in order to mitigate or eliminate the risk of issue failure.

As a rule, the first introduction of securities in the regulated market always requires a prospectus or an information memorandum (depending on the volume of the offering). The obligation to prepare a prospectus or an information memorandum does not apply to, inter alia, a public offering targeted exclusively at qualified investors[13], and when the issuers are the Treasury or the National Bank of Poland (*Narodowy Bank Polski*, NBP), or to an offering which pertains to securities whose unit nominal value is not less than EUR 50,000 or the zloty equivalent thereof, or where the shares admitted to trading on a regulated market represent less than 10% of all shares of the company over a period of 12 consecutive months, and in other cases specified in the Act on Public Offering[14]. In the case of exemption from the need to prepare listing particulars, the issuer or the selling shareholder specifies the scope and form of information given to interested investors.

Listing particulars – prospectus and information memorandum

The prospectus is the fundamental document on the basis of which the public offering is carried out. At the same time it is the main source of information for investors. On the basis of the prospectus (drawn up in English), it is possible to carry out a public offering and introduce securities to trading in the regulated market in any EU Member State. At the EU level, issues related to the obligation to approve and publish a prospectus are regulated by the Prospectus Directive[15], and – in respect of the scope and content of the prospectus – the Regulation[16] implementing this Directive. Directives are introduced to national legislation. EU Regulations are applicable in Poland directly in the Polish language version. The validity period of a prospectus is 12 months from the date it has been made available to the public. The issuer is obliged to update the prospectus in the form of an annex at the moment when events or circumstances occur which could significantly influence the price of the security prior to entry to the regulated market. The annex is subject to the approval by the Polish Financial Supervision Authority (*Komisja Nadzoru Finansowego*, KNF).

[13] See section 1.2.2 "Investors".

[14] Exemptions from the requirement to prepare a prospectus are laid down in Article 7 sections 2 to 4 of the Act on Public Offering

[15] Directive 2003/71/EC of the European Parliament and of the Council of 4 November 2003 on the prospectus to be published when securities are offered to the public or admitted to trading and amending Directive 2001/34/EC.

[16] Commission Regulation (EC) No 809/2004 of 29 April 2004 implementing Directive 2003/71/EC of the European Parliament and of the Council as regards information contained in prospectuses as well as the format, incorporation by reference and publication of such prospectuses and dissemination of advertisements.

The information memorandum presents a narrower scope of information than the prospectus. It is only prepared in specific situations provided for in the Act on Public Offering[17], e.g. in connection with the acquisition of another company or a merger with another company, in smaller public offerings whose value does not exceed 2.5 million euro, or in relation to securities already admitted to public trading in another regulated market.

Public offering and the introduction of securities to trading

The process of a public offering of shares starts with the adoption of a resolution on the public issue of shares by the shareholders of a company during the general shareholder meeting. The company must select and sign an agreement with a brokerage house to coordinate the process of the share offer. It should also commence work on preparing the prospectus together with an independent auditor, the selected brokerage house, and legal and financial advisors. On behalf of the issuer, the brokerage house submits the prospectus together with an application for its approval to the Polish Financial Supervision Authority (KNF). After the prospectus has been approved by the KNF, the brokerage house carries out the public offering of the issuer's securities in the primary market. Next, the shares of the new issue are registered by the court and at the National Depository for Securities (KDPW). If the public offering is to be combined with the introduction of shares to the regulated market, the next step is to submit an application to the market operator for the admission of the shares of the company to trading in the regulated market. After the shares of the company have been admitted to trading, they are introduced to trading in the regulated market.

Bonds may also be traded. The Treasury is the largest issuer of bonds in Poland. Treasury securities are issued by the Minister of Finance. In Poland, Treasury securities are mainly traded outside the regulated market. The remaining types of bonds, i.e. corporate bonds, bank and municipal bonds are less common. Treasury bonds are issued on the basis of a letter of issue, whereas municipal bonds, on the basis of an information memorandum. In relation to the issues carried out as public offerings, the issue process for corporate bonds and bank bonds is similar to the issue of shares, and is carried out on the basis of a prospectus approved by the KNF. The requirement to prepare the prospectus does not apply in the case of issues under private placements. In the case of non-Treasury securities, the success of the issue depends on the issuer's creditworthiness and the rating assigned by specialised rating agencies.

[17] Articles 38 to 42 of the Act on Public Offering.

In the case of derivative instruments other than securities[18], the notion of admission to trading rather than public offering applies. In the regulated market (the WSE in Poland)[19], the market operator organising trading in derivative instruments prepares a standard for derivative instruments, i.e. the basic elements for the construction of a given derivative. Next, the market operator prepares the terms and conditions of trading (including the manner of clearing) and applies to the market regulator (KNF) for approval. After approval is granted, the market operator adopts a resolution on introducing the instrument to trading. The procedures for the clearing of trades in derivatives, their registration, and the minimum amount of the margin[20] are specified by the clearing house.

An offer of securities which is not a public offering

A private placement of securities is addressed to a limited number of investors (not more than 99) and takes place pursuant to the rules specified in the general provisions of law (inter alia, in the Code of Commercial Companies in the case of shares, and the Bonds Act in the case of bonds). These securities may then be introduced to trading organised at the MTF[21], or trading of these securities may have a non-organised character[22].

1.1.2. Registration and depositing of securities

Depositing securities consists of entrusting the custody of securities in material form to an institution which provides depository services[23]. The purpose of depositing is to ensure the security of the safekeeping of financial instruments.

[18] Instruments which are not issued.

[19] In addition, in Poland derivative instruments are also traded outside the regulated market. Financial institutions (banks) offer their customers the possibility to execute sale and purchase transactions in derivate instruments on the basis of a framework agreement. The agreement is prepared based on *Rekomendacje ZBP dotyczące zawierania wybranych transakcji na polskim rynku międzybankowym* [Recommendation of the Polish Bank Association concerning the execution of certain transactions in the Polish interbank market], internal regulations (rules concerning a given product, rules governing the transaction, etc.), or based on ISDA (*International Swap & Derivatives Association*) recommendations. Procedures for establishing the margin and for clearing transactions are specified by the financial institution which offers the derivatives.

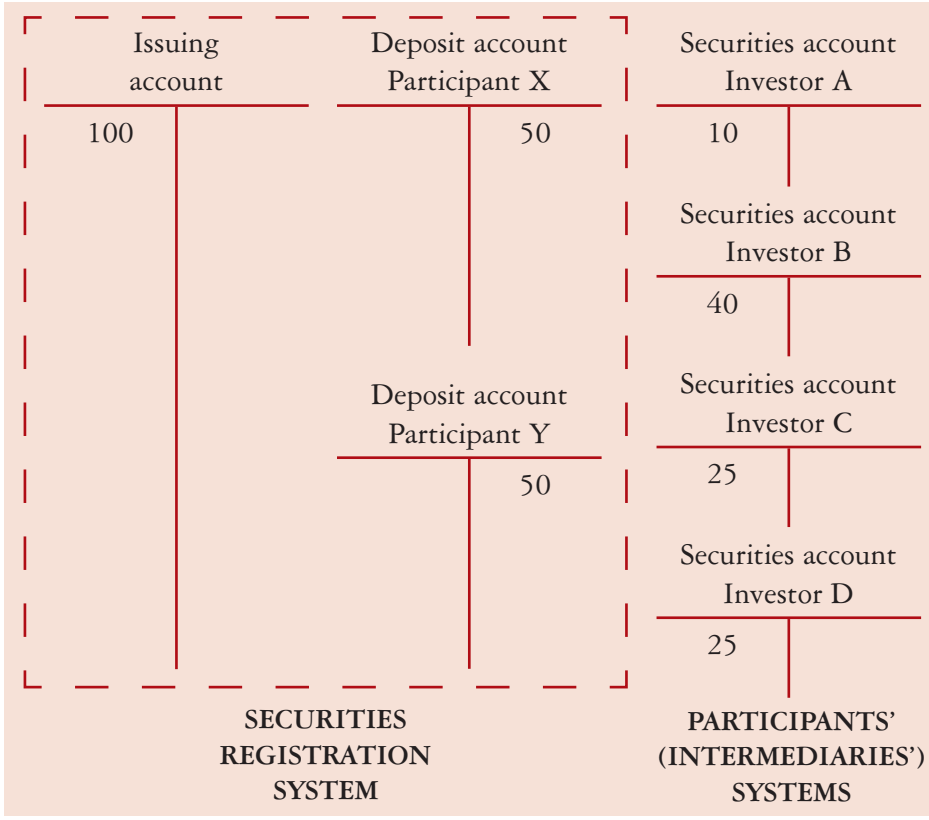
[20] This is one of the elements of clearing risk management used by the KDPW. For more information see sections 1.1.4 "Clearing", and 2.2.1.2 "The present KDPW system".

[21] Multilateral Trading Facility

[22] See also section 1.1.3 "Trading".

[23] In the *Draft Working Document on Post-Trading* of the European Commission, "deposit" is defined as "the storage of physical securities on behalf of others". See section 2.1.2.2 "The present role of securities depositories ".

Diagram 2. The system for securities registration in Poland



Source: KDPW.

Depositing may be followed by immobilisation, which means that the securities are registered on deposit accounts maintained by the depository for securities. From that moment on, they start to function in trading in the form of a book entry in the securities account held by the depository or an investment firm for their owner; the deposited certificated securities are not invalidated.

The term **registration** refers to dematerialised securities (securities which, from the moment they are created, exclusively have the form of book entries) and refers to entering the securities introduced to trading into the system of accounts held by the securities depository.

Pursuant to the Act on Trading in Financial Instruments[24], the securities depository is a system for the registration of dematerialised securities which comprises securities accounts and deposit accounts. In Poland, pursuant to the above-mentioned Act, for the majority of financial instruments the system is

[24] Article 3 section 21 of the Act of 29 July 2005 on Trading in Financial Instruments (Journal of Laws of 2005, No. 183, item 1538).

operated by the National Depository for Securities SA (*Krajowy Depozyt Papierów Wartościowych SA*, KDPW), and for Treasury bonds issued by the Ministry of Finance and money market bills issued by the NBP – the system is called the Register of Securities (*Rejestr Papierów Wartościowych*, RPW), which is maintained by the NBP.

Securities are registered at the request of the issuer. The application indicates the number and characteristic features of the securities of a given issue. After the application is approved, the institution which maintains the securities deposit adopts a resolution on accepting the securities. Owing to their fungibility[25], by way of a resolution adopted by the institution which maintains the securities depository, all securities of a given issue are marked with the same code (Poland uses the ISIN code – the International Securities Identification Number)[26] and entered in the issuing account held at the securities depository. The balance of that account reflects the volume of the issue[27].

Securities are registered in the depository in accordance with the principle of double entry bookkeeping: entries in deposit accounts correspond to entries in issuing accounts and reflect the balance of securities owned by investors. Deposit accounts may be maintained on an individual basis (direct holding system) or at the level of intermediaries: custodian banks and brokerage houses (indirect holding system). In the case of the first model, apart from issuing accounts, the securities depository also holds deposit accounts directly for final investors. This solution, applied in some capital markets, e.g. in Scandinavia or Greece, is not applied in Poland. In the case of the other model (applied by the Polish depository for securities), deposit accounts are global, i.e. they register the general number of securities held by the clients of intermediaries. In their systems, in turn, intermediaries maintain detailed registers for their clients: final investors or other intermediaries. The register of financial instruments for final investors is maintained on *securities accounts*, where the right to financial instruments is registered.

In accordance with the definition laid down in the Act on Trading in Financial Instruments[28], securities accounts allow for the identification of the holders of

[25] This means that all securities covered by a given issue give the same rights to their owners.

[26] ISIN is a code which allows for the identification of a security in the trading and settlement process.

[27] The description only concerns securities. In the case of derivatives, registration takes place on accounts maintained by the clearing house in the process of the registration of operations (mainly transactions) in those instruments through the recording of the positions taken by the seller (short position) and the buyer (long position). Therefore, the issuing account is not maintained for derivatives.

[28] Article 4 of the Act on Trading in Financial Instruments.

rights arising under the financial instruments registered therein (final investors), and may be maintained for those persons by brokerage houses, banks conducting brokerage activities, custodian banks, foreign investment firms, KDPW, and the NBP. The balances of deposit accounts held for the intermediaries at the securities depository are a collective reflection of the balances of securities accounts held by the latter for their clients. The sum of the balances of securities accounts maintained by an intermediary should be the same as the balance on the deposit account maintained for that intermediary. Diagram 2 presents the system for the registration of securities in Poland.

Entries in deposit accounts and the related entries in securities accounts arise as a consequence of the transfer of **rights** in securities between final investors, as a result of a distribution in the primary market, or following a transaction in the secondary market. In both cases, financial instruments are transferred in the process of the simultaneous debit and credit of deposit accounts.

Where an investor needs to present a written confirmation of holding rights which arise under the securities entered in his/her account (e.g. for the purpose of participating in the general shareholder meeting of the company whose shares he/she holds), the entity which maintains such an account issues a **deposit certificate** in writing, in the name of the holder. The securities indicated in the certificate are blocked on the account, which makes it impossible to sell them within the validity period of the deposit certificate.

1.1.3. Trading

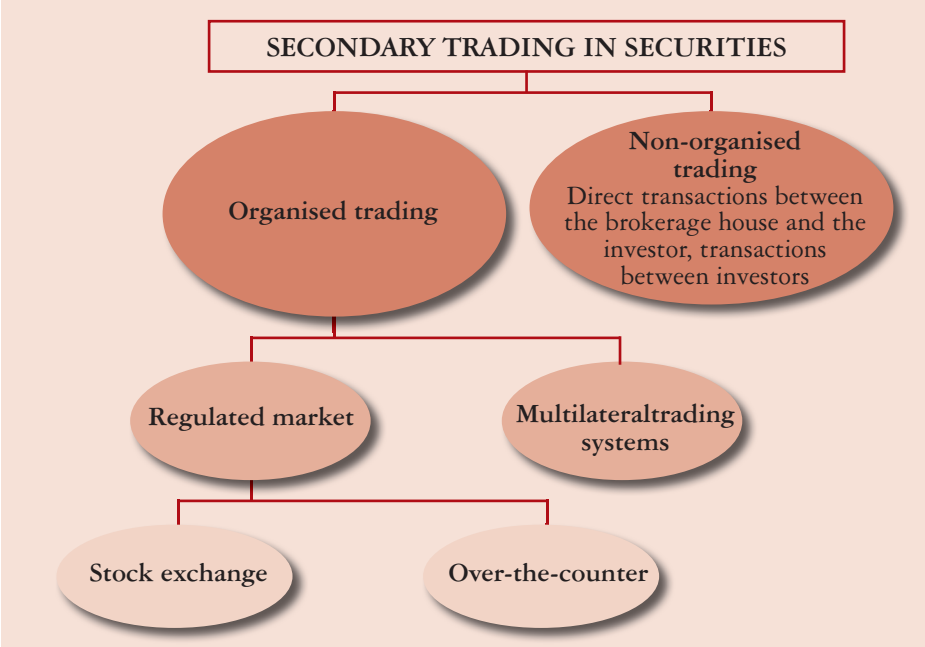
The securities issued and sold to the first owner enter trading in the secondary market. Trading in the secondary market is to be understood as the execution of transactions in securities (matching buy and sell orders) between investors (without the participation of the issuer)[29]. Diagram 3 presents the structure of secondary trading in securities.

Organised trading is understood as trading in securities or other financial instruments on a regulated market or in an alternative trading system in the territory of the Republic of Poland[30]. The regulated market is a system used for trading in financial instruments admitted to that trading which operates on a permanent basis, ensures that investors have common and equal access to market information at the same time as sell and buy orders for financial

[29] Detailed regulations concerning secondary trading can be found in the Act on Trading in Financial Instruments (inter alia, Article 3 section 7, and Part II Secondary Trading in Financial Instruments).

[30] Article 3 section 9 of the Act on Trading in Financial Instruments.

Diagram 3. Structure of secondary trading in securities



Source: WSE

instruments are matched, and the same conditions for purchasing and selling those instruments, organised and supervised by the KNF[31]. The KNF indicates regulated markets which operate in Poland to the European Commission (EC). The European Commission publishes a list of all regulated markets which operate in each EU Member State. The MTF[32] is a multilateral system for trading outside the regulated market, organised by an investment firm or a company which operates a regulated market.

At present, the investor has the possibility to execute transactions in the regulated market (the stock exchange market, operated in Poland by the Warsaw Stock Exchange (WSE), and the over-the-counter market, operated in Poland by MTS-CeTO SA), and outside the regulated market, i.e. at the MTF (the NewConnect market for shares and MTS Poland for bonds[33]), directly with an

[31] Article 14 of the Act on Trading in Financial Instruments.

[32] Article 3 section 2 of the Act on Trading in Financial Instruments. As compared to the regulated market, the MTF market is characterised by lower information requirements in respect of the listed instruments, and more flexible procedures for the admission of instruments and participants to trading. The MTF is characterised by a higher investment risk for investors due to a smaller transparency of the market. Owing to simpler regulations and lower requirements of the regulator, MTFs may constitute cheaper trading platforms than regulated markets, and, depending on the business model adopted, this may relate to the issuer or investor.

[33] It is worth noting that, on the one hand, MTS Poland does not constitute an alternative trading system within the meaning of the provisions of Polish law (Article 3 section 2 of

investment firm (direct transaction[34]) or with another investor[35]. In Poland, the intermediation of an investment firm is only required for trading in the regulated market[36]. The investment firm is obliged to ensure that investors have the best possible results for executing the order – the best execution principle.

An investor who intends to execute a transaction in the regulated market needs to conclude an agreement and set up an investment account with a selected investment firm. The investment account consists of a securities account and a cash account. In the case of derivative instruments, the investor must also obtain a Client Identification Number (*Numer Identyfikacyjny Klienta*, NIK), assigned by the clearing house. The investment firm whose customer has ordered the execution of a transaction is responsible for the proper execution of the order. When executing a transaction at the MTF, there is no obligation to use the intermediation of an investment firm. The investor may place an order which is then directly matched with the order of another investor.

In order to execute a transaction in the organised market, a customer submits a sell or buy order for financial instruments to the investment firm. Orders may be placed in person at the brokerage house or otherwise via the telephone, fax or the Internet. The order is verified by the investment firm. The verification covers, *inter alia*, checking whether the investor holds the securities he/she wants to sell on his/her account, or whether he/she has a sufficient amount of money if he/she wants to buy them. Next, the order is passed on for execution. The buy and sell orders are matched by the trading system according to strictly specified criteria. The matched orders form a transaction. Upon its conclusion, the market operator sends a confirmation of the execution of the trade to the investment firms. The investment firm informs the investor that the transaction has been executed. Upon approval by the investment firm the confirmation of the trade is sent to the clearing house for clearing (in Poland, this function is performed by KDPW).

A transaction outside the organised market may be executed directly with an investment firm or another investor. The investment firm may execute

the Act on Trading in Financial Instruments), being a market where the trading in Treasury securities is organised. On the other hand, MTS Poland features on the MTF list published by the Committee of European Securities Regulators (CESR) Pursuant to the requirements of the MiFID.

[34] Direct transaction consists of the investment firm executing the buy or sell order for securities admitted to organised trading by executing a sale agreement on its own account with the customer (Article 74 of the Act on Trading in Financial Instruments).

[35] In practice, the term "over-the-counter" (OTC) is used in reference to all transactions executed outside the stock exchange trading floor proper.

[36] Initially, the principle of the intermediation of investment firms dominated in regulated markets. At present, many markets are moving away from the exclusivity principle.

the customer's order by concluding a financial instruments sales agreement with the customer on its own account. Executing transactions directly with the investment firm requires the customer's consent to that manner of order execution in an appropriate contract on the provision of services. The investor may also execute a transaction with another investor pursuant to the general provisions of civil law.

1.1.4. Clearing

The conclusion of a transaction described in section 1.1.3 is the first stage of its execution, which initiates the so-called transaction chain. This covers the entire cycle of transaction processing – from its conclusion, through clearing, to settlement, which completes the execution through the transfer of funds to the seller and of the purchased securities to the buyer.

Once the transaction has been executed, it is necessary to establish the amounts of obligations of the parties which arise under that transaction, and to check the availability of the assets (securities and funds) necessary to meet those obligations[37]. This process is referred to as **clearing**. It is carried out by clearing houses, which may be operated within the central depository for securities or by separate entities.

In Poland, both for securities, and for derivative instruments, transactions executed in the regulated market (as well as outside this market, if they involve financial instruments registered at KDPW) are cleared in KDPW. On the basis of the transaction confirmation received from the regulated market, KDPW calculates the debits and credits in respect of the financial instruments involved in the transaction and the funds, taking into account the planned date of execution of the obligations.

Obligations which arise under individual transactions may be calculated separately on a gross basis, or netted. **Netting**, i.e. calculating obligations on a net basis, consists of reducing obligations of a financial institution to be executed on a given day (or in a given clearing session, if clearing is carried out in a number of sessions within a day) by its due amounts on that day (session), and may be applied to mutual obligations of two participants (**bilateral netting**) or a group of participants (**multilateral netting**)[38]. Netting may pertain to obligations in securities or cash, and applying it reduces the number and volume

[37] On the basis of the definition laid down in the EC document *Draft working document on post-trading activities*, 23 May 2006, http://ec.europa.eu/internal_market/financial-markets/docs/clearing/draft/draft_en.pdf.

[38] *A glossary of terms used in payments and settlement systems, Committee on Payment and Settlement Systems, Bank for International Settlements*, March 2003, pp. 9 and 33.

of transfers of securities and cash flows. After the amount of obligations has been established, the institution which carries out the clearing notifies (by way of reports) the parties to the transaction of their amounts due and obligations, which allows them to prepare the assets necessary to perform the settlement on the designated day.

The last element of clearing is **verifying the availability** of securities and funds necessary to execute the obligations. If they are available, the transaction is passed on for further processing – i.e. settlement. In case it is established that there are not enough assets, the clearing house may refrain from processing the transaction any further and inform the interested financial institution of this or attempt to obtain the assets necessary for the settlement, using mechanisms to ensure transaction processing liquidity, such as securities loans, the settlement guarantee fund, or collateral[39].

The clearing of transactions in derivative instruments that are not securities starts with the registration on accounts held by the clearing house[40] (and on securities accounts maintained by investment firms) of derivative instruments which arose as a result of the transaction. Next, the clearing house estimates the risk of the parties' defaulting on obligations they entered into, using mathematical models. On this basis, it sets the amount of the margin, i.e. a reserve of financial instruments and funds to be transferred by the parties to the transaction to the clearing house in order to guarantee the execution of their obligations which arise as a result of the positions taken[41]. The clearing house constantly monitors the market situation (the prices of financial instruments, the turnover), which influences the level of risk, and updates the amount of margins charged at least once a day (more often in case of sudden changes in the market)[42].

The margins are updated on a daily basis until the investor closes the position held in derivative instruments, either by concluding an opposite contract or by executing the rights which arise under the derivative. In the first case, the derivative is deleted from the account, which closes the clearing process. In the second case, when the rights arising under the derivative instruments

[39] For a more detailed description of the mechanism for clearing optimisation see section 2.2.1.2. "The present KDPW system" in the "Risk management" paragraph, and those used by the RPW – in section 2.2.2.2. "Characteristics of the RPW", in the "Risk management" paragraph.

[40] For the purposes of clearing in the derivatives market, KDPW maintains accounts at the level of individual investors (identified by the NIK (client's individual number) client code), which, nevertheless, are not securities accounts.

[41] In many countries, margins are also used in the spot market.

[42] More information on the risk management system used by KDPW is included in section 2.2.1.2. "The present KDPW system" in the "Risk management" paragraph.

are executed, the clearing house specifies the type and amount of obligations which arise under the contract and passes them on for settlement.

1.1.5. Settlement

Transaction **settlement** is the last element of the transaction chain in the case of dematerialised securities. It consists of the transfer of rights from securities effected by debiting the account of the party delivering the securities (transferor) and by crediting the account of the party receiving the securities (transferee), as well as the execution of the corresponding cash flows, if necessary. The aim of settlement is to complete the securities transaction, via the transfer of financial instruments and cash between the accounts of the transaction parties (i.e. usually between the accounts of the transferor and the transferee)[43]. Settlement is generally executed by central securities depositories on deposit accounts held by them. In Poland, under the Act on Trading in Financial Instruments[44], the settlement of transactions executed in the regulated market and in the MTF is carried out by KDPW.

Obligations resulting from transactions may be effected on the trade day or on any other day indicated in the transaction as the settlement day. The settlement period is usually based on the standard settlement cycle adopted in a given market. In the Polish capital market, the period for executing obligations resulting from transactions executed in the regulated market is 3 days (T+3)[45]. There is an exception to this principle, namely, the settlement period for transactions in Treasury bonds is 2 days (T+2). Parties to transactions executed outside the regulated market may establish the settlement date between themselves.

Settlement may take place on a delivery versus payment (DvP) basis or a free of payment (FoP) basis, depending on whether the payment is made upon the delivery of securities or not. In the case of a FoP delivery, settlement consists of the transfer of securities between accounts. In the case of delivery versus payment, the settlement of securities involves a simultaneous transfer of funds, i.e. debiting the cash account of the party delivering funds, and crediting the account of the party receiving the funds as a result of transaction clearing[46].

[43] On the basis of the definition laid down in the document *Draft working document on post-trading activities*, of the European Commission, 23 May 2006, http://ec.europa.eu/internal_market/financial-markets/docs/clearing/draft/draft_en.pdf.

[44] Article 48 section 2 of the Act on Trading in Financial Instruments.

[45] This means that transaction settlement is effected on the third day following the day the transaction has been executed.

[46] According to the classification of the Bank of International Settlements (BIS) in Basel presented in the paper entitled: *Delivery versus Payment in Securities Settlement Systems* (September

Settlement may be performed using central bank money (via cash accounts held by a central bank for settlement participants) or in commercial bank money (via cash accounts held with a commercial bank). The central securities depository may also act as a commercial bank, if there is a relevant legal basis for such an entity. In Poland, cash settlement of transactions in securities denominated in the Polish zloty and the euro is effected in central bank money. An institution which carries out the settlement on the basis of *delivery versus payment* is obliged to ensure that the transfer of securities takes place only when the transfer of funds is effected, and *vice versa*. Therefore, it is important to carry out both parts of settlement simultaneously. When there is an insufficient amount of securities or funds, transaction settlement is not effected and settlement fails management procedures are launched. In such situations, KDPW – which executes both the clearing and the settlement of transactions, and the two processes are closely linked with each other – applies the procedures described in section 1.1.4 as mechanisms ensuring clearing liquidity[47].

In Poland, the transfer of rights from securities takes place when an appropriate entry is made on the securities account. Pursuant to the Act on Trading in Financial Instruments[48], such an entry may be made only upon the registration of the transfer of securities between relevant deposit accounts maintained by KDPW. The cycle of executing transactions in the capital market is completed when settlement is effected.

The process of securities clearing and settlement is closely related to the management of a variety of risks that are present during the process. The basic types of risks in this respect include credit risk[49], liquidity risk[50], and operational risk[51].

1992), there are three models of DvP settlement: Model 1 Gross settlement in securities and funds transfers, Model 2 Gross settlement of securities transfers followed by net settlement of funds transfers and Model 3 Simultaneous net settlement of securities and funds transfers.

[47] For more information about the procedures see section 2.2.1.2. "The present KDPW system", and section 2.2.2.2. "Characteristics of the RPW".

[48] Article 7 of the Act on Trading in Financial Instruments.

[49] Credit risk is the risk that a transaction party does not settle the full amount of the obligation, neither within the prescribed deadline nor in any other period of time. Credit risk may be limited by carrying out settlement on a DvP basis in real time.

[50] Liquidity risk is the risk that a transaction party (or a participant of the settlement system) does not settle the full amount of the obligation on time. Liquidity risk does not make a transaction party or a participant insolvent, as it is possible for them to settle the required obligation later, on an unspecified date.

[51] Operational risk is the risk of an unexpected loss incurred by system participants, which arises from incorrect system functioning as a result of human or technical errors or an external event, e.g. a terrorist attack.

1.2. Entities operating in the capital market and their function

1.2.1. Issuers

An issuer in the capital market is an entity that issues securities on its own behalf. Various entities may be issuers, e.g. enterprises, general government institutions, or financial institutions (e.g. investment funds, pension funds, banks, brokerage houses, insurance companies). The right of these entities to issue any given types of securities is defined by the relevant acts, e.g. the Polish Code of Commercial Companies and Partnerships, the Bonds Act, the Act on Investment Funds, and the Act on Public Finances.

Issuers in the capital market ensure the supply of securities. By selling securities to investors, issuers acquire capital to finance their activity. A broad offer of securities in the market provides investors with greater possibilities to diversify their investments. There are usually two types of issuers in the capital market: issuers of shares and issuers of bonds.

1.2.1.1. Issuers of shares

Shares are securities which are related to the establishment and functioning of joint-stock companies. Shares may be issued by enterprises which carry out economic activities in the form of a public limited company and a limited joint-stock partnership. A share is an equity security which confirms that its holder holds a share in the capital stock of a company. The most important shareholder rights include the right to participate in the general shareholder meeting, voting rights, rights to a share in the profits (right to dividend) and subscription rights when new shares are issued.

Companies may acquire capital through an issue under private placement, addressing securities to not more than 99 investors. However, a public offering provides companies with greater possibilities to acquire capital. In most cases, such issues are connected with their introduction to regulated trade. In Poland, it is mostly the WSE market. The majority of share issuers on the Polish stock exchange are companies of private origin[52], followed by companies in which the Treasury has a share and private companies of public origin. Foreign issuers of shares are also strengthening their presence on the Polish stock exchange, which is mainly the effect of Poland's membership of the EU[53]. Foreign companies are

[52] *Rodowód spółek giełdowych*, [The Origins of Stock Exchange Companies], Rocznik Giełdowy 2008, p. 123.

[53] This is related to the existence of the so-called single European passport for issuers.

dual listed (they are listed both on a foreign stock exchange and on the WSE) or only in the Polish market.

1.2.1.2. Issuers of bonds

A bond is a debt security in which the issuer states that it owes the bond owner (bond holder) a debt, and undertakes to fulfil a given obligation[54].

Bonds are issued, e.g. by companies, municipalities and local authorities, banks and the State Treasury. For an issuer of non-Treasury securities, the creditworthiness of a given issue and an appropriate rating assigned by specialised rating agencies are important. The largest rating agencies are: Moody's, Standard&Poor's, and Fitch Ratings.

In Poland, Treasury bonds are the most frequently traded debt securities. Treasury debt securities are perceived as a secure and safe investment, as their buyout is guaranteed by the state, which contributes to a demand for these securities throughout the world.

Bonds may also be issued by local governments, e.g. municipalities, administrative districts, voivodships and associations of these units[55], and abroad they can be issued, e.g. by school districts. They are considered to be the second safest securities with Treasury securities leading the ranking and are usually issued under private placement.

Corporate bonds are issued by entities which carry out economic activity and have legal personality (e.g. public limited companies and limited liability companies) under the Bonds Act. The yield on corporate bonds is calculated in relation to the issuer's insolvency risk. In Poland, the issue of corporate bonds is a less popular form of obtaining foreign capital as compared with bank loans. One reason for this is the poor knowledge of the debt securities market on the part of potential issuers, issue-related costs and the need to improve company transparency[56]. A broad variety of safer Treasury bonds may also contribute to limiting the development of this market segment. At the same time, bonds are gaining in significance among debt securities and it is likely that this market segment will be developing dynamically in the future.

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[54] Article 4 Para. 1 of the Act of 29 June 1995 on Bonds (Journal of Laws of 2001, No. 120, item 1300).

[55] Article 2 Para. 2 of the Act on Bonds.

[56] See *"Wybrane determinanty rozwoju rynku akcji i korporacyjnych instrumentów dłużnych w Polsce. Wyniki badania ankietowego"* [Selected determinants of the development of the stock market and the market of corporate debt securities in Poland. Results of the survey]. National Bank of Poland, Warsaw, January 2005. The survey was carried out in 2004, in cooperation with the Polish Securities and Exchange Commission and the Warsaw Stock Exchange.

Various types of financial institutions, such as: banks, international financial institutions, and central banks may also issue bonds. Among bonds that are most frequently found in the market are bank bonds. Polish banks rarely use bonds to finance their activity; they usually allocate proceeds from the issue to increase lending.

1.2.2. Investors

An investor is a natural person, a legal person or an organisational unit which does not have legal personality, who invests capital to gain profit. By buying securities in the primary market, investors represent the demand side of the capital market. As participants of the purchase of securities in the primary and secondary market, they hope to achieve a level of income which would be attractive in comparison with alternative forms of investing, e.g. in a bank. There are two main categories of investors in the capital market: individual investors and institutional investors.

Individual investors are usually small investors. Among them are those who allocate their savings in securities occasionally, and those who are more active and more experienced, who analyse the market systematically and see investment as their source of income. EU regulations, in particular the Markets in Financial Instruments Directive (the MiFID)[57], and the Polish Act on Trading in Financial Instruments provide retail clients (individual clients) with protection in contacts with investment firms. One of its elements is the best execution principle. Individual investors may form an association in investors' clubs. Members are obliged e.g. to act together to gain knowledge on investment rules in organised trading, among others, through investing collectively in dematerialised securities admitted to trading in the regulated market.

Institutional investors are usually participants of market trading who are professionals in terms of knowledge, experience and funds (financial resources, know-how related to investing in the capital market, and trained staff). They have own capital or they allocate their clients' funds as investments, deposits and contributions in the capital market, according to the investment strategy adopted. EU (the MiFID) and Polish regulations (the Act on Trading in Financial Instruments) provide institutional investors (professional clients of investment firms) with less protection in contacts with investment firms than the protection granted to individual investors, as they have professional knowledge and

[57] Directive 2004/39/EC of the European Parliament and of the Council of 21 April 2004 on markets in financial instruments amending Council Directives 85/611/EEC and 93/6/EEC and Directive 2000/12/EC of the European Parliament and of the Council and repealing Council Directive 93/22/EEC.

experience. Institutional investors mainly include financial institutions, such as banks, investment funds, open pension funds, insurance companies and asset management companies.

The Act on Public Offering also introduces a separate category of investors, the so-called qualified investors[58], to whom a public offering organised without a prospectus may be addressed. A qualified investor may be e.g. a financial institution or another legal person entitled to operate in financial markets, a state, a central bank of a state, a small or medium-sized enterprise, or a natural person, who meets the requirements laid down in the aforementioned Act. Legal or natural persons should have sufficient funds or experience in operating in financial markets. Entities that wish to obtain qualified investor status must be entered into the register of qualified investors kept by the KNF.

Banks may be divided into universal and specialised banks, including investment banks. Universal banks mainly carry out deposit and lending operations. Investment banks specialise in varied investment activities, e.g. offering services related to the issue and trading of securities or advisory services on mergers and acquisitions. Owing to their large assets they act as active institutional investors.

Investment funds are collective investment institutions. Their aim is to invest the funds paid by fund participants as profitably as possible. Investment funds are managed by investment fund management companies (*towarzystwo funduszy inwestycyjnych*, TFI). Funds may be divided into open-end investment funds and specialised open-end investment funds that sell and repurchase participation units, and closed-end investment fund that issue investment certificates[59]. In many countries, funds allocated in funds exceed funds collected on bank accounts.

Open pension funds (*otwarty fundusz emerytalny*, OFE) are a specific type of collective investment institutions. They collect funds for future pensioners and invest them in securities or other assets to achieve maximum security and yield on deposits[60], in accordance with the adopted investment strategy. The volume of the participant's holdings in fund assets is reflected by the value of his/her participation units. OFEs are an essential element of the new pension system, the so-called second pillar. They are set up and managed by pension fund management companies (*powszechne towarzystwo emerytalne*, PTE). Taking

[58] Article 8 of the Act on Public Offering.

[59] Types and rules of functioning of investment funds are governed by the Act of 27 May 2004 on Investment Funds (Journal of Laws of 2004, No. 146, item 1546).

[60] Article 139 of the Act of 28 August 1997 on the Organisation and Operation of Pension Funds (Journal of Laws of 1997 No. 139, item 934).

into account the value of assets they manage and their systematic growth, open pension funds are among significant institutional investors operating in the Polish capital market.

Insurance companies are financial institutions which offer different insurance services within two main branches: sector I – Life insurance and sector II – Non-life insurance[61]. Within the first sector, the insurance companies offer their customers both typical protection products as well as investment products, e.g. life insurance coupled with an investment fund. Part of the investor's contribution is invested to build up a sufficient amount for the payment of the future benefit.

Asset management companies provide services of securities package management on commission. These services may be provided by brokerage houses and investment fund management companies. Such services may be provided only to investors with large funds. Typically, asset management companies offer their customers a selection of some basic portfolios with a varying share of individual types of securities, with a specified rate of return and investment risk level.

1.2.3. Investment firms and banks

Investors operate in the capital market through financial institutions: investment firms and banks. According to Polish law, the term **investment firm** refers to brokerage houses, banks that conduct brokerage activities, and foreign investment firms that conduct brokerage activity in Poland. Brokerage activity includes receiving and transmitting orders to purchase or sell financial instruments and executing the orders on behalf of their customers, concluding transactions on their own account, managing share portfolios, offering financial instruments, providing services related to the issue and introduction of financial instruments, and maintaining securities accounts and cash accounts used to service them, offering investment advisory services and managing an MTF[62]. Conducting investment activities requires permission from a supervisory authority of a country where a given investment firm has its registered office. Investment firms provide services both to investors and to issuers. The main activity of investment firms is to provide investors with brokerage services, which means that a brokerage house executes securities sale and purchase contracts on behalf of customers. Polish regulations oblige investors to execute transactions in the regulated market through investment firms. To that end, the investor signs an

[61] The Act of 22 May 2003 on Insurance Activity (Journal of Laws of 2003, No. 124, item 1151) determines the types of insurance according to branches, groups and types of risk.

[62] Article 3 section 33 and Article 69 of the Act on Trading in Financial Instruments.

agreement with the investment firm to provide brokerage services, including the maintenance of a securities account and a cash account. The investment firm puts orders made by customers on the market, and acts as an intermediary in the execution, clearing and settlement of orders.

Investment firms also offer their customers services related to securities management (making investment decisions and effecting them for the customer, in accordance with general terms set in the agreement) and advisory services related to trading in securities (preparing recommendations for customers).

Investment firms also represent investors in securities clearing and settlement systems maintained by clearing houses and central securities depositories, acting as clearing members in the case of clearing houses, or as settlement agents in the case of central securities depositories. Investment firms which are not direct participants of these institutions clear and settle transactions executed by them through the intermediation of other investment companies.

Investment firms maintain a register of securities owned by their customers and of their own securities, on the basis of securities accounts they maintain. Entries in these accounts are made on the basis of information received from an institution which maintains a securities depository (in the form of an extract from an account). It is the responsibility of investment firms to ensure consistency between the register maintained by them with the entries on the accounts maintained in the securities depository.

As cash settlement of capital market transactions in Poland is effected through current accounts maintained exclusively for banking entities by the central bank, non-banking investment firms use the so-called payment banks for these activities.

In the market, investment firms may also act as entities representing the issuer. They offer advisory services to enterprises that plan to obtain capital through the issue of securities. These services include advice on issue structure, preparation of analyses and documentation, support in contacts with the regulator, marketing of the offer and the sale of securities. Acting as the sub-issuer, investment firms may guarantee a successful issue by undertaking to purchase securities not subscribed for by investors. They also advise in merger and acquisition processes and participate in the restructuring and privatisation of state-owned enterprises.

1.2.4. Trading platform operators

Trading platform operators in the capital market are entities conducting economic activities or investment firms which organise and operate a trading system that matches buy and sell orders for financial instruments. Platform

operators manage stock exchange markets, OTC markets and Multilateral Trading Facilities.

The history of stock exchanges goes back to the 13th and the 14th centuries[63]. In the cities of Northern Italy (Florence, Genoa, Venice) regular meetings were organised by participants concluding transactions in foreign currencies and bills of exchange. As the trade continued to develop, the meetings were also held in other European cities. In Bruges, the meetings took place in the house of the *van den Beurse* merchant family. The name of the stock exchange in many European countries originates from the name of this family. The Polish name of the stock exchange ("*giełda*") derives from the German word *die Gilde*, which means a professional association, a type of merchant guild. The first stock exchange was established in the 16th century in Amsterdam, and in the 17th century the first shares were traded there. Thus, the stock exchange in Amsterdam became the first stock exchange which traded in securities. In the second half of the 20th century, electronic regulated OTC markets developed. The first entirely electronic OTC market, the Nasdaq, was established in 1971. At present, there is a noticeable development of new securities trading platforms MTFs[64]. Their development is particularly prevalent in the United States, where they have become a serious competitor to traditional stock exchange markets, gaining up to 30% of trading in securities market. In the European market, MTFs developed mainly in countries where the trading concentration rule in regulated markets was not mandatory (like in e.g. the United Kingdom). The introduction of the MiFID finally abolishes the concentration rule. As the European financial market is becoming more liberal, MTFs are also growing in importance in the European market.

The MiFID regulates the operating principles for market operators in the European market. Pursuant to the MiFID, entities which operate regulated markets (stock exchanges and OTC markets) are subject to stricter organisational or functional requirements than other trading systems. At the national level, the principles of operating trading platforms are regulated by the Act on Trading in Financial Instruments.

Trading platforms are responsible for organising trading in financial instruments. Platforms ensure the concentration of supply and demand for financial instruments, safety and efficiency of transactions and promote information on quotations and executed transactions. The management of a trading platform

[63] See W. Januszkiewicz, *Giełdy w gospodarce światowej* [Exchanges in the world economy], PWE Warsaw 1991, p. 168.

[64] See section 1.1.3 "Trading".

requires obtaining permission from a relevant authority. The main trading platforms in the Polish capital market are:

- the stock exchange market operated by the WSE,
- the OTC market operated by MTS-CeTO SA; one of its shareholders is the WSE,
- the NewConnect market, which is a non-regulated market (MTF), operated by the WSE.

1.2.4.1. The Warsaw Stock Exchange

The origins of the Polish stock exchange go back to the beginning of the 19th century. In 1817, the Mercantile Exchange (*Giełda Kupiecka*) was established in Warsaw. When the Second World War broke out, it was closed. The WSE commenced its activities in its present legal form on 16 April 1991, after a break of nearly fifty years. During the first session, the shares of five companies were listed (Tonsil, Próchnik, Krosno, Kable and Exbud).

The WSE is a public limited company established by the State Treasury which is its majority shareholder (at present, it holds 98% of its equity capital). The following entities may also become shareholders of the stock exchange: investment firms, banks, investment fund management companies, pension fund management companies, and issuers of securities listed on the stock exchange. The shares of the stock exchange may be purchased by other domestic and foreign legal persons upon receiving consent of the KNF. If the stock exchange becomes a public company, these restrictions will not remain in force.

The WSE provides trading in financial instruments in two markets: the WSE main market and the NewConnect market. The WSE main market has been operating since the beginning of the WSE on 16 April 1991. It is a regulated market supervised by the KNF and listed in the European Commission's register. The members of the stock exchange are the transaction parties: brokerage houses and banks which act as intermediaries in transactions executed by investors. The stock exchange also has so-called remote members. These are foreign companies with direct access to the stock exchange trading system without being physically and formally present in Poland, or using the intermediation services of Polish companies.

The WSE is the largest regulated market in Poland. The main financial instruments listed on the WSE are shares and derivatives. Derivatives appeared on the WSE in 1998. They were WIG20 Index Future contracts. At the end of September 2008, the following derivatives were listed on the WSE: index future contracts, share future contracts, foreign exchange future contacts, as well as index options and index participation units.

On 30 August 2007, the WSE launched an MTF – the NewConnect market, which is a non-regulated market. At the first session, the shares of five companies were listed. NewConnect is a stock market which finances the development of start-up, developing companies with high growth potential. Due to simplified formal requirements (in respect of admission to the market and information requirements), access to the market is easier. The process of entering into the NewConnect market is faster as compared to the regulated market and lasts around 3 months. A company planning to debut on the NewConnect market is supported in its preparations for the debut by an authorised adviser. It cooperates with the company, advising on how to function in the NewConnect market and giving support in meeting information requirements for at least one year from its debut on the NewConnect market.

1.2.4.2. MTS-CeTO SA

The OTC market was established in Poland in January 1996, under the name of the Central Table of Offers (Centralna Tabela Ofert SA, CeTO), on the initiative of more than 20 major Polish banks and brokerage houses. In 2004, CeTO formed a strategic alliance with MTS S.p.A. (MTS), an Italian company, and changed its name to MTS-CeTO SA. The MTS associates and provides services to a group of electronic securities trading markets throughout Europe. The WSE holds 31.1% of shares in the MTS-CeTO SA capital, banks hold a total of 30.95% shares, and MTS – 25% of shares.

MTS-CeTO SA manages:

- The regulated OTC CeTO Securities Market, which is supervised by the KNF (bonds, mortgage bonds, shares and investment certificates are listed there according to the same rules as on the WSE), and
- The non-regulated MTS Poland market, which is a wholesale Treasury bonds and bills trading market.

1.2.5. Clearing houses and central counterparties

Clearing houses are institutions that clear transactions in securities. The function of the clearing house may be performed by a specialised institution appointed for this purpose, or by a separated part of an institution that operates a stock exchange or a central securities depository (in Poland is the function is performed by KDPW).

Clearing houses may provide services to one or several segments of the capital market. In the case of providing services to the non-regulated market, they match orders which constitute the transaction (in regulated markets this is done when the transaction is executed by the trading platform operator),

which gives the transaction parties the possibility to confirm the terms of the transaction before its final execution (settlement).

However, the main task of clearing houses is to clear transactions, *i.e.*, to specify the amount of obligations of a party and verify whether funds to meet these obligations are available. Clearing houses use numerous mechanisms which enable the reduction of the risk of default by parties to the transaction. The basic mechanism that reduces the risk is netting (calculating the net value) of debit and credit obligations as well as debit and credit related to the same financial instrument vis-á-vis different transaction parties, which reduces the number and the volume of transfers. The possibility of using a smaller amount or number of securities in the final settlement than those arising from single transactions, reduces the probability that the clearing parties will have insufficient funds, whereas the reduced number of transfers lowers clearing costs.

Moreover, clearing houses apply mechanisms that guarantee settlement execution, e.g., using assets contributed by the transaction parties in the form of margins and payments to a guarantee fund. Margins are collected from the transaction parties. They are meant to cover the possible increase in the value of obligations, if the price of the subject of the transaction changes significantly between the time of the conclusion of the transaction and its settlement. During this time, they are monitored by the clearing house, which adjusts their amount to the current price level in the market and charges the clearing member with additional funds for collateral or refunds the surplus. The guarantee fund is established to guarantee transaction settlement if a member is unable to satisfy any obligations. The assets collected in the fund are only used when other methods of settlement optimisation, e.g.: securities loans, intraday credit or queue management for transaction clearing (so that clearing of some transactions provides funds for clearing of subsequent transactions) have been used.

Some clearing houses also apply other mechanisms to provide funds for clearing, e.g. insurance policies. Other clearing houses assume the settlement risk of the transaction, becoming a central counterparty. A **central counterparty (CCP)** is an entity which assumes the mutual rights and obligations of the transaction parties, becoming the buyer to every seller and the seller to every buyer[65]. In this way, the parties to the transaction become anonymous to each other, each of them having claims and obligations only towards the central counterparty. The insolvency risk of the other transaction party is changed into the insolvency risk of the central counterparty. The central counterparty is considered to be a very

[65] On the basis of the definition laid down in the EC document *Draft working document on post-trading activities*, 23 May 2006, http://ec.europa.eu/internal_market/financial-markets/docs/clearing/draft/draft_en.pdf.

secure counterparty, as it is an institution which specialises in risk management and has numerous risk mitigating mechanisms.

The central counterparty may perform its functions by using novation, which is a legal, irreversible transfer of obligations from the transaction parties after the transaction has been entered into, or by applying the principle of the so-called open offer, when it becomes the party to the transaction at the moment the transaction is executed in the market.

Since the central counterparty becomes the transaction party it is thus held responsible for meeting the transaction obligations in the same way as the original transaction party. This means that investors (who have the secure CCP as their counterparty) are given an additional guarantee that the obligations will be executed, which is related to the transfer of credit risk to the CCP.

Although some clearing houses do not become parties to the clearing in legal terms, their functions and significance do not differ from those of the CCP, since in addition to performing clearing, they ensure the safe operation of the system by using advanced methods of management for all clearing-related risk. In such instances they can be treated as an actual CCP.

1.2.6. Securities depositories

Securities depositories were established in relation to the immobilisation and dematerialisation of securities. These are entities operating the financial instruments registration system in the form of accounting entries on deposit accounts run by them and thus ensuring the effective transfer of ownership of those instruments without the need to exchange physical certificates.

Securities are registered in accordance with the principle of double entry bookkeeping. On the one hand, the number of financial instruments issued is registered in issuing accounts, on the other hand, the balance is registered in deposit accounts of financial instruments held by each participant of the depository system, which usually include investment firms and banks (although some depositories also identify individual investors). The responsibility of the securities depository is to control the volume of the issue (this may change only through corporate actions performed at the request of the issuer) and to ensure its integrity, i.e., that the number of securities in the accounts of the participants (in the market) and the volume of the issue correspond. The main responsibilities of the securities depository also include processing corporate events. These lead to a change in the number and nature of securities issued (division, merger, exchange), and are usually conducted simultaneously in the issue account and the participants' deposit accounts.

As the securities depository maintains deposit accounts for investment firms it usually also settles transactions – it transfers securities between the accounts of participants representing transaction parties and carries out the transfer of funds (if it maintains cash accounts for the participants) or supervises their transfer (if settlement is conducted in cash accounts outside the depository). Other responsibilities of the securities depository often include the clearing of transactions which are subject to settlement in the depository – in this case, the depository acts as a clearing house.

Securities depositories which are in direct contact with the issuer, as well as being in direct or indirect contact with investors, often act as intermediaries in satisfying the issuer's obligations towards its shareholders: depositories act as intermediaries in paying cash benefits: dividend and interest (determination of those entitled to receive them, division and distribution of funds) and in transferring benefits in the form of securities, such as new issue shares or rights to shares (determination of those entitled to receive them, registration of securities in deposit accounts).

The securities depositories may also provide other services, such as maintaining registers of securities owners for the purpose of corporate actions operations, processing the payment of proceeds, providing services in case of optional corporate events, e.g. on-demand redemption, or conversion (collection of applications, assignment), tax services (related to tax on proceeds from securities) and acting as an intermediary in voting on behalf of shareholders at the general shareholders' meeting.

The participants of the securities depository may include investment firms, state-owned institutions, such as the central bank or the State Treasury, and foreign securities depositories . Due to the participation of foreign depositories, the cross-border settlement of transactions executed between the participants of both depositories, as well as the transfer of securities which are traded in markets in different countries (dual listing) becomes possible.

The functions performed by the securities depository are essential for the proper functioning of a dematerialised securities market. For this reason, the role is usually performed by a central institution. It is usually treated as a public interest entity and is subject to the oversight of financial markets regulators and central banks. In Poland, such an institution is KDPW[66].

In addition to central (national) securities depositories (CSDs), there are also international central securities depositories (ICSDs). The term refers to two institutions operating in Europe: Euroclear Bank and Clearstream Banking

[66] More information about the functioning of KDPW is described in section 2.2.1.2. "The present KDPW system".

Luxembourg. They were established to keep and service the issue of Eurobonds, and then they began processing other securities (mainly debt instruments). Their participants are large financial institutions which execute transactions in the international market, and national securities depositories which may transfer securities to other depositories through these institution (e.g. in the case of a dual listing).

1.2.7. Supervisors and regulators

An institution that supervises the functioning of the capital market is a necessary part of its infrastructure. The idea to introduce supervision of the capital market originated in the USA and was triggered by the Great Crisis of the 1930s. In the EU, the MiFID[67] obliges the Member States to establish a public authority acting as a supervisor of the capital market. At the national level, the supervisory system may be organised according to three different models:

- A separate agencies system, where several independent institutions supervise each financial market sector,
- A coordinated lead regulator system, where operations of the aforementioned institutions are coordinated,
- An integrated agency system, where the control of all financial market segments is concentrated in one entity[68].

At present, the central authority of government administration which supervises the Polish financial market, including the capital market, is the KNF. Oversight of the KNF is performed by the President of the Council of Ministers. The KNF was established to implement the concept of the integrated agency system on 19 September 2006, under the Act on Financial Market Supervision[69]. Until 31 December 2007, the KNF supervised the insurance sector, the pension funds sector, and exercised supplementary supervision of financial conglomerates[70], and supervision of the capital market[71]. On 1 January 2008, the KNF also assumed the tasks which had been performed by the Commission

[67] Directive 2004/39/EC.

[68] J. Socha, *Rynek papierów wartościowych w Polsce* [The securities market in Poland], Warsaw 2003, p. 505.

[69] Act of 21 July 2006 on Financial Market Supervision (Journal of Laws of 2006, No. 157, item 1119).

[70] Responsibilities taken over from the Insurance and Pension Funds Supervisory Commission (*Komisja Nadzoru Ubezpieczeń i Funduszy Emerytalnych*, KNUiFE).

[71] Responsibilities taken over from the Securities and Exchange Commission (*Komisja Papierów Wartościowych i Giełd*, KPWiG).

for Banking Supervision, related to banking supervision and supervision over electronic money institutions.

The aim of the KNF supervision of the capital market is to ensure the proper functioning of the market, in particular the safety of trading and the protection of investors and other trading participants, as well as the observance of fair trading principles. The tasks of the KNF include:

– undertaking actions that ensure the proper functioning of the capital market,
– performing the supervision of activities of entities that constitute the capital market infrastructure (including supervision of the WSE, MTS-CeTO SA and KDPW),
– undertaking educational and information activities,
– drafting legal regulations related to the functioning of the capital market.

The supervisory activities of the KNF related to admitting financial instruments to trading in the regulated market consist in particular in approving prospectuses, conducting information campaigns and maintaining a list of qualified investors. Exercising supervision of the activities of the supervised entities is mainly related to issuing permits to conduct specific activities.

The KNF comprises of the Chairperson and his/her two Deputies who are appointed by the President of the Council of Ministers, and four members who are: the Minister for financial institutions and the Minister for social security or their representatives, the President of the NBP or a delegated Deputy President of the NBP, and a representative of the President of the Republic of Poland. The KNF activities are supported by the KNF Office.

1.2.8. Central banks

The role of the central bank in the capital market is mainly reflected through their activities related to securities settlement systems (SSS). The central bank's interest in the safe and efficient functioning of securities settlement systems results from the Bank's three main responsibilities. These include:

1. Responsibility for the stability of the financial system. Serious irregularities in the functioning of the SSS may not only be a source of problems in a given system, but may also affect other systems, and thus cause broadly understood financial and economic instability.
2. Responsibility for carrying out of monetary policy operations effectively. Clearing and settlement is carried out in the SSS using securities, which are purchased and sold by the central bank, and collateral for securities is established so that central banks can grant loans. Irregularities in the

functioning of these systems would be the direct cause of inefficiencies in monetary policy operations.

3. Responsibility for the efficient functioning of the payment system. The SSSs are indispensable elements in the payment system; irregularities in their functioning may cause disruption in the operation of payment systems used by the SSS to settle financial obligations resulting from the securities transactions.

EU regulations do not specify the function, responsibility, tasks or tools that may be used by central banks to ensure the safety and effectiveness of SSS operations. It is common practice, however, that central banks undertake different actions in this matter, which mainly include:

1) oversight[72] of SSSs (all EU central banks),
2) establishing and operating the SSS (7 EU central banks),
3) holding an equitable stake in the company which operates the SSS (6 EU central banks) or the right to participate in the work of the company's corporate bodies without holding its stocks (3 EU central banks),
4) cooperating with supervisors and regulators of the SSS (16 EU central banks have formal agreements in this respect),
5) contractual relationship which regulates the provision of SSS services by the central bank or using SSS services (19 EU central banks),
6) influencing the SSS through public statements or moral suasion, which is based on the central bank's prestige.

The NBP plays an important part in several areas related to the functioning of Polish SSSs. First of all, the NBP is the owner and operator of the securities depository and settlement system operating under the name of the Register of Securities (*Rejestr Papierów Wartościowych*, RPW), where Treasury bills and NBP bills are registered, deposited and settled. The settlement of financial obligations related to trading in securities registered in the RPW is carried out in central bank money maintained in banks' current accounts held with the NBP.

Moreover, the NBP is a shareholder of KDPW, which acts as a central institution for securities registration, depositing, clearing and settlement. The NBP is also a participant of KDPW, while the securities account maintained for the NBP by KDPW is mainly used to manage collateral for central bank credit operations. Apart from Treasury securities, operations are also collateralised by NBP bonds.

[72] According to the BIS definition, oversight means: "a public policy activity principally intended to promote the safety and efficiency of payment and securities settlement systems and in particular to reduce systemic risk".

The NBP also acts as the settlement agent for KDPW. This means that financial obligations in Polish currency and in the euro, related to transactions in securities deposited at KDPW, are settled in current accounts, belonging to banks, maintained by the NBP with the use of an auxiliary account maintained by the NBP for KDPW.

Under the Act on Financial Market Supervision, the President of the NBP or a delegated Deputy President of the NBP is one of the seven members of the KNF which is responsible, *inter alia*, for supervision[73] of entities which operate the securities depository.

Moreover, the NBP performs tasks related to the oversight of the Polish SSSs, while not being provided with the relevant statutory tools which cover the systems now in operation. It is only the establishment of a new SSS or the change of its functioning principles, in accordance with the Act on Settlement Finality in Payment and Securities Settlement Systems and the Rules of Oversight of these Systems[74], that requires the consent of the KNF, issued after consultation with the President of the NBP. The NBP performs oversight of KDPW, with the use of other supervisory tools, i.e. mainly corporate powers arising from participation in the KDPW shareholder structure. Ultimately, the NBP aims to obtain statutory rights to perform, together with the KNF, oversight over all Polish SSSs.

[73] According to the BIS definition, supervision means "the assessment and enforcement of compliance by financial institutions with laws, regulations or other rules intended to ensure that they operate in a safe and sound manner and that they hold capital and reserves sufficient to support the risks that arise in their business."

[74] Act of 24 August 2001 on Settlement Finality in Payment and Securities Settlement Systems and the Rules of Oversight of These Systems (Journal of Laws of 2001, No. 123, item 1351).

Chapter 2
The history and current activity of central counterparties and securities depositories in EU Member States and in Poland

2.1. The infrastructure for depositing, clearing and settling securities in the European Union – its development and current status

The infrastructure used for depositing, clearing and settling securities, which mainly consists of central securities depositories and central counterparties, is the basis of the proper functioning of the capital market. Thus, it has been developing together with the development of securities stock exchanges and other trading platforms and has been following the changes among the participants of capital markets. During the last decades of the 20th century, the pace of the development increased significantly in the EU countries, together with the development of the economy, the financial systems and technology. In addition, ensuring a free flow of capital, goods, services and people, and particularly the introduction of the single currency, the euro, which aim at establishing a single market in Europe, made European investors more interested in concluding transactions in foreign markets. As a consequence, a number of integration and consolidation processes were coerced in the EU capital markets.

The EU depository, clearing and settlement infrastructure remains quite diverse and fragmented. Yet, the cooperation of EU Member States in the area of economy and finances, harmonisation of regulations and fast development of modern technologies as well as the resulting growing competitiveness and availability of services have a large impact on integration and, in particular, consolidation of its structure. It is, at present, less important where the infrastructure is located due to the availability of remote access, and investors see fewer obstacles and more advantages of investing in foreign markets. The evolution of central counterparties, securities depositories and the integration processes in place are presented below.

2.1.1. The development and current role of central counterparties in EU Member States

2.1.1.1. The history of establishing clearing houses and central counterparties

The history of the development of central counterparties servicing stock exchanges is very long, while the differences between the functioning of the first very simple clearing systems and the present, modern central counterparties are

very large, especially as far as risk management is concerned, despite the fact that the basic clearing rules have not changed significantly.

The first clearing system was established in France in the 13th century. Goods were purchased and sold in the market by concluding debit and credit transactions respectively, with the local banker. After the bargaining, all transactions were cleared by calculating a single balance, which was regulated by a single payment made between the banker and each merchant. Such a solution significantly reduced the number of payments that needed to be made[1].

The functioning of clearing houses originated from banking, whereas establishing bank clearing houses probably influenced the development of derivatives clearing houses to a great extent.[2] In the London market, the first bank clearing house was founded in 1773[3]. The first stock exchange clearing houses were established in 1874 for the London Stock Exchange[4], in 1876 or in 1879 for the Liverpool Cotton Association, which was the first stock exchange for agricultural produce[5]. In 1888, the London Clearing House, which cleared commodity-based contracts, was in turn established[6]. In order to reduce brokers' losses, the houses introduced periodical (weekly) settlements of contracts that may be compared to contemporary marking to market operations[7]. All non-cleared contracts were compared to the settlement price applicable in a given week, and all the differences had to be cleared[8].

The first clearing houses in the world which operated as central counterparty, *i.e.*, assumed the role of buyer to every seller and seller to every buyer in all transactions executed in a given market, originated from the European market. Their history dates back to the end of the 19th century, when they started to provide services to agricultural produce exchanges in France (Caisse de Liquida-

1 E. Nevin, E.W. Davis, *The London Clearing Banks*, Elek, London, 1970.

2 J.T. Moser, *Origins of the Modern Exchange Clearinghouse: A history of early clearing and settlement methods at futures exchange*, April 1994.

3 W.E. Spahr, *The clearing and collection of checks*, Bankers Publishing, New York 1926.

4 W.S. Jevons, *Money and the Mechanism of Exchange*, Kegan Paul, Trench & Co, London 1903.

5 T. Ellison, *Gleenings and Reminiscences*, 1905, H.C. Emery, *Speculation on the stock and produce exchanges of the United States*, Columbia University, New York 1896.

6 www.lchclearnet.com

7 Marking to market – making current market valuation: revaluation of financial instruments value with the use of current market prices.

8 R.B. Forrester, *Commodity Exchanges in England*, American Academy of Political and Social Science, Philadelphia 1931.

tion in Paris, Havre, Lille, and Roubaix) and in Germany (Liquidationskasse in Hamburg)[9].

The central counterparties operating currently were established only a dozen or even a few years ago. The exceptions are: LCH.Clearnet Ltd, established in 1888 as the London Clearing House, and LCH.Clearnet SA, which was established more than 80 years later as Banque Centrale de Compensation SA. Thus, the trend for establishing central counterparties has been observed in the last 10-20 years, the result of the rapid development of capital markets, especially derivatives markets, which required advanced mechanisms for the clearing and management of clearing risk. Recommendations for securities settlement systems, issued in 2001 by CPSS-IOSCO, also contributed to the establishment of central counterparties in some way. They recommended cost-benefit analyses of establishing a central counterparty in markets where it did not function yet. Table 1 shows the specification of central counterparties that are presently functioning in the EU Member States, with the dates of their establishment.

Table 1. Date of commencement of business by the currently operating central counterparties

Central counterparty	Date of commencement of business
LCH.Clearnet Ltd	1888 as The London Clearing House (LCH)
LCH.Clearnet SA	1969 as Banque Centrale de Compensation SA
Stockholm Stock Exchange	1984 (the year of the establishment of the stock exchange)
MEFF	1989, has acted as CCP since 1992
CC&G	1992 r.
ADECH (ETESEP)	1998 r.
EUREX Clearing	1998 r.
KELER	1993, CCP status since 2002
MEFFCLEAR	2003 r.
CCP Austria	2004 r.

Source: NBP.

[9] J.T. Moser, *Origins of the Modern Exchange Clearinghouse: A history of early clearing and settlement methods at futures exchange*, April 1994.

In the second half of 2008, a new central counterparty started to operate in the European market, the European Central Counterparty Ltd. (EuroCCP), which is a branch of the American depository, clearing and settlement institution – The Depository Trust & Clearing Corporation (DTCC). EuroCCP has its registered office in London and operates under UK laws. Citigroup is the settlement agent for the new CCP. EuroCCP clears transactions executed on the new trading platform, called Turquoise[10], which has been established by seven leading banks active in the international market[11].

2.1.1.2. The current role of central counterparties

Currently, central counterparties operate in all significant EU securities markets. They play a major role in minimising credit risk of settlement, reducing demand for and cost of liquidity and collateral security and also ensuring the anonymity of transactions. Demand for central counterparty services within the EU will be sustained due to a growing number of transactions and the positive impact of CCP activities on the efficiency and stability of financial markets.

Clearing functions in EU markets lacking a central counterparty are carried out by clearing houses, which usually constitute part of the central securities depository or – less commonly – of the stock exchange. However, the scope of services provided by clearing houses and their role are markedly different. Some do not differ much in their function and significance from a central counterparty. Apart from the clearing functions, they also ensure the safety of the system by using advanced management methods for all kinds of risks underlying clearing and settlement. The main difference – and sometimes one of few differences – between a clearing house and a central counterparty is that the former does not become a party to every transaction being cleared in a given market segment, i.e. it is not a buyer to every seller and a seller to every buyer. Such cases involve playing the actual role of a CCP as opposed to being a legal counterparty. The National Depository for Securities (KDPW) in Poland is an example of such a clearing house.

Clearing functions in the EU Member States are carried out by various institutions, as shown in Table 2. In 12 EU Member States, transactions are cleared by independent CCPs, in 4 countries – by CCPs which are part of stock exchange structures, and in one country – Hungary – by a CCP which is part of a securities depository. However, in most EU Member States, especially in

[10] The Turquoise platform started operations on 22 September 2008.

[11] Credit Suisse, Deutsche Bank, Goldman Sachs, Morgan Stanley, Merrill Lynch, Citi and UBS.

those which joined the EU in 2004 and after, clearing functions are performed in securities depositories as a process which precedes transaction settlement. In 4 Member States, clearing functions are performed by the stock exchange. It is worth noting that clearing is not always carried out in the country where the transaction took place, e.g. LCH.Clearnet SA, Stockholm Stock Exchange and Eurex Clearing clear transactions from different countries.

Table 2. Entities providing clearing of transactions in securities and derivatives

Country	Name of the clearing entity	Infrastructure form
Austria	CCP Austria	CCP
Belgium	LCH.Clearnet SA	CCP
Bulgaria	CDAD, GSD	depositories
Cyprus	CSE	stock exchange
Czech Republic	UNIVYC, SKD, RM-SYSTEM	depositories
Denmark	Stockholm Stock Exchange VP	CCP in stock exchange structure depository
Estonia	ECSD	depository
Finland	APK/NCSD Stockholm Stock Exchange Eurex Clearing AG	depository CCP within the stock exchange CCP
France	LCH.Clearnet SA	CCP
Germany	Eurex Clearing	CCP
Greece	ADECH (part of Helex since 2006) Hellenic Exchange SA BOGS	CCP within the stock exchange depository within the stock exchange depository
Hungary	KELER	CCP within the stock exchange*
Italy	CC&G Monte Titoli	CCP depository

* From 1 January 2009, the CCP function will be taken over from the depository by the KELER CCP company, created especially for that purpose.

Country	Name of the clearing entity	Infrastructure form
Ireland	Eurex Clearing	CCP
Latvia	LCD, VNS	depositories
Lithuania	LCVPD	depository
Luxembourg	Clearstream Banking Luxembourg	depository
Malta	MSE	stock exchange
Netherlands	LCH.Clearnet SA	CCP
Poland	KDPW RPW	depository (CCP functions) depository
Portugal	LCH.Clearnet SA	CCP
Romania	BVB SNCDD SaFIR	stock exchange depository depository
Slovakia	CDCP SR, Central Registry	depositories
Slovenia	KDD	depository
Spain	MEFF MEFFCLEAR	CCP within the stock exchange CCP
Sweden	Stockholm Stock Exchange VPC AB/NCSD	CCP within the stock exchange depository
United Kingdom	LCH.Clearnet Ltd	CCP

Source: NBP.

The remaining part of this section is mainly devoted to central counterparties, as clearing houses usually operate within securities depositories, which are presented in section 2.1.2.

At present, there are 10 central counterparties in the EU. Four of them are the most important: LCH.Clearnet SA, LCH.Clearnet Ltd, Eurex Clearing, and CC&G.

LCH.Clearnet SA and LCH.Clearnet Ltd form part of the LCH.Clearnet Group Ltd holding company, which was created as a result of a number of consolidation

processes. Clearnet SA was created after the merger of 3 central counterparties operating in the French market. Next, the company was merged with Belgian and Dutch central counterparties, and later took over clearing services from the Portuguese market. Finally, Clearnet SA merged with London Clearing House Ltd, forming the LCH.Clearnet Group Ltd capital group. Currently, LCH.Clearnet SA and LCH.Clearnet Ltd operate as independent companies within that group. The former acts under French law and mainly clears transactions executed on Euronext markets, and the latter acts under UK laws and clears transactions from the London Stock Exchange, Euronext.LIFFE, the London Metal Exchange, ICE Futures, and SWX Europe (formerly virt-x).

Eurex Clearing AG is 100% owned by Eurex Frankfurt AG, which in turn belongs to Eurex Zurich AG, owned in 50% by SWX Swiss Exchange and in 50% by Deutsche Börse AG. Eurex Clearing AG operates under German law and clears transactions executed on Eurex Exchanges.

CC&G is 72.73% owned by Borsa Italiana. The remaining 27.27% belong to five commercial banks. CC&G clears transactions executed on spot and derivatives markets (IDEM, Borsa Italiana securities markets, MTS Italy).

All four are leading institutions among the European CCPs in terms of the number of participants and the number and value of transactions cleared. Among them, LCH.Clearnet SA ranks first, followed by Eurex Clearing and CC&G. Together, they clear 98.4% of all transactions dealt with by CCPs in the EU in terms of number and 98.9% in terms of value[12].

In addition to the central counterparties mentioned above, CCPs based in other countries also operate in EU markets, e.g. Swiss SIX x-clear, which clears transactions executed on SIX Swiss Exchange, SIX Swiss Exchange Europe and the London Stock Exchange and is planning to clear transactions from other European stock exchanges (e.g. Deutsche Börse).

Central counterparties, with the exception of LCH.Clearnet SA and Eurex Clearing, which hold a banking licence, operate as commercial law companies. CCPs are either independent or associated, in terms of capital, with other CCPs, stock exchanges or other entities. The shareholders of central counterparties are mainly stock exchanges and/or commercial banks which are CCPs users; in some cases they are also depositories, institutional investors, and in one case – a central bank. Most central counterparties operate on a for-profit basis. Table 3 presents detailed information on the legislative framework and shareholders of CCPs in the EU.

[12] ECB Blue Book, data for year 2006. The data does not include figures for LCH.Clearnet. Ltd, OMX, MEFF and MEFFCLEAR.

Table 3. Legal status and ownership structure of central counterparties in the EU

Central counterparty	Infrastructure form	For-profit or not-for-profit	Ownership structure
CCP Austria	company	n.a.	Wiener Börse (50%) Österreichische Kontrollbank (50%)
LCH.Clearnet SA	bank, LCH. Clearnet Group Ltd affiliate	for-profit	Stock exchanges (45.1%), former LCH members (45.1%), Euroclear (9.8%)
ADECH	within the structure of a stock exchange acting as a company	for-profit	Helex is a public company owned by banks, issuers, and institutional and private investors
MEFF	within the structure of a stock exchange acting as a company	n.a.	BME holding, which is a public company partly owned by the central bank (5.33%)
MEFFCLEAR	system managed by MEFF	n.a.	BME holding, which is a public company partly owned by the central bank (5.33%)
EUREX Clearing	company with a banking licence	for-profit	Eurex Frankfurt AG (100%), owned by Deutsche Börse AG (50%) and SWX Swiss Exchange AG (50%)
Stockholm Stock Exchange	within the structure of a stock exchange acting as a company	for-profit	Stockholm Stock Exchange group Oy (100%), owned by OMX AB
KELER	within the structure of a depository acting as a company*	for-profit	Central bank (53%), Budapest Commodity Exchange (20%), Budapest Stock Exchange (26.67%)**

Central counterparty	Infrastructure form	For-profit or not-for-profit	Ownership structure
LCH.Clearnet Ltd	company, LCH. Clearnet Group Ltd affiliate	for-profit	Stock exchanges (45.1%), former LCH members (45,1%), Euroclear (9.8%)
CC&G	company	for-profit	Stock exchange (72.73%), 5 commercial banks (27.27%)

* From 1 January 2009 CCP function will be taken over from the depository by the KELER company, created for that purpose.

** It is planned that KELER CCP will have the following ownership structure: KELER – 75%, Budapest Stock Exchange – 25%.

Source: NBP.

Currently, central counterparties clear transactions executed on all types of trading platforms, and offer services in relation to a wide range of financial products, including, *inter alia*, futures contracts, options, spot market shares and debt instruments, repo agreements and OTC (over-the-counter) market derivatives. Table 4 presents detailed information on trading platforms and financial instruments managed by each central counterparty.

Table 4. Financial instruments and trading platforms managed by central counterparties in the EU

Central counterparty	Financial instruments	Trading platforms
CCP Austria	S, D	Vienna Stock Exchange
LCH. Clearnet SA	S, D, DS, R	Euronext Group (stock exchanges in Amsterdam, Brussels, Lisbon and Paris), London Stock Exchange's Dutch Trading Service (LSE DTS), e-speed, Euro-MTS, MTS-France, MTS Italy, BrokerTec, ETCMS - Euroclear Trade Capture and Matching System
ADECH	D	Athens Exchange Derivatives Market
MEFF	D	MEFF

Central counterparty	Financial instruments	Trading platforms
MEFFCLEAR	DS, D	SENAF (Fixed Income Electronic Trading System), EuroMTS Electronic Trading System
EUREX Clearing	S, D, DS	Eurex, Eurex Bonds, Eurex Repo, XETRA, Frankfurt Stock Exchange, ISE Xetra
Stockholm Stock Exchange	D	Stockholm Stock Exchange, OTC market
KELER	S, D	BSE Budapest Stock Exchange
LCH. Clearnet Ltd	S, D, DS, R	London Stock Exchange, SWX Europe, EDX, Intercontinental Exchange (ICE), Liffe, London Metal Exchange (LME), OTC Freight, OTC UK Power, Powernext
CC&G	S, D	Borsa Italiana, MTS SpA and BrokerTec markets

S – spot market, D – derivatives, DS – debt securities, R – repo transactions.
Source: NBP.

2.1.1.3. Regulation and oversight

The activities of central counterparties are exposed to high risk concentrations, as CCPs take over the credit risk of transaction parties. Fortunately, until now central counterparties have had a very low failure rate. In Europe, a CCP has failed only once, in Paris in 1974, and it concerned the commodity market[13]. Nevertheless, EU regulators and central banks play a very important role in exercising oversight of central counterparties. In the light of the growing scale and scope of CCP services, increasing concentration due to numerous consolidation initiatives and the expansion of cross-border activities, CCPs face new challenges. On the one hand, implementing an efficient oversight policy is aimed to minimise systemic risk in order to avoid the influence of potential significant CCP problems on financial market stability. On the other hand, regulatory and oversight policy should support rather than hinder market development and market initiatives,

[13] F. Wendt, *Intraday margining of CCP: EU practice and a theoretical evaluation of benefits and costs, De Nederlandsche Bank*, Amsterdam, March 2006.
[F.F] Wendt, Intraday margining of CCP: EU practice and a theoretical evaluation of benefits and costs, De Nederlandsche Bank, Amsterdam, March 2006.

which have been very successful over the past years. National regulations sometimes inhibit the further development of cross-border operations, as shown by the Giovannini barriers described in 3.3.2.5. Uneven rules of competition between central counterparties and banks acting as General Clearing Members is one of the problems[14]. They consist in the application of different capital requirements, which sometimes make the clearing of a cross-border transaction via such a bank cheaper than using a link between two CCPs.

Public authorities, and especially the European Commission, have already taken steps aimed at eliminating the above-mentioned barriers to integration and free competition (more information on this topic in Chapter 3).

2.1.1.4. Trends

In recent years, a few trends in the operation of central counterparties in EU markets have been observed. They pose new challenges to market participants, service suppliers, central banks and regulators. These trends include the integration of cross-border activities, the expansion of the scope of services provided, CCP operational development, and changes to the ownership structure.

1. Integration of cross-border activities

One of the most important trends is the integration between central counterparties in the EU and the scope of cross-border activities growing each year. Initially, in most countries with developed capital markets, central counterparties were established only for the purposes of meeting the needs of the local securities or derivatives exchange, and they mainly served national participants. The European clearing infrastructure as a result consisted of a network of national systems, which functioned within areas enclosed by geographical borders. National intermediaries were used to clear cross-border transactions. After the introduction of the single currency, the euro, the model started to change gradually as a result of the rapidly growing number of cross-border transactions. Improving effectiveness, and especially lowering the costs of clearing such transactions became possible thanks to the implementation of three different solutions: consolidation of central counterparties, creating operational links between them, and allowing remote access of foreign participants to CCP systems, which are gradually replacing the traditional method of cross-border clearing, i.e. via intermediaries.

[14] A General Clearing Member is a type of CCP participant. Apart from clearing its own and its clients' transactions, it can also clear transactions of other financial institutions. Individual (or Direct) Clearing Member is a CCP participant which can only clear its own transactions or transactions of its clients.

Consolidation of Central Counterparties

In recent years, there have been numerous consolidations of central counterparties. The most important ones include:

1) Gradual national consolidation of clearing houses in the United Kingdom in the 1980s and 1990s, which resulted in the extension of the scope of activities of the London Clearing House to new markets and products,
2) International consolidation of clearing houses in Germany and Switzerland in 1998, which led to the establishment of Eurex Clearing,
3) National consolidation of 3 central counterparties in France into Clearnet SA in 1999,
4) International consolidation of central counterparties in 2001, which resulted in Clearnet SA taking over the role of CPP in the Belgian and Dutch markets,
5) International consolidation of central counterparties in 2003, which resulted in Clearnet SA taking over clearing services in the Portuguese market,
6) International consolidation of central counterparties in 2003, which resulted in Clearnet SA and the London Clearing House merging to form the LCH.Clearnet Group Ltd holding company and changing their names to LCH.Clearnet SA and LCH.Clearnet Ltd.,
7) International consolidation within the OMX Group in 2004, which resulted in the transfer of clearing functions for derivatives traded in the OMX market from Finland to Sweden.

Operational links between central counterparties

Creating operational links between central counterparties which operate in different countries facilitates the integration of capital markets of those countries, allowing investors to execute transactions in foreign markets and to clear them via the national CCP. With the help of such links, the participation of one central counterparty in the system allows the clearing of cross-border transactions from many markets.

The *European Code of Conduct for Clearing and Settlement* (described in more detail in section 3.3.2.6), signed by stock exchange operators, central counterparties and securities depositories in 2006, had an important positive influence on creating links between central counterparties. The Code establishes formal rules in the areas of access and interoperability between the infrastructure institutions, ensuring non-discriminatory and transparent access to those institutions.

Links between central counterparties may take a variety of forms, which usually depend on national characteristics, e.g. market practice or regulatory

barriers. The above-mentioned *European Code of Conduct for Clearing and Settlement* recognises the following main types of links:

- Standard access: a CCP becomes a standard participant of another CPP (unilateral link),
- Customised access: a CCP is a participant in another CCP, but certain parts of the service offered to the requesting entity are customised (customised unilateral link),
- Transaction feed: access without the opening of an account, only for the exchange of information between the stock exchange, the central counterparty and securities depository,
- Interoperability: a technically and organisationally advanced form of bilateral link.

This classification is different from the one set out earlier in CPSS-IOSCO *Recommendations for Central Counterparties*, which recognises the following:

- Mutual participation: a CCP becomes a participant of another CCP without any further integration of systems,
- Mutual collateralisation: a mechanism which allows an entity participating in two different central counterparties which operate in different markets to reduce the value of financial collateral kept in both CCPs,
- Merger of clearing systems: two CCPs merge their clearing systems to form a single system (which may, but need not be accompanied by the consolidation of the entities).

The classifications of links described above differ slightly, as the one presented in the *Code of Conduct* includes both horizontal operational links (between institutions performing the same function, e.g. clearing houses) and vertical operational links (between institutions performing different functions within the transaction process, e.g. between a clearing house and a stock exchange or a clearing house and a depository). By contrast, the classification described in the Recommendations only relates to horizontal links. Furthermore, the division applied in the *Code of Conduct* only covers links between entities, whereas the division in the Recommendations also takes into consideration cooperation within a given service (collateral).

In practice, there are many more differences between various links, and it is difficult to find two identical ones. Table 5 presents the existing links between CCPs operating in EU Member States and between CCPs operating in the EU and CCPs from outside the Union.

Table 5. Links between central counterparties

Countries	Links
USA, Germany	CCorp ⟶ Eurex Clearing
France, Belgium, The Netherlands, Portugal, Italy	LCH.Clearnet SA ⟷ CC&G
Sweden, Norway	SSE ⟶ Oslo Börs / NOS Clearing ASA
Sweden, United Kingdom	SSE ⟷ LCH.Clearnet Ltd
Switzerland, United Kingdom	SIXx-clear ⟶ LCH.Clearnet Ltd
United Kingdom, USA	LCH.Clearnet Ltd ⟶ CME

⟶ Unilateral link

⟷ Bilateral link

Source: NBP.

Remote access

In the past, if a foreign entity wanted to clear cross-border transactions via a central counterparty, it had to extend its activities and open a branch or office in the country of the CCP and hold its assets there. Another solution was to use the services of a domestic intermediary. At present, owing to the progress of integration, especially the harmonisation of regulations[15] and the development of modern electronic communication technologies, foreign entities have more and more opportunities to participate in central counterparties via remote access, without having to establish a branch.

Intermediaries

Using intermediation services to access a central counterparty is still widely seen both in domestic markets and in cross-border transactions. Members of the trading platform handled by a central counterparty can be its direct participants,

[15] For details on MiFID and the Code of Conduct see Chapter 3.

i.e. individual clearing members, or they can use the services of a dedicated entity, which is a direct participant of the central counterparty, i.e. general clearing member. Taking into account the relatively small number of direct members of central counterparties, it can be assumed that most entities which execute transactions on EU trading platforms use intermediary services.

2. The scope of services

The next trend is the extension of the scope of CCP activities. At the time when Economic and Monetary Union was established, almost all central counterparties from the EU Member States cleared transactions in derivatives only, because of the higher risk associated with such transactions in the long term. In recent years, many of them extended the scope of their activities to also include spot market transactions in securities, and repo transactions[16]. It is worth noting that clearing transactions in securities and clearing transactions in derivatives differ considerably. In the former case, the credit risk results only from the clearing and settlement process, while in the latter, the transaction itself entails high credit risk, which cannot be separated from the clearing risk.

Due to growing competition in the European market, central counterparties continue to search for new areas of business. The next challenge could be the OTC derivatives markets, which are developing very dynamically but still need to be improved as regards clearing services.

3. Operational development

Technological development also has a considerable influence on the development of central counterparties, especially on risk management methods and clearing mechanisms. Operational innovations allow the improvement of the efficiency of cross-border clearing, particularly by harmonising working principles of different CCPs in order to ensure interoperability between their systems. Operational innovations which reflect the internalisation of risk management practices and of clearing mechanisms include, *inter alia*:

1) Accepting by CCPs of financial collateral in the form of foreign currencies or securities issued abroad (e.g. LCH.Clearnet, Eurex, OM Stockholm, Wiener Börse AG);

[16] For instance, between 1999 and 2006, Eurex Clearing also started to clear repo and securities transactions, MEFF started to handle repo transactions and government bonds, CC&G extended its activities to securities in the MTS Italy and EuroMTS markets, CCP Austria started to clear securities (European Commission, Draft working document on post-trading, Brussels 2006), and in 1999 the London Clearing House introduced CCP services for swaps, repo transactions and securities transactions executed on the London Stock Exchange (John Jackson, M.J.Manning, Comparing the Pre-Settlement Risk Implications of Alternative Clearing Arrangements, Bank of England, 2007).

2) Accepting collateral held in a bank or with an intermediary located abroad (e.g. Eurex);
3) Executing transactions on a stock exchange in one country and clearing that transaction via a CCP in a different country (e.g. LCH.Clearnet, Eurex Clearing);
4) Setting a collateral portfolio in one CCP by a member, which is then used to secure its transactions cleared in two or more clearing houses (cross-margining) (e.g. CME/LCH/LIFFE)[17].

4. Corporate changes

In the case of central counterparties operating as independent companies, yet another trend can be observed which consists in their transformation from not-for-profit into for-profit organisations. Traditionally, central counterparties have had the form of user-owned companies. They usually operated on a not-for-profit basis. In time, the for-profit model has become more convenient for CCPs, as it improves efficiency and competitiveness by lowering operating costs and fees. However, CCPs must be careful not to make the change at the expense of lowering safety standards, as the main function of a central counterparty is risk management.

2.1.1.5. The optimal clearing model in the EU market

At present, the vast majority of transactions in the EU is cleared by a few CCPs. Other CCPs clear a small number of transactions and may be subject to further consolidation. The existing fragmentation of clearing operations in the EU market and cross-border clearing barriers provoke lively discussions among market participants about the future optimal model of CCPs activities in the EU.

In the opinion of some market participants, the best solution would be to create a single pan-European user-owned CCP, which would operate across various currencies and products, benefiting from economies of scale, integrated risk management, standardisation, and lower costs and fees. However, there are many obstacles to the creation of a single CCP, including strong ties between CCPs and stock exchanges, or legislative fragmentation. Moreover, there exists the significant risk that the problems of a single CCP might affect all markets it would provide services to. There is also the risk which arises from the fact that such an institution would hold a monopoly position (there would be no pressure

[17] D. Russo, T.L. Hart, A. Schönenberger, The evolution of clearing and central counterparty services for exchange-traded derivatives in the United States and Europe, ECB Occasional Paper No 5, Frankfurt, September 2002.

from competition which would force the introduction of innovations, improvement of service quality, or lowering of costs)[18]. At the same time, introducing a model for a single central counterparty for the whole of Europe may be difficult, as European markets are diverse and require dedicated services.

Other participants maintain that there should be two central counterparties in Europe. One of them should service transactions in securities and the other – transactions in derivatives, as they each require different risk management techniques. Supporters of such a solution claim that it would bring maximum savings in respect of collateral management and other costs. Again, this case may involve risks related to the *de facto* monopoly position of each of those institutions in the European market segments they handle. Furthermore, to manage risks in such a scenario, it would not be possible to use the mechanisms of correlation between securities and derivatives, which allow the value of the necessary collateral to be determined more efficiently.

According to yet another group of participants, the consolidation of central counterparties should be carried out cautiously, and the model of a single CCP for the whole of Europe is not a good solution because of the differences between European markets and their needs for dedicated services. At the same time, central counterparties should be provided with conditions which would help foster real competition, e.g. by harmonising legal requirements across the EU.

Taking into account the opinions of participants presented above, which appear in current discussions in the EU, further consolidation may be expected. Its pace and scope will depend on the conditions and needs of the European capital market.

2.1.2. The development and current role of central securities depositories in the EU, including international CSDs

2.1.2.1. The history of establishing central securities depositories

Similarly to stock exchange clearing houses, central securities depositories started to operate in Europe at the end of the 19th century. The first central securities depository in the world was established under the name of Wiener Giro- und Cassenverein in Austria in 1872[19]. Next, depositories were established

[18] Experience shows that the user-owned formula might not ensure all participants sufficient influence over the institution's activities, or that their interest is taken into consideration when decisions about its operations are made.

[19] European Central Bank, Blue Book: Payment and securities settlement systems in the European Union: euro area countries, Frankfurt, August 2007.

in Germany, where they were called Kassenvereine. The first depository in France, the CCDTV, was founded in 1942. In other European countries central depositories appeared in the 1970s: in Belgium in 1968, in Luxembourg in 1970, in the Netherlands in 1977, and in Italy in 1978. The process continued into the 1980s, e.g. in Denmark in 1983 and in Sweden in 1989, reaching its highest point in the 1990s when around 20 new depositories were established in the EU in less than 10 years. The main reasons behind the fast-growing number of depositories included the tendency to concentrate depository and settlement services in one or more national institutions, the improved efficiency of securities markets, and the 1989 publication by the Group of Thirty[20] of recommendation to create a central depository in each country. Table 6 presents detailed information on the history of the depositories currently operating.

The depositories usually functioned as statutory or natural monopolies. They mainly handled commercial securities, while depositories for government securities were managed by central banks. The scope of services delivered by the depositories depended on the legal basis and the circumstances of their establishment. Most of them provided both depository as well as settlement services, but some specialised in settlement functions. The status of central securities depositories was to some extent related to the process of dematerialisation of securities in a given country. In countries where securities dematerialisation was common or even obligatory, working principles for depositories were more precisely defined and regulated, and their role was perceived to be of special importance due to the fact that they were bearing the risk related to the function of a depository for dematerialised securities[21].

Euroclear Bank and Cedelbank (currently Clearstream International) international central securities depositories (ICSDs) were created in the late 1960s in order to provide settlement services for cross-border transactions in Eurobonds. Over the years, the range of financial products covered by their services increased, and at present they settle transactions in most types of bonds, as well as – though to a lesser extent – transactions in shares[22].

Euroclear was established in 1968 as the securities department within the Belgian branch of the Morgan Guaranty Trust Company of New York. It was a for-profit entity. In 1971, Morgan Guaranty Trust Company of New York sold the system to its users and to the newly created Euroclear company, keeping a say

[20] More on the Group of Thirty in section 3.2.3.1 "Activities of the Group of Thirty".

[21] BNP Paribas, Clearing and settlement in the European Union, Main policy issues and future challenges, Paris 2002.

[22] H. Schmiedel, Performance of international securities markets, Bank of Finland Studies, Vammala 2004.

in the management of the new entity. In 2000, the links with Morgan Guaranty Trust Company of New York were severed and Euroclear was transformed into Euroclear Bank, a company established under Belgian law. In the following years, Euroclear Bank carried out an intensive strategy of taking over national depositories in order to become a pan-European depository.

Clearstream International was established in 2000 as a result of a merger between Cedel International, which had been established in 1971, and the German depository, i.e. Deutsche Börse Clearing.

The need for operational cooperation between securities depositories in the EU was noticed fairly soon – as early as in the mid-1990s, and their large number started to be perceived as a drawback, rather than an advantage, which could hamper the development of the European securities market. In that period, three main initiatives for the integration of depository and settlement services in Europe were started. ECSDA[23] created a model for infrastructure integration through the creation of standardised bilateral links between individual systems and depositories. Practitioners in the field prepared two more models of such links, the *spaghetti* model where every depository was linked with each other, and the *hub and spokes* model where every depository has access to all other depositories via one depository acting as a hub connected to all depositories. The former assumed a large number of links and an equal role for each depository, whereas the latter assumed a limited number of links and a central role of one of the depositories. In the spring of 1999, Euroclear, the largest international securities depository in Europe, announced its support for the hub and spokes model. In response to that proposal, only a few weeks later, Cedel International, the second largest international securities depository, announced its merger with the German depository, Deutsche Börse Clearing, thus choosing yet another model of European infrastructure integration – through consolidation. The final goal of Cedel International was to create a consolidated mechanism for European markets, referred to as the European Clearing House. The integration of the European systems with the European Clearing House was to consist of establishing electronic communication connections and transferring the services for securities clearing and settlement to the ECH, or in carrying out mergers. It is clear that the target level of integration of the clearing and settlement infrastructure increased with every model[24]. The present level of that integration is described further in this subsection.

[23] ECSDA – European Central Securities Depository Association.

[24] M.Malkamaki, J. Topi, Strategic Challenges for Exchanges and Securities Settlement, Discussion Papers, Bank of Finland, December 1999.

2.1.2.2. The current role of central securities depositories

The infrastructure of depository services in the EU is fragmented, which is reflected by a large number of existing securities depositories: currently, there are 42 securities depositories in 27 EU Member States; 22 of them are located in the euro area and 20 outside the euro area. When the number of countries within the euro area and the number of countries which have not yet adopted the euro are compared as regards the number of securities depositories which operate in their territories, one notices that the differences are insignificant. They arise from the fact that in the euro area, national consolidation is a little more developed than in other EU Member States.

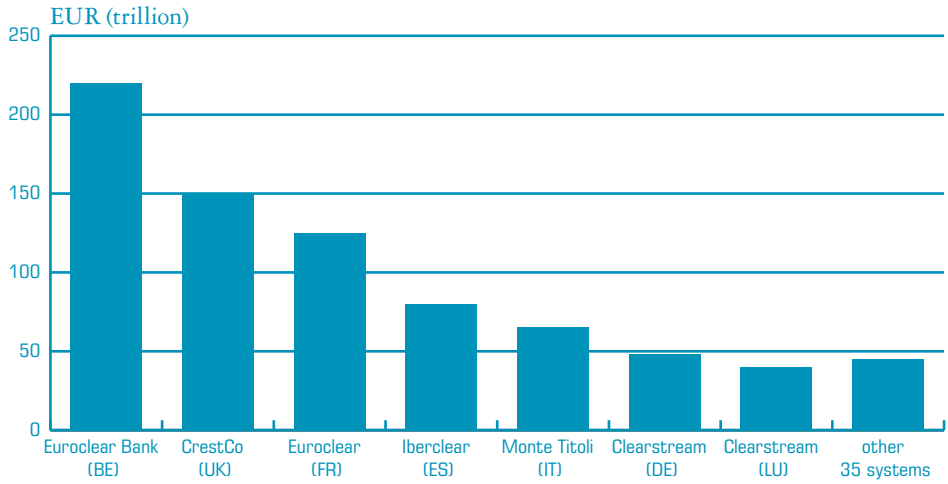
Among entities which provide depository and settlement services in the EU, three capital groups, which include most of the largest depositories in the EU, stand out: Euroclear Group, Clearstream International and the Nordic CSD Group.

Euroclear Group consists of Euroclear Bank international securities depository and four national central securities depositories, i.e. Euroclear France, Euroclear Belgium, Euroclear Nederland and Euroclear UK & Ireland (which had operated as CRESTCo until July 2007). All those depositories are branches of the Euroclear SA/NV holding company, established in Belgium, which in turn is a branch of Euroclear Plc., a holding company registered in the United Kingdom. Euroclear Plc. is owned by Euroclear system participants. Being an international depository, Euroclear Bank acts as a depository for international securities, particularly Eurobonds, and settles such securities, as well as local securities. National depositories which belong to the Euroclear Group handle securities issued in their home markets, and Euroclear UK & Ireland additionally handles Irish securities. Initially, all five depositories worked independently, but in order to improve their efficiency and to benefit from consolidation, they developed an operational integration plan for the group. According to the plan, integration is a gradual process, divided into implementation stages. In the first stage, a common settlement platform was created and implemented. In the second stage, a common mechanism for processing national and cross-border transactions in shares and debt securities was introduced in the Belgian, Dutch and French markets. The third and the last stage will ensure consolidation in the form of a single platform for all markets handled by the Euroclear Group. The completion of the integration process is planned for 2009-2010[25].

Clearstream International, which is a branch of Deutsche Börse AG, is a holding company which includes Clearstream Banking Luxembourg (CBL),

[25] Based on the Blue Book 2006 data.

Figure 1. Turnover of CSDs in the EU, 2006 (total value of instructions processed)



Source: ECB

Clearstream Banking Frankfurt (CBF), Clearstream Services Luxembourg and regional representative offices in the main financial markets. Clearstream Banking Luxembourg is an international depository and, at the same time, the operator of LuxClear (the national depository of Luxembourg). Clearstream Banking Frankfurt handles the German securities market and Clearstream Services Luxembourg is the operator of the Creation IT platform, used in cross-border activities. The integration of Clearstream International consisted of two stages and was carried out in 2002.

The Nordic CSD Group includes the national depositories of Sweden and Finland; the Finnish depository, APK, is a branch of VPC, the Swedish depository. Currently, both depositories work as independent entities, but there are plans to integrate them in order to improve their efficiency and benefit from economies of scale, which should contribute to the development and strengthening of the position of the entire Nordic market.

The situation described above, where there are three strong capital groups, might change in the near future, as on 2 June 2008 the Euroclear Group and the Nordic CSD Group signed an agreement according to which the Euroclear Group will take over the shares of the Nordic CSD Group in the fourth quarter of 2008. If the consolidation takes place, Euroclear will significantly extend the scope of its business.

The analysis of statistical data shows a significant concentration of depository and settlement services in the EU. The seven largest depositories, i.e. Euroclear Bank in Belgium, CrestCo in the United Kingdom, Euroclear France, Iberclear in Spain, Monte Titoli in Italy, Clearstream Frankfurt and Clearstream Luxembourg, store a total of 85.86% in terms of value of all securities registered in

all depositories in the EU, settle 77.77% of all transactions in terms of number, which represents 95.07% of all transactions in terms of value.[26]

Most depository and clearing institutions which operate in the EU do not perform banking functions, yet there are some which do, or which hold banking status. Such entities which hold bank status include the Austrian Oesterreichische Kontrollbank A.G. (OeKB), Hungarian KELER, two members of the Clearstream International SA group: Clearstream Banking Frankfurt and Clearstream Banking Luxembourg, as well as Euroclear Bank SA, which belongs to the Euroclear group.

The EU central securities depositories have very different ownership structures. Some of them function as sections or departments of larger institutions, e.g. depositories handled by central banks (e.g. the Register of Securities in the National Bank of Poland) or within stock exchange systems (e.g. the depository within the Cyprus Stock Exchange structure). Some are companies within a larger capital group structure created as a result of horizontal consolidation[27] (e.g. Euroclear France is a branch of Euroclear SA/NV, which in turn is a branch of Euroclear Plc.) or vertical consolidation (e.g. Clearstream Banking Luxembourg is a branch of Deutsche Börse). Others operate as independent companies (e.g. OeKB in Austria).

In terms of ownership structure, central securities depositories can be divided into the following groups:

1) Depositories owned by state institutions or with state institutions acting as shareholders, e.g. the Ministry of Finance or the State Treasury –a few of these exist in the EU (e.g. in Bulgaria, Cyprus, Malta, Ireland, Poland), mostly in the countries which acceded after 2004;
2) Depositories managed by central banks (there are 9 of them in the EU) or with central banks as shareholders (e.g. in Bulgaria, Denmark, Estonia, Spain, Lithuania, Poland, Hungary);
3) User-owned depositories (e.g. OeKB, Euroclear Plc., VP, KDD);
4) Depositories partially or fully owned by companies (institutions) connected with the capital market, mainly stock exchanges (e.g. UNIVYC, ECSD, LCVPD, LCD, KELER);
5) Depositories owned by third parties, not directly related to post-trading services (e.g. RM-SYSTEM).

[26] Based on the Blue Book 2006 data.

[27] The different types of consolidation are described in section 2.1.3.2 Initiatives aimed at the integration of infrastructure providing post-trading services in the EU.

In practice, in the EU there are many depositories with mixed share ownership, e.g. depositories partially owned by users (participants) and by stock exchanges, and sometimes also by state institutions.

Depending on their activities and ownership structure, central depositories operate on a not-for-profit or for-profit basis. The first group includes central securities depositories owned by Ministries of Finance, State Treasuries or central banks, and a few user-owned depositories. In the second group the majority are depositories owned by the users and stock exchanges as well as depositories owned by third parties.

Table 6. Description of CSDs currently operating in the EU

Country	Name of depository	Date of commencement of activities	Infrastructure form, for-profit or not-for-profit	Ownership structure
Austria	OeKB	1872 as Wiener Giro- und Cassenverein, in 1965 changed its name to OeKB	bank, for-profit	mainly domestic commercial banks
Belgium	NBB	1991	central bank, not-for-profit	central bank (100%)
	Euroclear Belgium	1968	Euroclear SA/NV branch, company, for-profit	Euroclear SA/NV – branch of Euroclear Plc, whose shareholders are participants (86.9%) and Sicovam Holding SA (13.1%)
	Euroclear Bank	1968	bank, for-profit	Euroclear SA/NV – branch of Euroclear Plc, whose shareholders are participants (86.9%) and Sicovam Holding SA (13.1%)

Country	Name of depository	Date of commencement of activities	Infrastructure form, for-profit or not-for-profit	Ownership structure
Bulgaria	CDAD	1996	Company, for-profit	Ministry of Finance (21.9%), central bank (20%), commercial banks (21.6%), Bulgarian Stock Exchange in Sofia (3%) and others
	GSD	1992	central bank, not-for-profit	central bank (100%)
Cyprus	CSE	1996	stock exchange as a public institution, for-profit	Government of the Republic of Cyprus (100%)
Czech Republic	UNIVYC	1996	stock exchange branch, for-profit	Prague Stock Exchange (100%)
	SKD	1995	central bank, not-for-profit	central bank (100%)
	RM-SYSTEM	1993	company, settlement system within the OTC market, for-profit	2 natural persons (50% each)
Denmark	VP	1983	company, for-profit	banks and brokerage companies (32%), bond issuing companies (28%), central bank (24%), shares issuers (8%), institutional investors (8%)

Country	Name of depository	Date of commencement of activities	Infrastructure form, for-profit or not-for-profit	Ownership structure
Estonia	ECSD	1994	company, for-profit	OMX Exchanges (62%), central bank (1.1%), market participants (remaining shares)
Finland	APK/ NCSD	1996	company, for-profit	VPC AB (100%), owned by: OMX (19.8%) and 4 main Swedish banks (19.8% each): Föreningssparbanken, Nordea, SEB, and Svenska Handelsbanken
France	Euroclear France	1949 as SICOVAM	company, for-profit	Euroclear SA/ NV – branch of Euroclear Plc, whose shareholders are participants (86.9%) and Sicovam Holding SA (13.1%)
Germany	Clearstream Banking Frankfurt	1990 as Frankfurter Kassenverein AG	bank, for-profit	Deutsche Börse (100%)
Greece	Hellenic Exchanges SA Holding, Clearing, Settlement & Registry	1991 – depository within the stock exchange structure, 1876 – Athens Stock Exchange	company, depository in stock exchange structure, for-profit	Helex (100%), which is a public company
	BOGS	1994	central bank, not-for-profit	central bank (100%)

Country	Name of depository	Date of commencement of activities	Infrastructure form, for-profit or not-for-profit	Ownership structure
Hungary	KELER	1993	bank, for-profit	central bank (53%), Budapest Stock Exchange (46.7%)
Italy	Monte Titoli	1978	company, for-profit	Borsa Italiana Spa (98.7%), foreign central securities depositories (1%), investment firms (0.1%), other (0.13%)
Ireland	NTMA	1990	public institution, not-for-profit	Ministry of Finance
Latvia	LCD	1995	company, for-profit	Riga Stock Exchange (100%); RSE is 93% owned by OMX Group
	VNS	1993	central bank, not-for-profit	central bank (100%)
Lithuania	LCVPD	1993	company, for-profit	central bank (60%), OMX Group (32%), Lithuanian Stock Exchange VVPB (8%); VVPB is 93% owned by the OMX Group
Luxembourg	Clearstream Banking Luxembourg	1970 as Cedel	bank, for-profit	Deutsche Börse (100%)
Malta	MSE	1996	stock exchange, for-profit	State Treasury (100%)
Netherlands	Euroclear Nederland	1977 as Necigef	company, for-profit	Euroclear SA/ NV – branch of Euroclear Plc, whose shareholders are participants (86.9%) and Sicovam Holding SA (13.1%)

Country	Name of depository	Date of commencement of activities	Infrastructure form, for-profit or not-for-profit	Ownership structure
Poland	KDPW	1991	joint stock company, not-for-profit	WSE (33.3%), State Treasury (33.3%), National Bank of Poland (33.3%)
	RPW	1995 – CRBS, 1996 – RBP, merged into RPW in 2003	central bank	central bank (100%)
Portugal	SITEME	n.a.	central bank	central bank (100%)
	Interbolsa	1991	company, for-profit	Euronext Lisbon (100%)
Romania	BVB	1995	stock exchange	72 legal entities (mainly banks) and 28 natural persons
	SNCDD	1996	n.a.	n.a.
	SaFIR	2005	central bank	central bank (100%)
Slovakia	CDCP SR	2004, as a result of the transformation of the Securities Center of the Slovak Republic, which had been created in 1992	company, for-profit	Bratislava Stock Exchange (100%)
	Central Registry		central bank, not-for-profit	central bank (100%)

Country	Name of depository	Date of commencement of activities	Infrastructure form, for-profit or not-for-profit	Ownership structure
Slovenia	KDD	1995	company, for-profit	41 shareholders, including banks, government funds, companies, brokers, issuers and other
Spain	Iberclear	2003, as a result of a merger between CADE and SCLV	company, not-for-profit	BME holding (100%), which is a public company with shares owned by the central bank (5.33%)
	Local depositories, SCL Barcelona, SCL Bilbao and SCL Valencia	Barcelona – 1992 Bilbao – 1890 Valencia – 1992	companies, for-profit	BME holding (100%), which is a public company with shares owned by the central bank (5.33%)
Sweden	VPC AB/ NCSD	1989	company, for-profit	NCSD Holding AB (100%), owned by, among others: Nordea Bank Sverige (24.82%), Skandinavska Enskilda Banken (24.82%), Svenska Handelsbanken (24.82%) and Swedbank (24.82%)
United Kingdom	Euroclear UK & Ireland Limited	1996 (CrestCo)	company, for-profit	Euroclear SA/ NV – branch of Euroclear Plc, whose shareholders are participants (86.9%) and Sicovam Holding SA (13.1%)

Source: NBP.

The range of financial instruments handled by central securities depositories is very wide. In countries where there is only one central securities depository, it handles all financial instruments traded in the domestic market. In several EU Member States there are two central securities depositories, of which one usually handles Treasury securities and the other – the remaining securities.

Central securities depositories usually operate across all trading platforms in a given country. However, sometimes one securities depository performs the settlement of transactions from only one of the markets in a given country or region.

2.1.2.3. Regulation and oversight

As in the case of central counterparties, oversight and regulation of central securities depositories are essential to maintain the stability of the financial system. Due to the very rapid development of capital markets, the continued integration process of post-trading services in the EU, and the introduction of modern technologies, oversight principles and rules which regulate post-trading services need to be constantly revised, as previous regulations were created for national markets rather than for cross-border transactions, and pose a significant barrier to the development of a single pan-European capital market[28].

In respect of oversight, there is a clear trend towards increasing the role of central banks, apart from institutions exercising supervision, in carrying out systemic oversight of both central securities depositories and central counterparties. The need to involve central banks in the oversight of securities settlement systems is described in section 1.2.8 Central banks.

That need was confirmed by analysis carried out by major international bodies, including the Committee on Payment and Settlement Systems (CPSS) at the Bank for International Settlements (BIS), the International Organisation of Securities Commissions (IOSCO), and the European Central Bank (ECB)[29].

To a lesser or greater extent, nearly all EU central banks declare they exercise systemic oversight of CSDs and CCPs. However, they apply quite different regulations and tools in this respect. This follows, *inter alia,* from the differences between national legal systems, the scope of activities and the position of central banks, the adopted depository and settlement infrastructure models, as well as from historical factors. For exercising systemic oversight, some central banks use statutory instruments. Other banks, which have not been granted

[28] Legal barriers to the integration of the European market of post-trading services, among other things, are presented in the Giovannini report discussed in Chapter 3.

[29] See Chapter 3.

such instruments by national legislation, use alternative solutions, e.g. ownership rights, participation of central bank representatives in corporate bodies of entities which manage the securities settlement system (SSS), cooperation with bodies which regulate the financial market, public statements[30], exerting influence as a participant or service supplier, and persuasion based on the authority of the central bank.

The national legislation of the majority of EU Member States imposes obligations on central banks related to the performance of the systemic oversight of SSS. EU central banks have been granted rights to exercise oversight of SSS over the past 20 years (e.g. in Sweden in 1989, in Denmark in 1996, in Ireland and Finland in 1997, in Belgium and Italy in 1998, in France and Luxembourg in 2001, in Austria and Cyprus in 2002, in Lithuania and Latvia in 2003, in Estonia and Hungary in 2004, in Slovenia in 2006).

Central banks can be divided into three groups according to the scope of these rights:

1. Central banks directly authorised to exercise systemic oversight of the SSS. National legislation of 7 countries stipulate directly that oversight of securities settlement systems, securities depositories or securities clearing and settlement systems is the responsibility of the central bank.
2. Central banks indirectly authorised to exercise systemic oversight of the SSS. National legislation of 12 countries requires the central bank to exercise oversight of the national payment system, specific payment systems, settlement systems and clearing systems. Some legislations impose an obligation to take necessary action in order to ensure the stability, effective functioning or promotion of the monetary system, money circulation, currency circulation, the financial stability of the entire financial system, or the stability of the payment and settlement systems. In those countries, the obligation to exercise SSS oversight is derived from the interpretation of the rules, or from the statutory definition that they also include the obligation to support the correct functioning of the securities settlement systems.
3. Central banks not authorised by legislation to exercise oversight of the SSS. The legal systems of 6 countries do not contain regulations that could be the legal basis for central banks to exercise oversight of SSS.

The statutory powers of central banks in respect of the systemic oversight of CSDs and CCPs are diverse and may consist of the following:

[30] Public statements are understood as central banks' opinions expressed in many different forms, e.g. through the publication of opinions, issue papers, positions, views or press releases, and other actions.

- the right to demand information, data, files or other documentation from system operators,
- the right to issue binding regulations specifying the functioning of the system,
- the right to exercise controls or carry out inspections at the operator's head office,
- the right to demand the removal of irregularities in the functioning of the system,
- the right to levy sanctions (fines) in the event that standards are not being met or the obligation to submit information is not complied with,
- the right to declare the recommendations of the ECB and of the Basel Committee as legally binding.

In most EU Member States, central banks cooperate with relevant securities commissions or with other capital market regulators in the oversight of CSDs and CCPs.

Moreover, the development of cross-border activities in respect of post-trading services has made it necessary for the national supervisory authorities to cooperate. Such cooperation takes various forms. For instance, both capital and financial market supervisory institutions as well as central banks, participate in various committees, prepare common supervisory rules and monitor the functioning of securities settlement systems and central counterparties, paying special attention to security, efficiency and ensuring a level playing field. An example of such a committee for the supervisors of the post-trading infrastructure is the Committee of European Securities Regulators (CESR). According to the classification prepared by Alexandre Lamfalussy[31], it represents the third level of the regulatory process in the EU, and is working on preparing common standards and guidelines for securities markets in the EU. Central banks organise committees and working groups within the European System of Central Banks. The Payment and Settlement Systems Committee (PSSC) deals with securities settlement systems. Furthermore, central bank representatives cooperate with representatives of market institutions, i.e. securities settlements systems and central counterparties, their associations and the largest commercial banks within the Contact Group on European Market Infrastructure (COGESI).

Mutual agreements on the exchange of information or a wider cooperation in a given area are another form of cooperation between supervisors in the EU. Such agreements can concern one or more sectors of the financial market. Agreements between central banks and bank supervisors and between central

[31] See section 3.3.2.4 "Lamfalussy report".

banks and the Ministries of Finance from the entire EU on cooperation in crisis situations can serve as another example of such cooperation.

Moreover, supervisors often cooperate bilaterally where a system spans more than one country. An example is the memorandum of understanding (MOU) between supervisors from the Euroclear Group countries on the supervision of the activities of the group's institutions.

2.1.2.4. Trends

The development of capital markets, intensive integration processes, and the rapid development of technologies have contributed to enormous changes in the activities of entities which provide depository and settlement services in recent years. They all lead to the lowering of the costs of trading. The most important trends in that area are described below.

1. Integration, cross-border activities

As in the case of central counterparties, securities depositories were created in the EU Member States to service individual segments of the capital market, e.g. the stock, corporate bond or government bond markets. Initially, owing to little need to cooperate, they operated independently from one another. Relatively few cross-border transactions were settled via local participants of foreign depositories, the local custodians, or global entities with local representatives, the global custodians. As economic and technical development progressed, the need to integrate depository and settlement services grew. It also increased following the introduction of the common currency and growing European integration, in particular the consolidation of European markets (e.g. Euronext, Deutsche Börse, OMX). As a result, both market participants and the EU Member States undertook many diverse actions in order to first integrate national infrastructures and improve their efficiency, and then create effective settlement channels for the constantly growing number of cross-border transactions. At present, there are 4 ways of carrying out cross-border settlement: through consolidated depositories, via links between depositories, via the participant's remote access to the depository, and – traditionally – through intermediaries in the local market.

Consolidation

The consolidation process of securities depositories started with mergers of depository systems at the national level, and then changed into international consolidation. The largest international consolidations of depository and settlement infrastructure within the last 8 years include:

- The merger of Cedel International, the international securities depository with the German Deutsche Börse Clearing securities depository in January 2000;
- The consolidation of the Euroclear Bank international securities depository with the French central securities depository Sicovam SA in January 2001, which resulted in the establishment of the Euroclear Group;
- The Dutch securities depository NECIGEF BV joining the Euroclear Group in May 2002;
- CrestCo, the securities depository from the UK and Ireland, joining the Euroclear Group in September 2002;
- Acquisition of the Finnish depository APK by the Swedish VPC AB securities depository in April 2004; the joint depository took the name of the Nordic Central Securities Depository (NCSD);
- Euroclear SA/NV takeover of the Belgian depository for commercial securities (CIK) in January 2006.

The next step in this respect may be the takeover of the shares in Nordic CSD by Euroclear Group, scheduled to take place towards the end of 2008, according to an agreement signed in June 2008.

Cooperation in the form of links

Cross-border cooperation between securities depositories may take the form of links[32]. They allow the registration in the national depository system of securities that were issued abroad and registered in a foreign depository, and to settle transactions in such securities via that system. Links between two depositories consist of a set of institutional, legal and technical procedures and mechanisms which ensure the electronic cross-border transfer of securities. To create a link, it is necessary to open an omnibus account for the national depository in the foreign depository. Links between depositories facilitate the transfer of eligible collateral for the purpose of the monetary policy of the Eurosystem, as well as of other securities traded in more than one country.

The scope and method of settlement via a link depend on its type. Links can be divided into:

1. DvP (delivery versus payment) and FoP (free of payment): a DvP link allows for the settlement of transactions in both securities and cash. An FoP link only allows for the transfer of securities, and the accompanying cash settlement (if any) is carried out outside the link.

[32] A link is a form of cooperation between independent institutions and does not imply merging them in the sense of consolidation.

2. Unilateral and bilateral: a link is unilateral when only one depository opens an account in the other depository, which only allows for the transfer of securities whose home depository is the one which maintains the account. A link is bilateral when each of the depositories opens an account for the other depository, which allows for the transfer of securities registered in either depository.
3. Direct and indirect: a link is direct when there is no intermediary between depositories. In an indirect link, the transfer of securities between depositories is carried our via a third entity, for instance a commercial bank or a third securities depository (the so-called relayed link).

Links between central securities depositories are also divided according to the *Code of Conduct* classification described in section 2.1.1.4 on links between CCPs.

DvP links are much more useful than FoP links in cross-border transaction settlement[33], as they ensure cash settlement. However, establishing a DvP link is much more complicated and costly, and thus less commonly used. European securities depositories use different methods for settlement via a DvP link, ensuring different levels of settlement safety. In some models of cross-border settlement via DvP models, banking functions performed by securities depositories are used, whereas in other models it is not necessary. This type of settlement can be carried out through:

1) Participants' cash accounts at the foreign correspondent bank, and accounts where participants' securities are registered, held with the local securities depository;
2) Participants' cash accounts at a foreign central bank and accounts where participants' securities are registered, held with the local securities depository, linked with the foreign securities depository;
3) Cash accounts and accounts where participants' securities are registered, held with the local securities depository, which has a cash account at a foreign central bank and is linked with the foreign securities settlement system;
4) Cash accounts and accounts where participants' securities are registered, held with the local securities depository which has a cash account with a foreign correspondent or central bank, and the account where the

[33] Where a link handles only the settlement of transactions executed in local markets which involve dual-listed securities, it is sufficient to transfer securities between the countries where they are listed, without the accompanying payment. There is no need then to create a DvP link.

securities are registered is held either with the foreign correspondent, or with the foreign securities depository with which it is linked.

The number of links between depositories in the EU has been increasing systematically. In 2006, the number of links between securities depositories in the euro area was 59, of which 21 links were unused[34]. The reason behind such a rare use of links between depositories may be the fact that the majority of links are FoP links, which do not allow cash settlement simultaneously with securities settlement. Furthermore, the number of foreign transactions remains relatively small, which can be attributed to the Giovannini barriers. However, their popularity may increase considerably with the increase in the number of DvP links. Establishing links between securities depositories is also quite popular in the new EU Member States. For instance, between 2003 and 2008, KDPW established 6 FoP links with: the Hungarian KELER, the Austrian OeKB, Clearstream Banking Luxembourg, the Central Securities Depository of the Slovak Republic, Euroclear Bank, and the Estonian Register for Securities. This is a result of the internationalisation of trading in those countries, particularly of the launching of foreign securities in those markets. As is the case with central counterparties, there should be a positive impact on establishing new links between securities depositories following their signing and application of the Code of Conduct, as the Code is aimed at eliminating barriers of access to entities which provide post-trading services. It must not be forgotten, though, that establishing links between depositories is a rather complicated and costly process, and its profitability depends on the demand for clearing and settlement in a given foreign market.

Remote access

In the context of cross-border settlements, many central securities depositories offer remote access[35] to their services to foreign investment firms (and indirectly – to the investors they represent). However, in the case of depositories which do not maintain cash accounts, i.e. in the majority of cases, the remote participant must obtain access to the bank where the cash leg of settlement of transactions for a given depository takes place. Those are usually national central banks, which normally allow remote access and offer current accounts maintenance to foreign entities for settlement purposes. However, they do not provide intraday credit,

[34] European Central Bank, *Blue Book: Payment and securities settlement systems in the European Union: euro area countries*, Frankfurt, August 2007.

[35] Remote access is understood as the access of a foreign participant to the system without the need to hold a registered seat or branch in the country of the system operator.

which is of utmost importance for timely transaction settlement., Remote access to the services of central securities depositories is therefore not very popular in the EU. Such a diversity of settlement rules in EU Member States[36] may constitute a barrier to cross-border operational cooperation between settlement systems.

Intermediaries

The traditional cross-border transaction settlement method, i.e. via intermediaries, is still widely used. The role of the intermediary is currently played by three types of entities, i.e. local agents who are participants of a foreign securities depository, international securities depositories, or global custodians. Local custodians are large local banks or branches/field branches of global banks, e.g. BACA in Austria, BBL in Belgium, Credit Agricole in France, Commerzbank in Germany, ABN Amro Bank in the Netherlands, ICCREA in Italy, and many more[37]. As global custodians and international depositories develop their own services intensively, the role of local custodians in the EU has been diminishing (from 66 in 1998 to 49 – in 2000, excluding GR, IE, LU, and PT)[38]. The market for global custodians is very concentrated due to the high cost of launching such operations and the high rate of economies of scale. The largest global custodians operating in the EU include BNP Paribas, Citibank, Deutsche Bank, and HSBC.

While on the one hand, international depositories and custodians compete, on the other their services are complementary. ICSD are usually included in the scope of business of global custodians which perform bonds settlement in ICSDs, while local custodians assist ICSDs in establishing contacts and links with local depositories. International depositories mainly focus on wholesale customers, and offer standard services to all customers. By contrast, global custodians focus on institutional investors and entities which provide private banking services and adapt their services to the individual needs of customers. Competition between international depositories and local custodians increases when ICSDs take over domestic depositories and thus enter the local market[39].

Settlement via an intermediary is costly, as a back office infrastructure needs to be created. Additionally, sometimes it is necessary to use the services of an intermediary via another intermediary. Thus, even several intermediaries

[36] See Giovannini barriers in Chapter 3.

[37] BNP Paribas, *Clearing and settlement in the European Union, Main policy issues and future challenges*, Paris 2002.

[38] K. Lannoo, M. Levin, *The securities settlement industry in the EU. Structure, costs and the way forward*, The Centre for European Policy Studies, Brussels 2001.

[39] K. Lannoo, M. Levin, *The securities settlement industry in the EU. Structure, costs and the way forward*, The Centre for European Policy Studies, Brussels 2001.

may participate in the settlement of one transaction. The risk and the cost of transaction settlement increase as the number of intermediaries grows. If an investor trades in many foreign markets, the cost of such operations increases considerably.

2. Changing the scope of services by entities which provide post-trading services

When the capital market infrastructure emerged, including the infrastructure of central securities depositories and ICSDs, and when custodian banks started their operations, their status and functions were clearly specified, and their scope of operations overlapped only slightly. As mentioned above, central depositories enjoyed a special status in the capital market. They functioned as a natural monopoly; their operations were strictly regulated and they operated in the national market. ICSDs held the status of commercial banks. They mainly handled international bond settlement, while custodian banks acted as intermediaries in security safekeeping and cross-border transaction settlement by allowing access to capital market infrastructure in foreign markets. Nevertheless, the introduction of the single currency and stock exchanges mergers triggered a change in the scope of services rendered by those entities, via numerous consolidations of post-trading infrastructure entities holding varying types of status and establishing operational links between depositories. For example, Euroclear Bank, which functions as an ICSD, started to take over national depositories and to provide intermediation services for cross-border transactions to them, thus moving, to a certain extent, into the area of custodian banks operations. Additionally, ICSDs started their expansion into national government bond markets achieving success in some of them, e.g. in the German, Dutch, Portuguese, Danish, and Irish markets[40]. Local depositories, on the other hand, extended their operations to cover all types of securities; they also launched cross-border activities by establishing operational links and allowing remote access to foreign participants. Furthermore, considering that some custodian banks conduct post-trading operations on a very wide scale with turnover much higher than that posted by certain depositories, it is noticeable that the operations of all three types of institutions overlap considerably. However, ensuring a level playing field for those entities is complicated due to the diversity of legal requirements applied to them. CSDs are regulated like securities depositories and as such must meet specific requirements, By contrast, custodian banks are subject to the requirements of credit institutions, while ICSDs are expected to meet both types of requirements. The situation is

[40] BNP Paribas, *Clearing and settlement in the European Union, Main policy issues and future challenges*, Paris 2002.

a result of adopting an institutional approach to regulation (targeting regulations at a specific type of entity) instead of the functional approach (targeting regulations at various types of entities having the same function).

3. Operational development

The extensive technological development which has taken place over the last 20 years enabled the automation of post-trading services in central securities depositories, which resulted in lower costs and the enhanced safety of settlement. Many depositories introduced transaction processing on a straight-through-processing[41] basis, i.e. the automatisation of the system, from order entry to settlement.

4. Corporate issues

Central securities depositories in the EU used to be owned by public authorities, central banks or commercial entities, the latter on a much lesser scale. They functioned as public institutions, and their market position was usually monopolistic. Recently, the ownership structure and the corporate nature of many depositories have changed. The following trends may be distinguished in this respect:

- In a few EU Member States, the depository and settlement infrastructure was privatised as state-owned institutions sold their shares to commercial entities – usually the system users. As a result, the previous state-owned monopolies turned into privately-owned ones, which additionally changed their commercial profile from not-for-profit to for-profit. Although the legal monopoly for the provision of clearing and settlement services was abolished in many Member States with the introduction of the MiFID (see section 3.3.2.1), in practice, due to the existence of various barriers, the depositories still retain their monopolistic position in respect of transaction settlement in individual markets.
- Another trend which has emerged among European depositories is demutualisation, i.e. extending the existing group of owners to include non-participant entities. This creates new possibilities of attracting external capital and is connected with the change in the commercial nature of an organisation into a for profit organisation.
- The withdrawal of central banks from operating securities depositories or from participating in their ownership structures. Currently, among the central banks of the EU Member States from before 2004, only

[41] In a system which operates on a straight-through-processing basis, the whole system of processing instructions takes place automatically, without the need for manual intervention.

the National Bank of Denmark and the Bank of Spain have shares in central securities depositories (24% and 5.33%, respectively)[42], excluding securities depositories which are wholly owned and maintained by central banks: NBB-SSS in Belgium, BOGS in Greece, and SITEME in Portugal. However, in the past (in the 1990s, i.e. before the introduction of the euro) as many as six other central banks had shares in central securities depositories. They were: Banque Nationale de Belgique/ Nationale Bank van België (5.19% in CIK), Suomen Pankki (Bank of Finland) (24.4% in APK), Banque de France (40% in SICOVAM), De Nederlandsche Bank (a minority share in Necigef), the Bank of England (2.5% in CREST), and the Bank of Italy (44% in Monte Titoli). With the exception of the National Bank of Belgium, all central banks had sold their shares in central securities depositories after the euro area was established and monetary policy decisions were simultaneously transferred to the European Central Bank. The main reasons for selling their equity stakes, as presented by central banks, include consolidation with other depositories or takeovers by stock exchanges (Belgium, France, and the United Kingdom), as well as privatisation (Finland, the Netherlands, and Italy). One of the main factors for the acceleration of integration and privatisation in this respect was the increased competition between central securities depositories which register securities and carry out settlement in a given currency when national currencies were replaced by the euro. It should be emphasised that, apart from the Bank of England, all central banks which withdrew as shareholders of central securities depositories enjoyed the statutory right to exercise oversight of securities settlement systems either directly or on the basis of a relevant interpretation of regulations which entrust the bank with the safe and effective operation of the payment system. As concerns the Bank of Spain, which retains its share in the central securities depository, it is not statutorily authorised to exercise oversight of securities settlement systems.

The analysis of capital involvement of central banks from countries which joined the EU in 2004 or later shows that the following banks hold shares in central securities depositories: the Bulgarian National Bank (20% in CDAD), the National Bank of Latvia (60% in LCVPD), the National Bank of Poland (33.33% in KDPW), the National Bank of Hungary (53% w KELER), and the Bank of Estonia (1.1% in ECSD). Additionally, the Bulgarian National Bank,

[42] The Bank of Spain holds a 5.33% share in BME (a holding comprised of Iberclear, MEFF-AIAF-SENAF and the Spanish Stock Exchange).

the Czech National Bank, the Bank of Lithuania, the National Bank of Poland, the National Bank of Romania, and the Bank of Slovenia maintain depositories, which they own 100% (GSD, SKD, VNS, RPW, SaFIR, and the Central Registry, respectively).

Table 6 presents detailed information on the current corporate structure.

2.1.2.5. Optimal model

At present, there is no single concept of the optimal model of the depository and settlement infrastructure in the EU.

Some market participants are in favour of retaining the *status quo*, i.e. the local, non-consolidated nature of infrastructure, as the costs and benefits of integration could be distributed unevenly between market participants. This group includes, in particular, intermediaries, who currently benefit from the fragmentation and differences in regulations, market practices, procedures, or the applied technology. In the event of full integration, demand for their services would decrease considerably.

Other market participants opt for reforms and intensification of integration processes. They have proposed many solutions as regards the optimal target model of depository and settlement infrastructure in the EU. For example, many custodian banks support establishing a common pan-European infrastructure, which would, however, only process the main post-trading functions, i.e. clearing and settlement, leaving depository functions (which constitute a major part of banking activities) to local depositories or banks. Representatives of infrastructure, on the other hand, particularly those from smaller markets, support the harmonisation of procedures and processes, but they would rather avoid reducing the number of depositories in the EU.

As a result, individual market participants take single independent initiatives, which most frequently consist of mergers with other entities providing post-trading and/or operational integration services. This increases the level of integration within the EU, but only for selected markets, depending on the current business needs. The experience of securities depositories which have engaged in consolidation processes in recent years shows difficulties connected with these processes that mainly stem from the lack of harmonisation of legal provisions between individual European markets, as well as other barriers (technical, fiscal – see section 3.3.2.5 on the so-called Giovannini barriers) and indicate that the cost of the process (Euroclear) is significant. The position of the European Commission also needs to be highlighted, as the Commission recognises the dominance of business factors in the process of making decisions concerning integration.

Most market participants also take part in pan-European harmonisation initiatives proposed by the European Commission or other entities[43]. The long-term character of these initiatives may show how difficult it is to integrate 27 different local capital markets and their infrastructures. An important factor may also be the propensity of state authorities from individual Member States to protect local markets from the necessity to submit to the rules of other markets and to retain their local character.

In response to the above problems, in July 2006 the European Central Bank put forward a proposal for the Eurosystem to build a cross-border transaction settlement system for securities denominated in euro – TARGET2-Securities (T2S). It was meant to be a counterpart of TARGET2 in respect of securities settlement. The system would take over, on an outsourcing basis, the settlement function of those securities depositories which would decide to join the initiative. T2S would provide settlement on a DvP basis with the use of cash accounts opened within TARGET2. According to ECB analysis, T2S would ensure the centralisation of the settlement function in the EU and enable to lower settlement costs.

Establishing T2S will not, however, result in full integration of post-trading services in the EU, as T2S will only provide the settlement function, exclusive of depository and asset management services, which will remain in national depositories. At the first stage, it will only cover transactions cleared in euro. It will not remove legal or fiscal barriers. Furthermore, T2S will take over settlement only from those markets whose securities depositories join the system. T2S is nevertheless the first initiative for building settlement infrastructure which covers the euro area as a whole, and it is thus expected that it may be conducive to eliminating barriers in respect of cross-border settlement, as well as significantly enhance the degree of integration of post-trading services in the EU. This should enhance settlement efficiency and safety. More information on T2S can be found in section 3.3.3.3.

Another initiative in respect of cross-border settlement harmonisation was a joint-venture named Link Up Markets, established by seven European securities depositories[44] in April 2008. The goal of the initiative is to build and maintain a common platform for cross-border settlement between linked depositories. The platform is to ensure efficient communication between different depository systems by means of converting the formats of messages used by the systems so that they are accepted by other systems.

[43] See Chapter 3.

[44] OeKB (Austria), VPS (Norway), Clearstream Banking Frankfurt (Germany), Iberclear (Spain), Helex (Greece), SIS (Switzerland), and VP (Denmark).

The project is to cover settlement of all financial instruments, exclusive of derivatives, in central bank money. According to the plan, settlement in various currencies will be possible. The venture is open for participation of depository institutions other than its founders.

2.1.3. The current level of capital and operational integration of central depositories and central counterparties in the EU

2.1.3.1. The level of national and international integration

At the national level, depository and clearing infrastructure in the EU is quite well integrated. On average, there are 1.55 depositories and 0.37 central counterparty per Member State, i.e. less than two clearing and settlement institutions. However, considering the number of Member States and the plans to establish a single financial market covering all the countries, the number of infrastructure institutions which service the European financial market is considerable. As previous sections show, there are currently 10 central counterparties and 42 depositories in the territory of the EU, including 2 international depositories,.

Such fragmentation of infrastructure is not an obstacle to servicing local markets, whereas in the case of cross-border transactions it leads to the necessity of establishing different types of links, which would allow participants to access the infrastructure in various countries and transfer securities between jurisdictions. The existence of many barriers in the area of regulations, taxes, market practice, as well as various technical requirements and the scope of services provided by infrastructure institutions in different Member States makes cross-border transactions costly and their settlement complicated.

The higher cost of cross-border transaction settlement and clearing results from the need for institutions from different countries to act as intermediaries in the process: from at least two countries, if there is a direct link between infrastructure institutions in those countries; or a greater number, if the link is indirect or a given market participant acts through custodian banks[45].

Apart from higher operating costs, post-trading market fragmentation in the EU is also connected with a higher level of risk for cross-border transaction settlement and clearing. This mainly concerns legal risk due to the potential conflict

[45] According to the Giovannini Report, the execution, clearing and settlement of a domestic transaction necessitates the intermediation of an average of five institutions, while in the case of a cross-border transaction the number rises to 11. European Commission, The Giovannini Group, *Cross-border clearing and settlement arrangements in the European Union*, European Commission, Brussels, November 2001.

between regulations on procedures, rights and obligations of transaction parties that are in force in different legal systems. Additionally, the level of other risks related to clearing and settlement, i.e. credit risk, liquidity risk, and operational risk, are higher, and are frequently related to the number of institutions which act as clearing and settlement intermediaries.

The degree of the fragmentation of the clearing and settlement infrastructure in the EU varies depending on the type of market, e.g. the debt instrument market is dominated by two ICSDs (Euroclear Bank and Clearstream International). By contrast, transactions in shares are processed in many national systems, which vary in terms of technical requirements, market practice, fiscal procedures, and legal conditions. This is largely a result of the nature of these securities. While debt securities are relatively fungible, shares are more diversified and servicing them is complicated, particularly in respect of the rights stemming from securities, which require communication between the issuer and the holder. As a consequence, cross-border share settlement is much more difficult than bond settlement in the EU, and simplifying it requires a high degree of integration, Many integration initiatives have therefore been taken. They will be described in Chapter 3.

2.1.3.2. Initiatives aimed at the integration of infrastructure providing post-trading services in the EU

Integration

The market is fully integrated for a given set of financial instruments or services if all its potential participants with similar characteristics:

- Firstly – must obey the same rules when they decide to use the instruments and/or services;
- Secondly – have equal access to those instruments and/or services;
- Thirdly – are treated equally if they operate in the market[46].

Achieving financial market integration is the main element of the Lisbon Strategy in respect of EU economic reforms. Moreover, integration would enhance economic development, boost the efficiency of capital allocation, and provide a more effective form of risk management related to financial market operations. It would result in, *inter alia*, higher market liquidity, lower transaction costs, enhanced diversification of investment options for investors and company financing, as well as many other benefits for the financial market.

[46] Baele et al., *Measuring European Financial Integration*, "Oxford Review of Economic Policy," 2004, Vol. 20, No. 4.

Consolidation

Consolidation leads to increased concentration of entities which provide clearing and settlement services. It may be achieved through structural changes (mergers and acquisitions) and strategic initiatives (e.g. outsourcing, strategic alliances, joint-ventures or reorganising financial institutions). In the case of mergers of central securities depositories, financial and organisational consolidation takes place first, followed by the consolidation of technical platforms, which is difficult to achieve in the short term but brings about notable benefits.

In recent years, the process of consolidating post-trading infrastructure in the EU has been exceptionally rapid due to a significant increase in the demand for cross-border services. The process is expected to continue, yet the optimal pace of future consolidation and the optimal infrastructure model are currently still under discussion between market participants, central banks, regulators, and other interested institutions.

Consolidation costs and benefits

The results of various analysis indicate that as a result of consolidating institutions which provide depository and settlement services, it is possible to obtain considerable economies of scale in the form of a high potential for lowering unit costs. However, obtaining benefits is only possible if operational and technical integration (a common clearing or settlement system) are carried out simultaneously. Consolidation at this level is costly both for central depositories and central counterparties, as well as market participants. Its implementation is justified if the economies of scale obtained exceed the cost of integration. The lack of unified regulations of the capital market at the EU level is a considerable obstacle for consolidation on a wide scale and an obstacle for consolidated entities to provide uniform services in the markets of different countries, i.e. for cross-border activities of central counterparties, particularly central securities depositories. Furthermore, the consolidation process enhances settlement efficiency, on the one hand, but also increases potential systemic consequences in clearing or settlement; it also limits competition between entities offering similar services.

Types of consolidation

Consolidation may take two forms: horizontal or vertical. Horizontal consolidation takes place when institutions providing services of the same kind, i.e. stock exchanges (e.g. Euronext), clearing houses (e.g. Clearnet) or depositories (e.g. Euroclear) merge or introduce other forms of cooperation. Vertical consolidation takes place when institutions providing services at different stages of transaction execution, i.e. stock exchanges, clearing houses,

and depositories, start operating as one institution (e.g. the Deutsche Börse group, which includes the Frankfurt Stock Exchange, the Xetra market, the central counterparty Eurex Clearing, and the Clearstream depository; BME in Spain, and Borsa Italiana in Italy, which associate stock exchanges, central counterparties, and depositories). Recent experience shows that vertical consolidation does not rule out horizontal consolidation. The former HEX Group was initially consolidated vertically, as it included stock exchanges in Stockholm, Helsinki, Estonia, Latvia, and Lithuania, as well as securities depositories in Finland, Estonia, Latvia, and Lithuania. Subsequently, within the group, the Finnish depository APK was sold to the Swedish depository VPS in 2004, as a result of which horizontal consolidation of the two depositories took place.

Horizontal consolidation as a result of merging similar functions may lead to considerable economies of scale; if it is international, it may also facilitate handling cross-border transactions.

The main benefit of horizontal integration arising from the fact that the whole process takes place within one institution is efficient, automated transaction processing starting from trade execution, through clearing to settlement,

2.2. The depository, clearing, and settlement infrastructure in Poland – its history and current status

2.2.1. The history and current role of the National Depository for Securities SA (KDPW)

2.2.1.1. The establishment of KDPW

The founders of the Polish capital market decided on the total dematerialisation of trading in securities in the market since its inception in 1991. The need to establish a system for registering securities, as well as clearing and settling transactions existed since the very beginning. All the above functions were entrusted to one entity – the National Depository for Securities SA (KDPW). KDPW was established in 1991, initially as an integral part of the WSE. On 7 November 1994, it was separated from the structures of the stock exchange and registered as a joint stock company named National Depository for Securities SA. Initially, its shareholders were the Treasury and the WSE. In January 1999, they were joined by a third shareholder – the NBP.

KDPW started to clear and settle transactions executed on the WSE in April 1991. The first securities registered in the depository were the shares of

companies listed on the WSE: Tonsil, Próchnik, Krosno, Kable, and Exbud. Subsequently, the catalogue of securities processed by KDPW was expanded to include Treasury bonds (since 1992), Universal Share Certificates issued under the Mass Privatisation Program, investment certificates of closed-end investment funds (since 2001), and derivatives: futures contracts (since 1998), index participation units (since 2001), and options (since 2003). Since 2003, KDPW has also registered shares of foreign companies.

Apart from clearing and settlement of transactions executed in the spot market of the WSE, KDPW has been clearing futures transactions executed on the Warsaw Stock Exchange since 1998. Since 1996, it has also been settling transactions executed in the regulated OTC market organised by MTS-CeTO SA. In September 2000, KDPW started to settle securities transactions executed between banks and the NBP within the framework of the NBP's monetary policy. It has been servicing the Treasury Securities Dealers market since 2002. Also in 2002, KDPW began to process the clearing and settlement of transactions such as repos, and on-request securities lending was introduced.

Since July 1996, all financial instruments registered in KDPW have been assigned an international securities ISIN code[47]. KDPW operates in the Polish market as a national securities numbering agency.

The depository and clearing system of KDPW was initially based on documents submitted by participants (brokerage houses and banks) in paper form. In 1993, the form of submitting documents was changed from paper to electronic (records on floppy disks). Since June 1997, the records have been submitted by KDPW participants by electronic messaging via the Electronic System of Information Distribution (*Elektroniczny System Dystrybucji Informacji*, ESDI).

Settlement was initially carried out once a day during a settlement session[48]. In July 2001, a multi-batch system was introduced with three settlement sessions throughout the day. Subsequently, the number of sessions was increased to five and finally to seven. Introducing multiple settlement sessions allowed multiple transfers of ownership throughout day. In August 2002, KDPW introduced the possibility of settlement of certain Treasury bond transactions in the Real Time Gross Settlement (RTGS) system. Also in 2002, the possibility to match settlement instructions within so-called tolerance levels was introduced.

Settlement was initially secured by cash deposits collected from participants. In 1992, deposits were replaced with the Guarantee Fund for the Settlement of

[47] See section 2.2.1.2 "The present KDPW system," sub-section "Issuing ISIN codes".

[48] Initially, the settlement session in KDPW took place once a week, similar to the stock exchange session. Later, the frequency of sessions increased; since 1994 settlement has been carried out on a daily basis.

Stock Exchange Transactions (settlement guarantee fund), made up of payments contributed by KDPW participants[49]. In February 1999, an automatic securities lending system was introduced in KDPW in order to secure settlement liquidity. In 2002, the system was enhanced to allow KDPW to conduct buy-in/sell out operations. In 2004, the principles for making payments into the settlement guarantee fund were also altered to allow for a part of the contribution to be paid in the form of Treasury securities.

Initially, the settlement cycle for regulated market transactions was: five days (T+5) for securities quoted in the single price auction system and two days (T+2) for securities quoted in the continuous trading system. Transactions executed outside the regulated market were settled in a cycle agreed upon by parties to the transaction. In the second quarter of 1993, the settlement cycle for transactions executed in the single price auction system on the WSE was shortened to three days (T+3). In October 1998, KDPW began to clear and settle transactions executed outside the regulated market as well as free of payment transactions on the trade day itself.

Cash clearing was initially conducted on a bilateral netting basis with the use of cash accounts maintained for KDPW and its participants by Bank Śląski SA. In May 1998, the principle of multilateral netting for the cash leg of transactions executed on the stock exchange and OTC market was introduced. In July 1999, cash settlement of transactions and cash processing of benefits from Treasury bonds was transferred to the Payment System Department of the NBP (PSD NBP). Since June 2002, cash processing of operations in all other securities has also been taking place through the PSD NBP. In August 2003, the processing of transaction settlement and cash benefits for instruments denominated and settled in foreign currencies via a commercial bank (Kredyt Bank SA) began. Since the SORBNET-EURO system was launched in March 2005, it has also been possible to process cash settlement of euro payments via the PSD NBP.

Apart from its principal operations, KDPW processed and continues to process many other functions essential for the operation of the Polish capital market. In the years 1997-1998, KDPW participated in the Mass Privatisation Program by dematerialising Universal Share Certificates and organising their exchange for shares in National Investment Funds. KDPW has also been participating in providing services for the social security system in Poland since 1999. It has been managing the Guarantee Fund for pension fund management companies (PTE) and processing transfer payments between Universal Pension Funds. Since 2001, KDPW has been managing the investor compensation scheme established

[49] More information on the settlement guarantee fund can be found in section 2.2.1.2 "The present KDPW system", sub-section "Risk management".

to guarantee customer funds and securities in the event of the insolvency of brokerage houses and banks managing securities accounts. It has also been pursuing operational relations with foreign securities depositories since 2003. This cooperation enables, e.g. the quoting of financial instruments of foreign companies in the Polish capital market simultaneously with their quotation in domestic markets (dual listing).

2.2.1.2. Description of the KDPW system

Legal basis for the operation of the system

KDPW was established pursuant to the Act of 22 March 1991 on Public Trading in Securities and Trust Funds (Journal of Laws of 1991 No. 35, item 155). Its operation was initially regulated by a separate ordinance of the Council of Ministers of 8 April 1992 on the Principles of Operation of the National Depository for Securities (Journal of Laws No. 34, item 149). Pursuant to the amended Act on Public Trading in Securities of 1994 (Journal of Laws No. 4, item 17), KDPW was devolved as a separate company. The activities of KDPW are currently regulated by the Act of 29 July 2005 on Trading in Financial Instruments (Journal of Laws of 2005 No. 183, item 1538), which replaced the Act of 21 August 1997 on Public Trading in Securities (Journal of Laws of 2005 No. 111, item 537) in 2005.

Description of the system operator, its ownership structure and management

The KDPW system is operated by a joint stock company acting pursuant to an Act and a statute (articles of association). The company's shareholders are the State Treasury, the WSE, and the NBP each with an equal holding (33.33% each). The share capital of KDPW amounts to 21 million zloty; it comprises 21,000 registered shares with a nominal value of 1,000 zloty each. The shares of KDPW may only be purchased by companies operating a stock exchange, brokerage houses, and companies operating an OTC market, the Treasury, the NBP, and banks. The transfer of ownership of KDPW's shares requires the written consent of the company's Supervisory Board. Pursuant to its statute and the above Act, KDPW is a not-for-profit organisation. The company's governing bodies are the General Shareholders' Meeting, the Supervisory Board, and the Management Board. The company is managed by the Management Board comprising three to five members. The joint term of the Management Board lasts three years. The Supervisory Board of KDPW, composed of six to nine members and appointed for three years, carries out ongoing oversight of its operations. The consultative function is performed by the Advisory Committee, which operates within

KDPW and provides advice on certain issues related to the functioning of the market. The Advisory Committee may comprise representatives of regulated market operators, foreign participants of KDPW, associations and chambers of commerce for issuers, custodian banks, and investment firms. KDPW is subject to oversight of the KNF.

Regulations of the system

Apart from statutory provisions setting forth the framework of the depository, clearing, and settlement system, the principles of KDPW operations and its relations with participants have been laid down in its internal regulations. The principal document in this respect is the Rules of the National Depository for Securities (or KDPW Rules). It describes the basic rules governing the functioning of the depository, clearing, and settlement system: participation in KDPW, how the basic functions of KDPW are performed (operation of the securities depository, transaction clearing and settlement), operation of the system for securing settlement liquidity, executing issuers' obligations towards securities owners, corporate actions processing, and calculating fees. The KDPW Table of Fees constitutes an Appendix to the Rules.

The principles of how individual functions are performed are governed by the Detailed Rules of Operation of the National Depository for Securities (or KDPW Detailed Rules of Operation). They describe the requirements with regard to documentation submitted by participants, terms and technical details (e.g. deadlines) of executing operations in the KDPW system, reports submitted to participants by KDPW; they also include information on the general rules of maintaining records of securities by participants. Appendices to the Detailed Rules of Operation include, *inter alia*, the schedule of the settlement day. The detailed principles of maintaining a register by participants are included in the KDPW Registration Procedures. The operation of the settlement guarantee fund, the investor compensation scheme, clearing transactions executed on commodity exchanges, and processing transfer payments are governed by separate rules.

The KDPW Rules, the rules of the settlement guarantee fund, and the rules of the investor compensation scheme are adopted by the KDPW Supervisory Board on the basis of proposals submitted by the Management Board. The KDPW Rules and the rules of the settlement guarantee fund, the investor compensation scheme, the clearing of transactions executed on commodity exchanges, and transfer payments are subject to approval by the KNF.

Rules governing participation in the system

Pursuant to Article 51 of the Act on Trading in Financial Instruments, domestic and foreign financial institutions performing brokerage activities

within the territory of the Republic of Poland, custodian banks, foreign central securities depositories , clearing houses, issuers, and other financial institutions may become KDPW participants if the purpose of their participation is joint cooperation with KDPW. Participation is based on a participation agreement executed with KDPW. The agreement stipulates the scope of activities of a given participant within the depository and settlement system and specifies the type and form of participation.

The participation in the KDPW system may take direct or indirect form. A direct participant acts independently in respect of KDPW and other participants, while an indirect participant acts through a direct participant. A direct participant may act in accordance with one type or several types of participation in the securities or derivatives market, as a custodian, brokerage house, depositor, stock exchange market maker, entity organising the OTC market, representative, foreign depository or lead manager. Issuers constitute a separate type of participants. A direct participant may hold the status of a clearing member. This means it is held responsible vis-à-vis KDPW and other participants for the correct performance of duties which derive from transaction clearing. In particular, clearing members participate in establishing the settlement guarantee system (making contributions to the settlement guarantee fund).

Additionally, the futures market features two types of status for a clearing member. An individual clearing member (ICM) has the right to clear transactions on its own account only. A general clearing member (GCM) is authorised to clear transactions executed on its own account and on behalf of investors, and, when clearing transactions in KDPW to represent members who do not have the status of an ICM,.

Depending on the type of activity, participants must meet organisational, material and technical, and financial conditions described in the KDPW regulations. Organisational conditions pertain to the fact that the system participant has established regulations on the flow of information and the scope of responsibility of employees handling the securities accounts and transaction clearing and settlement. Meeting material and technical requirements consists of maintaining technical and technological equipment which ensures the correct registration of securities. In order to meet financial conditions, the participant must maintain a sufficient amount of own capital and meet prudential norms. Participants maintaining securities accounts are also under the obligation to employ persons with specialist qualifications in respect of securities registration to maintain a securities register.

KDPW exercises oversight of participants as regards the compliance of their activities with KDPW regulations, particularly in respect of their maintenance of a financial instruments register. Where irregularities are found, KDPW may

penalise a participant with a reprimand, a fine, suspension or exclusion from the system. KDPW notifies the KNF of any irregularities found.

Withdrawal from the KDPW system may take place upon the resignation of a participant or its exclusion by KDPW when it poses a threat to the safety of the system. When participation terminates, the entity, which maintains securities accounts, is under the obligation to transfer the securities registered in those accounts to another participant, indicated by the KNF.

Basic functions

Registration of financial instruments

Pursuant to the provisions of the Act on Trading in Financial Instruments, KDPW maintains a system for registering dematerialised financial instruments in Poland, based on deposit accounts held with KDPW and securities accounts held with authorised investment firms, the NBP, and KDPW. In carrying out this activity, KDPW specifies the principles for the registration of financial instruments and oversees their observance by participants in respect of their compliance with the law and KDPW regulations. Pursuant to the Act, dematerialisation is mandatory for publicly traded securities admitted to trading in the regulated market or the MTF, and those issued by the Treasury or the NBP. As regards all other financial instruments, it is the issuer that decides on their dematerialisation[50].

Currently, the majority of financial instruments registered in KDPW are shares and Treasury bonds. Apart from Treasury bonds, KDPW also registers corporate, local government, convertible, and mortgage bonds, as well as bonds issued by financial institutions. KDPW also registers rights to shares, pre-emptive rights, investment certificates, and warrants.

Financial instruments are accepted by KDPW following an application by an issuer by way of an appropriate resolution of the KDPW Management Board. In addition to accepting securities into the depository, the procedure also assigns them an ISIN code. Securities are registered in a so-called issuing account and in deposit accounts of participants who maintain securities accounts of investors, i.e. securities' owners.

Securities are registered in quantitative terms, in line with the following rules:

1) Double entry – each operation relating to the rights arising under securities is registered in at least two record accounts, and the entry or the total

[50] Due to the advantages of dematerialisation, e.g. rapid clearing and settlement, a high degree of safety, practically no threat of theft, fraud, or embezzlement of securities held in safekeeping, and no necessity to maintain vaults.

of entries on one side of the account must be equal to the entry on the opposite side of another account in terms of quantity and value;
2) Separate registration of securities – operations with securities marked with the same code are registered in a separate group of accounts;
3) Taking into account the types of participation – separate groups of accounts are maintained which correspond to individual participation types of a given participant;
4) Simultaneous entries – entries in cash accounts and record accounts related to the same transaction are mutually dependent;
5) Completeness – registration applies to all securities operations;
6) Accuracy – securities operations are fully registered and reflect the actual status quo;
7) Transparency – the register reflects the balance of securities held by authorised entities in a clear and unambiguous way.

From the moment of accepting securities into the system, KDPW controls if the number of securities in the accounts of participants is consistent with the number of securities registered in the issuing account.

A different registration method applies to derivatives such as options or futures contracts, which are not issued in the classical meaning of the term, but emerge as a result of the conclusion of a transaction between an issuer and a buyer. Registration of derivatives takes place on the basis of information from the market that the transaction has been executed: an entry for a position in those instruments is made directly in accounts maintained by KDPW for participants[51]. When an investor executes a reverse transaction, the instrument is deregistered from the investor's account.

Maintenance of securities accounts and deposit accounts

The basis for the operation of the KDPW depository, clearing and settlement system are deposit accounts, maintained by KDPW to register financial instruments (in the form of an electronic entry) entered into securities accounts held with brokerage houses and banks. Entries in deposit accounts are made as a consequence of the following events: when investors take over a new issue in the primary market, execute a transaction in the secondary market, exercise rights arising from securities (such as the redemption of bonds, processing rights to new shares of a new issue, stock split, assimilation), execute a free of payment delivery (FoP), and conduct other activities which result in the transfer of securities from one account to another. The transfer of rights in financial instruments

[51] Accounts for derivatives are maintained at an individual level, separately for individual investors, identified with a Customer Identification Number (NIK).

takes place when they are entered onto the securities account of the investor. The entry is made on the basis of documents confirming that settlement has been carried out in deposit accounts of KDPW.

Deposit accounts are collective, i.e. the total number of financial instruments held by customers of investment companies – KDPW participants – is entered. Participants keep detailed records on securities accounts maintained for their customers in their systems. Account holders are entitled to the rights in respect of financial instruments entered into the accounts. Balances of deposit accounts maintained by KDPW for participants are a collective reflection of the balances of securities accounts maintained by them for their participants. Therefore, the sum of balances on securities accounts maintained by an intermediary should correspond to the balance of its deposit account.

Financial instruments of customers of a financial institution and financial instruments owned by that institution are entered into separate deposit accounts. This solution (called asset segregation) ensures the protection of customer assets in case the bank or brokerage house, which maintains their securities accounts, declares bankruptcy.

KDPW also maintains securities accounts for financial institutions (mainly banks) which operate independently and do not keep records of securities themselves[52]. Participants who use this service are granted "depositor" participation status. Apart from the above, KDPW also maintains issuing accounts. In each of those accounts, all securities marked with a given ISIN code are registered separately.

Processing rights from securities

The basic functions of KDPW include processing rights from securities (corporate actions, CA), which covers the exercise of issuers' obligations towards securities owners and processing corporate actions.

The exercise of issuers' obligations includes the realisation of pecuniary or non-pecuniary financial benefits in respect of entitled persons. As part of the realisation of pecuniary obligations of issuers, KDPW processes dividend and interest payments by acting as intermediary in the transfer of funds from the issuer to brokerage houses and banks maintaining customers' accounts. In the case of foreign issuers or bonds denominated in foreign currencies, dividend or interest is paid through the intermediation of KDPW in the currency declared by the issuer: the euro, USD or other currency (e.g. the Hungarian forint). KDPW also processes the execution of other financial obligations, such as the

[52] The maintenance of securities accounts by a bank requires the consent of the KNF and entails the need to meet technical and organisational criteria.

redemption of bonds and mortgage bonds, execution of warrants, redemption and amortisation of investment certificates, and expiry of index certificates. The execution of non-pecuniary obligations of issuers includes the conversion of convertible bonds into shares, execution of rights on senior bonds or subscription warrants, and processing issues with pre-emptive rights (execution of the priority to take over a new share issue).

In respect of processing corporate actions, KDPW conducts operations related to the assimilation and conversion of registered shares into bearer shares, changing of the face value and exchanging shares, as well as operations of share exchange due to the merger of public companies. KDPW also processes operations related to investors acquiring new securities in the primary market (including securities subscriptions). It also offers the following services: carrying out subscriptions and redemption of Treasury bonds, clearing and settlement of repo auctions, swap bidding, and normal and supplementary auctions for the bonds.

Additionally, in connection with processing issuers' obligations, KDPW may provide additional services, should the need arise, such as intermediation in providing issuers with information on the structure of a shareholding in order to allow them to file tax returns for investors being legal persons, intermediation in providing foreign issuers with information on shareholders (personal data, tax residence certificates, and declarations of securities ownership) where the data is necessary to pay out a dividend, intermediation in making an entry into the shareholders' register by investors of a foreign company to allow participation in a general shareholders' meeting, as well as participation in voting on resolutions during a general shareholders' meeting by conveying voting instructions to a proxy (proxy voting).

Clearing

The amounts of obligations and amounts due from participants being parties to clearing are established on the basis of documents which include transaction details sent to KDPW by the regulated stock exchange market operator or an operator of an OTC market, where the transactions have been executed, and in the case of transactions executed outside the regulated market – by participants being parties to the settlement of those transactions. In the case of transactions executed in the regulated market (on the WSE and CeTO), the operators of those markets ensure that the details of the executed transaction are confirmed by the counterparties. At the end of the trading day, KDPW receives lists of confirmed and matched transactions (the so-called contract notes) from markets. For transactions executed outside the regulated market and the so-called post-trading transfers (operations between market participants (brokerage houses) and

custodians), KDPW matches the documents they provide, i.e. establishes whether the instructions entered by participants being parties to settlement correspond.

KDPW calculates the amount of participants' obligations to be settled on the day of settlement on the basis of documents which include transaction details. The basic settlement cycle for transactions executed in the regulated market is three days (T+3), and in the case of transactions in Treasury bonds – two days (T+2). Transactions in derivatives are cleared on the trade date (T+0), while block transactions (executed outside the session), transactions executed in the interbank Treasury bond market, and transactions executed outside the regulated market are cleared and settled within a deadline established by the parties to the transaction (T+X, X ≥ 0).

Obligations pertaining to securities are calculated on a gross basis, separately for every transaction. Cash obligations are calculated on a net basis according to the multilateral netting principle, but certain types of transactions are cleared on the basis of bilateral netting, or cash obligations are determined on a gross basis. Currently, bilateral netting is applied for clearing outright transactions (sale of Treasury bonds by the NBP). Cash clearing on a gross basis may be applied to transactions in Treasury bonds executed in a non-regulated market and to transactions executed in the primary market[53].

On the basis of obligations calculated in the manner described above, KDPW prepares payment forecasts for the date of transaction settlement. The forecasts are then sent to KDPW participants being parties to transactions, and to banks responsible for the cash clearing.

Transactions executed in the derivatives market are cleared on the basis of documents provided by the WSE. Positions taken by individual investors – long positions in the case of purchase of contracts, and short positions in the case of their sale[54] – are registered in accounts maintained by the Derivatives Clearing House, which operates within KDPW. After each session in the derivatives market, KDPW calculates the debits and credits of both parties, which result from the positions they have taken, to be settled as part of marking to market. A futures contract buyer is under the obligation to provide the seller with the difference between the clearing price[55] of a contract on a given day and its price from the previous day (or – on the transaction date – transaction price), if the differences are positive. If they are negative, the contract seller transfers them

[53] The clearing method is related to the processing mode: clearing on a net basis takes place in the batch system; only gross clearing takes place in the RTGS mode.

[54] Offsetting positions taken in the same derivative instrument cancel each other out, i.e. taking a reverse position to the one previously taken triggers its closing.

[55] The clearing price is set according to the principles established by the WSE.

to the buyer. On the basis of positions registered in accounts maintained for the participant, KDPW estimates the risk and applies risk management mechanisms[56]. KDPW also calculates the debits and credits resulting from the final settlement (execution) of futures contracts and options in the form of transfers of securities (in the case of execution consisting in the supply of the underlying instrument) or funds (in the case of contract execution in cash).

Settlement

On the basis of debits and credits calculated in the clearing process, KDPW carries out transaction settlement, which takes place according to the principle of delivery versus payment (DvP). This consists of the transfer of securities between deposit accounts of KDPW participants with a simultaneous execution of payment instructions in the accounts of payment banks in the PSD NBP. In the case of certain operations, settlement may take place as a free of payment (FoP) delivery.

Settlement on a DvP basis is conducted according to BIS Model 1 (gross in securities and cash)[57] or BIS Model 2 (gross in securities, net in cash). Cash settlement in zloty or euro is performed via cash accounts of banks in the SORBNET or SORBNET-EURO payment systems maintained by the PSD NBP. KDPW clearing members without banking status indicate the bank which conducts clearing on their behalf in the NBP: the so-called payment bank, which is a participant of a relevant NBP payment system. KDPW is authorised to issue payment instructions for those accounts on the basis of powers of attorney received from participants. Payments in foreign currencies other than the euro are made through a commercial bank.

The settlement of most transactions is conducted in a multi-batch system. During each session, after the availability of funds in the accounts of payment banks at the PSD NBP and of securities in deposit accounts at KDPW is verified, the securities are transferred between the deposit accounts, along with the simultaneous transfer of cash between accounts following the execution of payment instructions at the PSD NBP, sent by KDPW. Currently (i.e. in 2008), KDPW holds seven settlement sessions a day, three of which include cash settlement.

Apart from settlement performed during the session, KDPW also conducts real-time gross settlement (RTGS). The system executes intra-day operations related to the registration of securities and cash settlement without the netting of debits and credits between parties on an ongoing basis. This allows for settlement practically immediately upon receipt of matching clearing instructions

[56] For information on risk management see section "Risk management".

[57] For information on BIS classification see section 1.1.5 "Settlement".

and verification that the securities as well as the cash are available. The RTGS system is used to establish collateral on Treasury bonds in favour of the NBP for lombard loans, intraday credit, and to settle transactions executed outside the regulated market, repos, and sell/buy-back transactions. The RTGS and the multi-batch system are synchronised to allow settlement of operations on the same securities in both modes.

Settlement is possible if the appropriate amount of cash and appropriate number of securities are available on the accounts of the given participant. In the absence of those assets, KDPW applies various mechanisms, which make up the so-called system for ensuring settlement liquidity in order to provide the missing funds. The mechanisms are also applied to transactions secured with the settlement guarantee fund.

If a participant who executes transactions in the derivatives market is unable to meet its clearing obligations, KDPW closes its positions and uses the funds thus obtained as collateral for securities; if the funds are not sufficient, KDPW uses the settlement guarantee fund.

The settlement is performed in accordance with the principle of intra-day finality[58], which means that the transfers made during that time are final and irrevocable.

Risk management

Risk management at KDPW includes settlement risk and operational risk management.

KDPW has a multi-level system of settlement risk management, which covers credit risk and liquidity risk. Credit risk is reduced by applying the DvP principle to settlement. Numerous mechanisms (including the settlement guarantee fund) make up the system for securing settlement liquidity and are used to reduce the liquidity risk in the cash market. In the futures market, the settlement guarantee fund is complemented by a system of transaction limits and margins. The system requires the monitoring of market risk and using it as the basis for setting safety thresholds and parameters for collateral management.

Where KDPW discovers the lack of a sufficient number of securities, it launches the automatic securities lending and borrowing system. Borrowing

[58] The finality principle derives from the provisions of the Act of 24 August 2001 on Settlement Finality in Payment and Securities Settlement Systems and the Rules of Oversight of these Systems (Journal of Laws of 2001, No. 123, item 1351) which implements Directive 98/26/EC of the European Parliament and of the Council of 19 May 1998 on settlement finality in payment and securities settlement systems (SFD). For more information on the settlement finality principle, see section 3.2.2 "International recommendations for securities settlement systems and central counterparties".

the outstanding securities from other participants via KDPW helps to cover the shortage and avoid the suspension of transaction settlement. KDPW also manages an on-request system of securities lending, which allows participants to cover the shortage before KDPW attempts to settle the transaction. If the loan does not provide sufficient funds, transaction settlement is suspended. In such a case, the participant is charged with a fine, and if it does not supply the outstanding securities within the following days, KDPW may purchase them on the market (using the buy-in/sell-out procedure) using funds from the settlement guarantee fund.

If transaction settlement is suspended due to the lack of funds, the obligations of the participant are executed from the proceeds from transactions waiting to be settled at a later time. If those funds are also insufficient, KDPW may use the resources of the settlement guarantee fund to cover the deficit.

The settlement guarantee fund is established in order to secure the settlement of transactions in the regulated markets – the WSE and CeTO. It is made up of the contributions of clearing members. The amount of the contributions is set individually for each member, proportionally to the value of the transactions settled by that member. The fund is divided into functionally separate parts which secure the settlement of transactions executed in individual segments of the regulated markets: the Guarantee Fund for the Settlement of Stock Exchange Transactions, the Guarantee Fund for the Settlement of CeTO Market Transactions, and the Guarantee Fund for the Settlement of Stock Exchange Futures Transactions. The resources of the fund are the joint property of its participants.

The resources of the Guarantee Fund for the Settlement of Stock Exchange Transactions and the Guarantee Fund for the Settlement of CeTO Market Transactions are used for the timely execution of the obligations of a participant who, owing to the lack of cash or securities coverage in the respective cash account or deposit account, is unable to meet the obligations deriving from the executed transactions. The resources of the Guarantee Fund for the Settlement of Stock Exchange Futures Transactions are used when KDPW begins to close the open positions of a KDPW participant in the derivatives market and the margins provided by the participant are insufficient. The Fund may be used only in the case of failure to meet the obligations stemming from the clearing of futures transactions by the participant in a timely manner, only after the entire margin and entire initial settlement deposit supplied by the participant have been used.

The amount of contributions to the functionally separated parts of the settlement guarantee fund is updated on a daily basis, according to special algorithms. KDPW manages the resources of the settlement guarantee fund,

and these revenues are transferred to the participants on a quarterly basis, after the deduction of a fee for the management of the resources.

The limits applied to derivatives transactions include the transaction limit and the exposure limit. The transaction limit is the value (or number) of positions that the clearing member may open during a session and is estimated on the basis of the initial deposit contributed. The exposure limit indicates the maximum number (or value) of open positions in individual classes of derivative instruments. If any of the limits is exceeded, this may result in the blocking of transactions cleared by a given member.

The margins for derivatives transactions include the initial deposit and the maintenance margin. The initial deposit is contributed by participants before the launch of the operations in the futures transaction market. It ensures the cover of the risk related to positions opened during the day, until the maintenance margin is paid. The maintenance margin is calculated every day, individually for each clearing member, on the basis of the balance of accounts maintained for a given member in order to ensure the ongoing settlement of positions of investors. The margins are calculated in accordance with the standard portfolio analysis of risk (SPAN).

As a rule, margins are calculated once a day. If a participant fails to supply the margin up to the appropriate amount at the request of KDPW, the participant has to close part of its positions. The margins may include cash and securities with high liquidity. Their value is updated daily (marking to market).

As regards operational risk management, KDPW monitors risk events and estimates the value of potential financial losses. KDPW also has a Business Continuity System which includes, among others, backing up copies of all data from the KDPW system on an ongoing basis, and running a business recovery centre with copies of IT systems which allow business operations to continue if there is a failure of IT systems at the KDPW head office. In addition, the system of electronic information sharing with participants is also protected by passwords and cryptographic protection.

Other KDPW functions

Assigning ISIN codes

KDPW is the Polish National Numbering Agency, i.e. the agency that assigns codes to securities, and since 1995 has been a member of the international Association of National Numbering Agencies (ANNA). When registering the securities from a given issue (or different issues, at the request of an issuer) with the same rights and the same status in trading, KDPW assigns them an ISIN code compliant with international standards.

Pension Guarantee Fund for open-end pension funds

The responsibilities of KDPW include the management of the Pension Guarantee Fund, established pursuant to the Act of 28 August 1997 on the Organisation and Operation of Pension Funds, and the Ordinance of the Council of Ministers of 30 March 2004 on the Pension Guarantee Fund. The resources of the Pension Guarantee Fund are collected in order to cover possible deficits in open-end pension funds and all liabilities resulting from the failure to perform or improper performance of the responsibilities of pension fund management companies (PTE) with regard to the fund management or representation, if they have been caused by circumstances beyond the company's control. The Fund may be used when the settlement value of units is lower than the required average and the reserves of open pension funds and own funds of pension fund management companies are insufficient to cover the shortfall.

The Pension Guarantee Fund consists of the basic part and the supplementary part. The basic part, managed by KDPW, is made up of contributions of pension fund management companies. The amount of contributions is set at 0.1% of the value of net assets of the open pension fund managed by a given company. The funds on the account of the supplementary part of the Pension Guarantee Fund constitute part of assets of open-end pension funds and are converted into settlement units.

KDPW specifies the amount of contributions of individual open pension funds to the Fund and the complementary payments from the supplementary part to the basic part of the Fund; it also manages the funds of the basic part of the Fund and invests them in accordance with the Ordinance of the Council of Ministers on the Pension Guarantee Fund.

Transfer payments

The responsibilities of KDPW include facilitating and executing cash transfers between pension funds following changes in participation in open pension funds. Such operations, commonly referred to as transfer payments, consist of the transfer of assets held on the account of a fund participant to another fund when this person decides to change fund or in the event of the death of a fund participant, the division of the property of spouses or the winding up of the fund.

Transfer payments are settled according to the principle of mutual netting of debits and credits between the funds. On the basis of the list of customers changing funds, obtained from the Polish Social Insurance Institution (*Zakład Ubezpieczeń Społecznych*, ZUS), KDPW prepares reports presenting the debits and credits as of the day of the transfer payment and then submits them to the open-end pension funds. The reports are treated as the basis for receipt of a specific amount (if the asset balance of the customers of a given fund is positive)

or the basis for the payment by the open-end pension fund (if the debits of the fund exceed the credits). Transfer payments are made once a quarter, on the last working day of the month[59].

The investor compensation scheme

KDPW is also responsible for the management of the investor compensation scheme. It was established in 2001, pursuant to the Law on the Public Trading of Securities, in order to guarantee cash and securities registered on cash and securities accounts managed for investors by brokerage houses and banks in the event of their bankruptcy, or when the supervisory authority declares that for financial reasons they are unable to fulfil their obligations resulting from investor claims.

Participation in the compensation scheme is compulsory for custodian banks and brokerage houses operating in the Polish capital market. At the beginning of 2008, the participants of the scheme included 37 brokerage houses and 14 custodian banks which made quarterly contributions whose amount was calculated by KDPW on the basis of the average amount of cash and the value of financial instruments of their customers in a given year. As from 1 January 2008, the compensation scheme covers the payment of funds amounting to the zloty equivalent of 22 000 euro.

The resources of the investor compensation fund were used for the first time at the turn of February and March 2008 in order to pay compensation to investors who incurred damages as a result of the bankruptcy of WGI Dom Maklerski SA.

Operational cooperation with foreign depositories

Article 51 of the Act on Trading in Financial Instruments allows foreign entities conducting activities related to the safekeeping and clearing of transactions in financial instruments to become KDPW participants. At the same time, KDPW can open deposit accounts in foreign depository institutions, thus allowing the holders of financial instruments registered abroad and admitted to trading in Poland (according to the principles of dual listing) to transfer those instruments, in order to execute transactions in the Polish market. KDPW clears and settles the transactions executed on the WSE for securities issued outside the territory of Poland, whose central registration is kept by a foreign depository institution. Additionally, within the framework of cooperation with foreign securities depositories, KDPW provides services to Polish investors who are shareholders of foreign companies listed in Poland,

[59] Transfer payments are made in February, May, August, and November.

related to the exercise of shareholders' rights, such as intermediation in making entries in the shareholder register before the general shareholders' meeting, or the distribution of dividends.

KDPW has direct operational links with the following foreign securities depositories: OeKB (Austria), KELER (Hungary), the Estonian CSD, and the CSD of the Slovak Republic SCP. It also has links with the international depositories such as Euroclear Bank, which intermediates in the transfer of securities between KDPW and the British Euroclear UK and Dutch Euroclear Nederland depositories, and with Clearstream Banking Luxembourg, which intermediates in the transfer of securities to and from the German depository Clearstream Banking Frankfurt, American DTCC, Swedish VPC, Italian Monte Titoli, French Euroclear France, and Czech SCP. These links are free of payment, which means that they are used to transfer securities only, without any cash flows. KDPW is also working on establishing DvP links. In September 2008, the links with foreign securities depositories were used to manage the transfers of 57 financial instruments.

2.2.2. The history and current role of the Register of Securities (RPW)

2.2.2.1. The history of the origins of the RPW

In July 1990, the NBP, which was implementing monetary policy guidelines, began to issue NBP bills, thus creating the basis for the money market. The NBP bills were in the form of certificates. They were sold at auctions organised by the central bank and purchased, in addition to banks, by domestic legal and natural persons.

The Treasury bills, which the Minister of Finance started to issue in May 1991 on behalf of the State Treasury, were also certificated, similarly as NBP bills. The bills were sold at weekly auctions organised by the issuing agent, i.e. the NBP. The Minister of Finance chose the NBP as the issuing agent after taking into account several factors:

- Experience in conducting auctions of its own securities;
- IT system modified to manage the auctions;
- Country-wide network of NBP branches which were used to transfer the bills to the buyers;
- The fact that the NBP had been operating the cash account for the Minister of Finance.

The beginning of the sale of Treasury bills, with a structure similar to NBP bills (discounted securities, short maturity) was the reason for stopping the issue of 28-day NBP bills by the central bank. The NBP offered bills with 91- and

182-day maturity instead. Taking into account the financial needs of the national budget, the priority was given to Treasury bills. The supply of NBP bills was gradually reduced, and their issue was suspended in 1992. The NBP resumed issuing those securities in the middle of 1995.

The fact that Treasury bills were certificated resulted in largely limited trading in those instruments in the secondary market. They were therefore dematerialised in 1995 and took the form of electronic records. On 1 July 1995, the Central Register of Treasury Bills (*Centralny Rejestr Bonów Skarbowych*, CRBS) was created at the NBP to manage those bills. It was a system for the registration of the balance and the changes in the balance of the bills issued by the Ministry of Finance on deposit accounts and the issuing account. It was also used to manage auctions of Treasury securities (bills and bonds) and to register operations involving Treasury bills.

In May 1996, the NBP introduced NBP bills in dematerialised form and established the NBP Bills Register (*Rejestr Bonów Pieniężnych*, RBP). As was the case for the CRBS, it was a system designed for the primary market that was used for registering NBP bills and carrying out operations on those securities.

Both systems functioned according to similar principles. The settlement of securities was performed on a delivery-versus-payment basis, using central bank money. Both the CRBS and the RBP had an electronic connection with the system processing the cash accounts of the banks, maintained in the NBP. The principle of intra-day settlement finality was observed. All securities processing was performed as real time gross settlements (RTGS).

Although the CRBS and the RBP met a number of the existing standards, their serious drawback was the lack of electronic connection with their participants (offers and orders were sent by the participants by fax), which required the modernisation of the systems. In October 2003, the CRBS and the RBP were integrated into one, fully electronic system – the Register of Securities (*Rejestr Papierów Wartościowych*, RPW). The system allowed for direct communication between the participants and the central bank. Participants received special software prepared by the NBP, i.e. the ELBON module, which made it possible to transmit offers, orders and messages to the RPW by means of an electronic data exchange system. During a business day, participants are able to verify their securities accounts and the deposit accounts of those securities on an ongoing basis, as well as view the current status of the securities operations they perform. The system is continuously modified and improved in accordance with market development and requirements. The following chapters present the current principles of operation.

The legal basis for the operation of the RPW

Pursuant to Article 49 of the Act on Trading in Financial Instruments, the central bank registers Treasury bills and NBP bills in the RPW, which maintains accounts and deposit accounts of Treasury bills, and NBP bills issued on the basis of various legal regulations. The rules governing the issue of Treasury bills are laid down in the Ordinance of the Minister of Finance of 26 June 2006 on the terms and conditions of issuing Treasury bills (Journal of Laws No. 113, item 771), pursuant to which Treasury bills are registered on accounts and deposit accounts maintained by the issuing agent within the Register. Pursuant to an agreement with the Minister of Finance, the issuing agent is the NBP.

NBP bills are issued on the basis of Resolution No. 30/2003 of the Management Board of the NBP of 12 September 2003 on the issue of NBP bills (Official Journal of the NBP No. 15, item 24).

The basis for the establishment of the RPW is Resolution No. 29/2003 of the Management Board of the NBP of 12 September 2003 on the introduction of the "By-laws for the operation by the National Bank of Poland of securities deposit accounts and sub-accounts, processing operations on securities and registering them in deposit accounts and sub-accounts of these securities" (Official Journal of the NBP No. 15, item 23), adopted pursuant to Article 109 section 1 para. 4 of the Act of 29 August 1997 Banking Law (Journal of Laws of 2002, No. 72, item 665).

RPW ownership structure and management

The RPW is operated by the NBP. As it functions within the structure of the central bank it is managed in accordance with the regulations in force at the NBP. Its decision-making body is the Management Board of the NBP, which sets out the By-laws for the operation of the Register by way of a resolution.

Regulations concerning the RPW

The rules governing the operation of the RPW are presented in the By-laws referred to above. According to the definition in the By-laws, the RPW is a system for registering securities, within which sub-accounts and deposit accounts are maintained for Treasury bills and NBP bills and operations on securities (transactions, blockades, transfers, loans, redemption) are processed. At the same time, the RPW is an electronic system for organising auctions of Treasury securities, as well as carrying out securities operations between the NBP and banks by means of auctions such as the sale and early redemption of NBP bills,

and concluding repo agreements and carrying out outright[60] transactions on Treasury securities. The By-laws are comprehensive and cover all the functions performed by the RPW, as well as the requirements and recommendations for the system. They specify in particular the conditions for the participation in the RPW, the rules for operating sub-accounts and deposit accounts by the NBP, and the processing of operations on securities, as well as the rules governing the submission of offers and orders by RPW participants.

Rules of participation in the RPW

According to the By-laws, the direct participants of the RPW include entities for which the NBP operates Treasury bills or NBP bills sub-accounts or deposit accounts at the Register. As regards Treasury bills, those entities include:

- Banks with a cash account at the NBP;
- KDPW;
- The Bank Guarantee Fund;
- The NBP;
- Foreign entities, provided they are primary dealers.

The RPW may also include the Treasury bills account for the issuer, i.e. the Minister of Finance, and for foreign depository and clearing institutions.

NBP bills accounts and deposit accounts may be operated for:

- Banks with a current account at the NBP;
- The Bank Guarantee Fund;
- The NBP.

Each entity applying for participation in the RPW must enter into an agreement with the NBP according to which the central bank undertakes to open and operate a sub-account and a deposit account in accordance with the By-laws. The agreement also lays down the rights and obligations of the parties, the scopes of responsibility and the provisions concerning the ELBON module and the cryptographic protection package. The agreement is concluded for an indefinite time and may be terminated by any party upon one-month's notice. If an RPW participant is found to have grossly violated the provisions of the By-laws or of the agreement, the NBP may terminate the agreement immediately.

The entity being party to the agreement is also required to submit the relevant documents confirming, in particular, that it was established in accordance with the relevant law, and indicating persons authorised to make statements regarding its property rights and obligations. In addition, it is necessary to provide the

[60] This transaction consists in the sale or purchase of securities from the NBP own portfolio or a portfolio of a bank, at the price set at an auction or resulting from the agreement between the NBP and the bank.

signature specimen card of persons authorised to sign offers and orders, and to authorise the NBP to debit the cash account of a given entity with the amounts resulting from the processing of operations on securities.

If an RPW participant does not have a cash account with the NBP (a foreign entity being a primary dealer), it must indicate the bank (payment bank) which performs cash settlements for Treasury bills[61] operations (purchases in the primary market, settlement of fees related to the loans of Treasury bills, and charging commission and fees for operating an account), and submit the relevant authorisation.

As regards foreign entities being primary dealers which do not wish to be direct participants in the RPW, the By-laws offer them the possibility to enter into a separate agreement on the NBP services for the participants of auctions for Treasury securities for which the NBP does not run sub-accounts and deposit accounts in the RPW. In such a case, the entity participates only in the electronic system of auctions for Treasury securities. The agreement specifies the conditions on which the NBP provides such services, and is signed for the duration of the period during which the function of a primary dealer is performed.

Both the RPW participants and the entities serviced by the NBP only in respect of auctions for Treasury securities have to indicate the bank which clears the transactions in Treasury bonds, if they do not have a deposit account at KDPW. The clearing bank provides the NBP with a relevant authorisation to issue registration receipts which credit or debit its deposit account with KDPW following transactions related to all types of auctions for Treasury bonds, carried out by an RPW participant or a participant of auctions Treasury securities.

Basic functions

Registration of financial instruments

Both NBP bills and Treasury bills are offered for sale at auctions organised by the NBP. Before each auction, the issuer publishes – via bank information systems – a notice with the data of the auction (including the date and time of the auction, supply, maturity date, settlement date and, in the case of Treasury securities, the ISIN code as well). After the auction is over, the issuer makes a decision which is then announced according to the same rules as the auction notice, and the participants of the auction receive information which confirms the acceptance or rejection of the offer by the issuer.

Payment for the bills purchased at an auction by its participants is made by debiting their cash accounts at the NBP or, in the case of a foreign entity acting as a primary dealer, by debiting the account of the clearing bank. Bill issues are registered on the issuing accounts of the Minister of Finance and the NBP concur-

[61] A foreign entity is not authorised to have an NBP bills account.

rently with the payment for the bills. Upon debiting the cash account of the auction participant or of its clearing bank, the papers are registered bilaterally – on the issuing account and on the participant's sub-account or deposit account.

Treasury bills and NBP bills are registered on accounts and deposit accounts in terms of quantity and value, according to their maturity dates and ISIN codes, in accordance with the following rules:

1) Double entry – each operation concerning the rights arising from bills is registered in the RPW on at least two sub-accounts or accounts, and the entry or the total of entries on one side of the sub-account or account is accompanied by an entry on the opposite side of another sub-account or account which is equal in terms of quantity and value. This rule does not apply to operations which result in the imposition or removal of the blockade of bills;
2) Completeness – all operations on bills which result in the necessity to change the balance of bills on accounts of RPW participants are subject to registration;
3) Accuracy – the rights arising from bills are registered fully and in compliance with the actual status;
4) Transparency – the RPW reflects the ownership of bills by the RPW participants and their customers in a clear and unambiguous way.

Operating securities deposit accounts and sub-accounts

The main task of the RPW is to store securities in the form of appropriate entries in the electronic system of deposit accounts and sub-accounts. The RPW operates Treasury bills and NBP bills accounts. Bills owned by an RPW participant are registered in the account. They constitute the participant's own portfolio. RPW participants may also have deposit accounts where the bills owned by the participant's customers, which constitute their collective portfolio, are registered. This means that the entries in those accounts refer to the overall number of securities owned by the customers of a given participant, without a breakdown into bills belonging to individual customers. The entities with deposit accounts at the RPW operate individual securities accounts for their customers within the framework of their own registration systems, on the basis of regulations issued to this end. At the same time, they observe the conditions, which arise from the provisions which regulate trading in securities. Entries made on individual bills accounts should be consistent with the balance of bills in the customers' portfolios on the deposit accounts of RPW participants.

The group of customers for which RPW participants may run individual NBP bills accounts is limited to domestic banks, branches of credit institutions and branches of foreign banks.

A Treasury bills deposit account has a specific structure and is divided into 27 categories of investors. The categories include such groups of customers as domestic banks, pension funds and investment funds, insurance companies, natural persons, the public finance sector, as well as several groups of non-resident investors. The above division results from the reporting obligations with regard to trade in securities issued by the State Treasury.[62] The NBP bills deposit account has only one category of customers, since the possibility to purchase those bills and trade in them is limited to the banking sector.

Apart from the deposit accounts and sub-accounts of the participants, the RPW also manages issuing accounts for the Minister of Finance as the issuer of Treasury bills, and for the NBP as the issuer of NBP bills. The accounts reflect the current balance of the securities issue. The RPW controls compliance of the volume of the issue with the balance of relevant securities on participants' deposit accounts and sub-accounts on an ongoing basis.

Processing operations on securities

The RPW also facilitates operations on Treasury bills resulting from transactions performed by the participants (purchase-sale, repo, sell/buy-back), as well as other operations such as blockades, transfers, loans and buy-back of bills. In the case of NBP bills, only buy/sell transactions are registered, as well as transfers, blockades and buy-back operations.

A **buy/sell transaction** is an operation, which results in the change in the balance of securities on deposit accounts or sub-accounts of two RPW participants. It involves cash settlement made on the current accounts of those participants.

The By-laws define a **repo transaction** as an agreement under which one of the parties (the seller) undertakes to transfer the ownership of the sold Treasury bills to the other party (the buyer) on the day of purchase in return for the payment of the purchase price by the buyer, while the buyer undertakes, in return for the payment of the buy-back price, to transfer the ownership of the same number of the same Treasury bills to the seller on the day of the redemption. In terms of registration of Treasury bills in the RPW, a repo transaction may be carried out using one of the following three formulas: the bills may be:

– transferred from the account or sub-account of the seller to the account or sub-account of the buyer;

[62] The above obligations are imposed, inter alia, on the NBP as the entity managing the Treasury bills register, by the Ordinance of the Minister of Finance of 17 May 2004 (Journal of Laws of 2004, No. 119, item 1244).

– transferred from the account or sub-account of the seller to the account or sub-account of the buyer and blocked there;
– only blocked on the account or sub-account of the seller.

A repo transaction cannot be completed earlier than on the day following its commencement.

A **sell/buy-back transaction** consists in the sale of Treasury bills and the concurrent conclusion of another agreement (the so-called term purchase agreement), i.e. for the future purchase of the bills by their seller, at a price set on the day of the sale of those bills. In terms of registration of Treasury bills on deposit accounts and sub-accounts in the RPW, the transaction is performed identically to the buy/sell transaction.

A **movement** operation results from a buy/sell, repo or sell/buy-back transaction between an RPW participant and its customer. As a result of the operation, the bills are transferred within the RPW participant's own portfolio and the portfolios of its customers but without any change in the total amount of bills managed by the participant. The cash settlement is not performed at the NBP.

A **transfer** of bills results in the change of the balance on the deposit accounts or sub-accounts of two RPW participants. There is no cash settlement in this case.

An RPW participant may **block** the bills in its own portfolio and the customers' portfolio for any period within the period up to maturity date. The bills are released on the basis of the order of the RPW participant or are automatically released by the system on the buy-back date, and the cash is transferred to the cash account of the blocking entity.

A **pledge** may only be made with the Treasury bills of an RPW participant which are on the account of that participant in its own portfolio. The participant that secured a pledge on the bills submits an order to the NBP to block those bills. This is the equivalent of notifying the debtor about the pledged claim, i.e. notifying the NBP, which operates on behalf and with the authorisation of the Minister of Finance, about the pledge on Treasury bills.[63] The blockade of pledged bills is removed on the basis of an order submitted to the NBP and issued by the pledger and the confirmation of the pledgee that such a removal may be performed.

An RPW participant may transfer Treasury bills to an auxiliary account maintained in the register within the KDPW deposit account (**DEPO operation**)[64]. The bills are transferred from the participant's deposit account or sub-account. The RPW participant provides additional information in the transfer order to

[63] Article 329 section 2 of the Civil Code.

[64] Detailed rules concerning this operation are regulated by KDPW.

identify the deposit account or the securities account where the Treasury bills are registered at KDPW. KDPW performs the reverse transfer of the bills by transferring the relevant Treasury bills to the appropriate deposit account or sub-account of the RPW participant.

Treasury bill **loans** are granted to participants within the framework of the loan system operated by the RPW. The loan may only relate to Treasury bills submitted by lenders to the loan pool. The loan is granted as ordered by the borrower, provided that adequate collateral is provided, and should be returned on the working day following the day on which it was granted at the latest[65].

On behalf of the issuer (both the Minister of Finance, and the NBP), the RPW also pays corporate entitlements to the entities holding the bills. On the day when the claim of the holder of the security related to the amounts due from the issuer becomes valid, the Treasury bills and NBP bills are redeemed at the RPW. The amount of funds to be redeemed is estimated at the end of the business day preceding the redemption day on the basis of the balance of bills on the deposit accounts and sub-accounts of RPW participants. The redemption of bills is performed by crediting the cash accounts of those RPW participants that have bills subject to redemption on their deposit accounts and sub-accounts with the amount equivalent to the face value of those bills. If an RPW participant does not have a cash account, the account of the clearing bank is credited. RPW participants that maintain individual bills accounts for their customers are responsible for the transfer of cash for the redemption of bills to the customers.

The RPW also offers the processing of loans granted by the NBP and secured with Treasury securities. In order to support the liquidity of the banking sector, the NBP grants intra-day credit and lombard credit to the banks with current accounts at the central bank.

Since December 2001, the NBP has provided banks with **intra-day credit** taken and repaid within a business day. Detailed conditions of its granting, use and repayment are laid down in the regulations[66] issued by the NBP. The instrument was offered to banks in order to increase the liquidity of the interbank settlement system and to improve the effectiveness of liquidity management by banks, which is of particular importance in case of a potential liquidity deficit in the banking system and the target lowering of the rate of the reserve requirement. As an element of the settlement system, intra-day credit is used by both the central

[65] See the paragraph entitled "Risk management".

[66] Resolution No. 57/2001 of the Management Board of the NBP of 22 November 2001 on the introduction of Regulations concerning intra-day refinancing of banks by the National Bank of Poland (Official Journal of the NBP 2001, No. 19, item 38).

banks, which participate in the European System of Central Banks (ESCB), and by the European Central Bank (ECB). The instrument enables banks to meet their obligations more efficiently thanks to the use of central bank funds at their disposal in the form of a secured credit facility. The repayment of the credit is secured with the transfer of rights arising under Treasury securities to the NBP. The electronic form of credit servicing and collateral management provides the banks with rapid access to liquidity and facilitates the submission and flow of documents. According to the regulations, the posting of the credit collateral by the bank means that the request for liquidity is fulfilled automatically.

The transfer of ownership to secure the repayment of intra-day credit is only possible in the case of Treasury securities (Treasury bills and bonds) with at least 5 working days to maturity. The transfer of ownership to secure credit is a guarantee for the repayment of the NBP claim if the credit is not repaid. The maximum amount of credit granted to the banks may not exceed 80% of the face value of securities used as collateral. No interest is charged on credit repaid on the same business day on which it was taken out, and the interest charged on credit repaid on the following business day corresponds to the lombard facility interest rate.

In addition to intra-day credit, the NBP also offers a **lombard facility** to banks**.** It enables them to supplement short-term liquidity deficits with funds from the central bank obtained on overnight (O/N) basis. The facility stabilises the fluctuations of short-term interest rates of the interbank market. Detailed conditions of granting, use and repayment of the lombard facility, as well as the rules and procedures for securing its repayment by means of a pledge on rights arising from securities are specified by the regulations[67] issued by the NBP.

The credit is secured with a pledge on the rights from securities. The pledge may only be made on Treasury securities (Treasury bills and bonds) with at least 5 working days to maturity. The maximum amount of credit granted by the NBP may not exceed 80% of the face value of securities used for the pledge.

In view of the fact that the lombard facility performs the role of overnight credit, it is repaid on the business day following the day the credit was granted. The lombard facility has a floating interest rate established by the Monetary Policy Council, but the interest is twice that rate if the credit is not repaid on time.

[67] Resolution No. 42/2003 of the Management Board of the NBP of 3 October 2003 on the introduction of Regulations on the refinancing of banks using the NBP lombard facility (Official Journal of the NBP 2003, No. 18, item 31).

Clearing

Transactions are cleared in the RPW on the business day on which the parties to the transaction have submitted their orders. Orders may not be sent earlier, nor may clearing be postponed until the following business day. The system offers participants the possibility to monitor the progress of the transaction., Each contracting party therefore decides on when to send an order to the Register and which settlement time suits them best.

The instructions to transfer cash and securities are matched and confirmed mainly outside the system, by the parties contracting transactions on their own behalf or for their customers. Settlement is possible if the RPW receives from both parties to the transaction the orders that match as regards form and amount. In case of discrepancies, the contracting parties are obliged to rectify them. The matched orders are automatically matched by the system. Then the system verifies whether the seller has the adequate amount of Treasury bills or NBP bills on the account, not blocked for any reasons, and whether the entity making the payment has an adequate amount of funds on the cash account. If all of the above conditions are met, the transaction is forwarded for settlement.

Settlement

The settlement of transactions in the RPW is carried out according to DvP principles and BIS Model 1 (gross settlement both in securities and in cash), in central bank money, i.e. through the cash accounts of the banks in the SORBNET payment system managed by Payment Systems Department in NBP (*Departament Systemu Płatniczego NBP*, DSP NBP). The settlement is performed in accordance with the principle of intra-day settlement finality, which means that the transfers processed are final and unconditional.

FoP settlement is also carried out in the RPW. The submission of matching orders by the contracting parties only results in the transfer of securities between the deposit accounts or sub-accounts, without cash settlement.

Risk management

Risk management at the NBP is carried out within the framework of the Integrated Risk Management System (*Zintegrowany System Zarządzania Ryzykiem*, ZSZR), which operates in the bank. According to the solution adopted in the system, financial risk management is centralised, while operational risk management is decentralised.

From the point of view of the NBP, the functioning of the RPW generates only operational risk and its management includes ongoing identification, analysis and measurement, as well as the selection and use of risk reduction

mechanisms. The results of risk monitoring and the ongoing evaluation of the efficiency of the mechanisms applied are presented in reports, which are the basis for preparing periodical information about operational risk levels for the NBP Management Board.

The mechanisms of reducing operational risk currently applied and related to the functioning of the RPW include in particular:

- Procedures for performing operations in the RPW and the division of tasks in accordance with the separation of duties principle, as well as the use of backup staff;
- Business continuity plans, prepared in accordance with European standards;
- A business recovery site ready to commence work at any moment of the business day;
- Backup copies, i.e. Recording system data several times a day and at the end of each business day, in such a way as to ensure their prompt recovery;
- A system of electronic data exchange transmitted by means of the ELBON module with a cryptographic protection package, which guarantees the confidentiality and integrity of the message and the authorisation of the sender;
- Periodical examination by the NBP of the correctness of installations, use and safety procedures applied by RPW participants with regard to the ELBON module and the cryptographic protection package;
- Periodical inspection (in the form of on-site examination at the seat of the RPW participant) by the NBP of the following:
  - The reconciliation of the balance of Treasury bills in the own register of the participant with the balance registered at the RPW, as well as the application of registration procedures in terms of their compliance referred to above;
  - Relevant regulations in place at the participant's head office and their compliance with the RPW By-laws and the provisions on operating securities accounts.

Operations conducted by RPW participants are a source of settlement risk related to the lack of liquidity, both with regard to cash and securities. The NBP, as the entity managing the RPW provides its participants with tools to manage that risk.

The system of providing Treasury bills loans is a tool for managing settlement risk, which includes securities liquidity risk (Treasury bills only). It allows for the performance of transactions in the event of the lack of all or a part of the Treasury bills on the seller's account within a business day. Access to the

system is voluntary for RPW participants. The participants of the system supply the bills to be lent to the loan pool. The bills in the pool are not blocked, so a participant may withdraw or replace them at any moment, provided that they are not used by another participant of the system. The loan is granted as ordered by the borrower, and should be returned on the working day following the day on which it was granted at the latest. Upon granting of the loan, the system blocks the Treasury bills allocated for collateral on the account of the borrower. At the same time, the system notifies the lender which bills were taken from the loan pool and of their face value. The face value of bills with a specific maturity which were lent to a participant may not exceed 5% of the overall value of the bills registered on the accounts and deposit accounts, and that of bills lent to all borrowers may not exceed 10% of the total value of bills registered on accounts and sub-accounts. The fee for granting a loan accounts for 0.01% of the face value of the borrowed bills. After the fee is calculated, the system issues orders to debit the borrower and credit the lenders with the appropriate amounts.

The intra-day credit and lombard facility granted to banks by the NBP are used for the management of settlement risk which includes the lack of cash liquidity.

Chapter 3

Trends in the functioning of clearing houses, central counterparties and securities depositories in the world, the European Union, and in Poland

Recent years have seen enormous changes to the post-trading infrastructure in the EU, which concern many areas, such as technology, law, rules governing the functioning of systems, market practices and corporate structures. Chapter 2 presents the development of clearing and settlement institutions in Poland and across the EU. This chapter describes the previous and new integration initiatives in all areas related to post-trading services which are implemented by various international and European institutions, operators of the depository, clearing and settlement infrastructure, and by market participants themselves.

3.1. Integrationary goals in relation to the depository, clearing and settlement infrastructure in the EU

According to the definition quoted in Chapter 2, the market for a given set of financial instruments or services is fully integrated if all potential participants of that market with similar characteristics need to comply with the same rules when they decide to use those instruments or services, have equal access to those instruments or services and are treated equally when they operate in that market[1].

The term *integration* used in this chapter is thus understood very broadly. First, it includes integration processes *in the narrow sense*, i.e. the processes which take place between independent entities and are aimed at merging them (horizontal or vertical consolidation), or at creating common structures. Secondly, it also includes integration processes *in the broader sense*, which are aimed at preparing uniform or harmonised rules of operation by independent entities (without merging them or creating common structures), including, among others, legal harmonisation, rules governing the functioning of the system, market practices and the standardisation of technological solutions.

Integration processes occur both within the EU and across the world, but their objectives are slightly different.

Integration efforts in the EU

The depository, clearing and settlement infrastructure in the EU remains fragmented, which is due to historical reasons. Initially, institutions providing post-trading services were established in individual countries for the sole purpose

[1] Baele et al., *Measuring European Financial Integration*, "Oxford Review of Economic Policy", Vol. 20 No. 4 (2004).

of servicing the local market. The progressing economic integration within the EU, carried out both top-down by Community institutions, as well as implemented bottom-up at the initiative of the market itself, also included the relatively poorly integrated capital markets of the Member States, along with the clearing and settlement services. The need to integrate the EU capital market, including the integration of securities settlement systems, results directly from the need to ensure the conditions for its development, which is currently hindered by a number of legal, tax, market (non-harmonised market practices) and technological barriers that hamper cross-border transactions. As a result, the performance of such transactions is very complex and requires a significant number of various types of intermediaries. This is the source of high costs, as compared to the local markets as well as the US market. An increasingly complex network of cross-border inter-system connections and the capital links between the institutions of the capital market infrastructure give rise to significant problems with effective supervision of the safe functioning of cross-border trade in securities in the EU. The solution to the problem is a close cooperation between the supervisors from individual EU Member States and a harmonised supervisory policy.

The basic aim of the integration of the depository, clearing and settlement infrastructure in the EU is to create conditions for the development of a competitive, effective, efficient and safe European capital market. Each participant of the market will have access to the same services and have a level playing field, irrespective of which Member States the participant operates in. Meeting this objective requires first and foremost the elimination of the existing barriers to market development, as well as the harmonisation of the rules governing the provision of services with regard to clearing and settlement of securities and depository functions. There are also measures which go further and aim at creating pan-European operational structures, such as the TARGET2, CCBM2 or TARGET2-Securities systems.

Global integration efforts

The integration of depository, clearing and settlement infrastructure also has a global dimension. However, unlike the integration efforts within the EU, the aim of global integration is not to create a single common market but to harmonise the rules governing only the functioning of securities settlement systems, to ensure an adequate level of security and efficiency of the systems. Such rules are to create conditions for cooperation between numerous markets functioning worldwide and institutions operating in those markets. As the aim has been defined in such a way, international cooperation is significantly narrower in scope than cooperation within the EU, and does not include the creation of common operational or supervisory structures.

3.2. International initiatives for the integration of depository, clearing and settlement infrastructure in the EU

3.2.1. International legal initiatives

The development of the cross-border trade in securities, as well as the widespread dematerialisation of securities have led to the identification of the following basic areas of national capital market regulations which most often constitute an obstacle to free cross-border trading in securities:

- Inconsistent regulation as regards rights arising from securities, both in the certificated and dematerialised form;
- Inconsistent tax law regulations;
- Regulations limiting free competition between the providers of capital market services.

The main problems as regards cross-border trading in securities are related to the first issue listed above, i.e. the nature of rights arising from securities. Diverse regulations in this respect (including those relating to dematerialised securities) result in a number of legal problems. The most important of these concern the identification of the applicable law for the legal position of the participants of a given cross-border securities transaction, and the problem of diverse regulations on, among others, the method of creating securities, rights arising from them, their execution or transfer, the finality of settlement of operations on those securities, and the protection of the rights arising from securities of persons in case of the bankruptcy of the intermediary holding those securities. A need has therefore emerged in the international arena to develop a uniform rule for identifying the law applicable for defining the rights of the participants of cross-border securities operations. It has also become necessary to harmonise the provisions regulating the nature and functioning of the institution of securities in the legal systems of each country. Two major initiatives have been undertaken in this regard, which reflect divergent interests of individual countries. These are the Hague Convention and the UNIDROIT Convention.

3.2.1.1. The Hague Convention

The aim of the Hague Conference, a global inter-governmental organisation, is the unification of the rules of private international law. In May 2000, the Conference began to work on the Convention on the law applicable to certain rights in respect of securities held with an intermediary (hereinafter referred to as the Hague Convention). According to the Hague Convention, the main

conflict of law rule applicable to securities held with an intermediary is a modified version of the PRIMA (Place of the Relevant Intermediary Approach) principle.[2] According to the above rule (hereinafter referred to as Type II PRIMA principle), the law applicable to determine the rights arising from securities in cross-border trading is the law governing the securities account agreement signed with the relevant intermediary. The equivalent Type I PRIMA rule, whose origin is in the material law principle of *lex rei sitae*[3], is competitive to the PRIMA rule within the meaning adopted in the Hague Convention. Pursuant to this rule, the rights to are determined by the law of the country on whose territory a given property is located. Type II PRIMA rule was chosen in the Hague Convention. The authors of the Convention feared that in practice, the *lex rei sitae* principle may be prone to failure due to the potential lack of the possibility to establish the place where dematerialised securities are currently held.

In addition, the Hague Convention provides for the verification of the selected law through a reality test. Its aim is to check whether an intermediary does indeed conduct any business (not necessarily consisting of the maintenance of securities accounts) in the country whose law was selected. If the applicable law cannot be determined on the basis mentioned above, the Convention stipulates that the applicable law is the law in force in the state where the office of the intermediary was located upon the conclusion of the securities account agreement. The Convention will enter into force when it is signed by at least three signatories. In July 2006, the Convention was signed by the USA and Switzerland[4].

3.2.1.2. UNIDROIT Convention

In September 2002, the Committee of Governmental Experts of the International Institute for the Unification of Private Law (UNIDROIT), which is an international organisation composed of the representatives of 59 countries, began to work on the preparation of a draft Convention on Substantive Rules regarding Intermediated Securities[5] (hereinafter referred to as the UNIDROIT

[2] The PRIMA rule in the wording proposed in the Hague Convention is a solution characteristic of the American approach to the regulation of conflicts of law with regard to the rights in respect of securities held with an intermediary. Due to the fact that the PRIMA rule in the Hague Convention is different from its traditional understanding in European law, it is also referred to as Type II PRIMA or even a non-PRIMA approach.

[3] Type I PRIMA rule, as a form of variation on the *lex rei sitae* principle to the conditions of trading in securities held with an intermediary, is characteristic of European legal systems.

[4] The Convention is therefore dated 5 July 2006, the day of its signing by the first signatories.

[5] www.unidroit.org/english/workprogram/study078/item1/main.htm.

Convention). The work of the Committee remains in progress. In contrast to the Hague Convention, which only indicates the conflict of law rules with regard to rights arising from dematerialised securities, the UNIDROIT Convention aims at formulating uniform regulations on the content of rights arising from the relationship between an investor and the intermediary that holds the securities in the form of entries in the securities settlement systems. The first chapter of the Convention contains the definitions of basic terms, i.e. securities, intermediated securities, securities account and intermediary. Subsequent chapters regulate, among others, the rights of the account holder, the transfer of rights in dematerialised securities, including the invalidity and reversal of entries on the account, acquisition of intermediated securities by an innocent party, and the priority among the rights – the application of insolvency provisions and settlement finality provisions – as well as the financial collateral agreement.

3.2.2. International recommendations for securities settlement systems and central counterparties

In view of the increasing popularity of cross-border transactions, the need to reduce risks and increase the safety and efficiency of the securities settlement systems was conductive to undertaking work on standards and recommendations aimed at strengthening and harmonising the principles for performing post-trading activities in individual capital markets. A number of initiatives in this regard have been undertaken in the last 20 years, and the most important are presented below.

3.2.2.1. The role of the BIS

BIS

The Bank for International Settlements (BIS) in Basel was established by Belgium, France, Germany, Italy, Japan, the United Kingdom and the USA at a conference in the Hague in 1930 in relation to the aid plan for Germany (the so-called Young and Dowse plan) after World War I. It is the oldest existing international financial institution. The BIS is a joint stock corporation owned by central banks[6], including the ECB (since 2000). The highest authority of the BIS is the General Meeting, which consists of the representatives of all members. The Board of Directors and the Management are also the decision-making bodies. Currently, the BIS is the main international forum for central bank cooperation. The bank has also developed its own centre for economic

[6] Poland has participated in the BIS from its origin, i.e. since 1930.

research and plays an important role in the process of collecting and exchanging statistical data.

The Group of Ten

The Group of Ten (G-10), established in 1962 at the initiative of the Organisation for Economic Co-operation and Development (OECD), is one of the international financial organisations of an informal nature. The Secretariat of the Group of Ten is run by the BIS and the International Monetary Fund. Despite its name, the Group of Ten consists of 11 industrialised countries (Belgium, Canada, France, Germany, Italy, Japan, the Netherlands, Sweden, Switzerland, the United Kingdom and the USA)[7]. The Group is a forum for cooperation and exchange of opinions about economic, monetary, and financial issues. The meetings, which usually take place once a year, are attended by the ministers of finance and the governors of central banks of those countries. The Group of Ten is supported by working teams and *ad hoc* committees. The Group has published numerous documents, also concerning certain aspects of the capital markets functioning.

Angell Report

In 1980, the Group of Ten established the Expert Group on Payment Systems. In February 1989, the Group, which was then headed by Wayne Angell[8], issued a document entitled *Report on netting schemes* (the Angell Report). The report examined the impact of netting systems on, among others, the effectiveness and safety of the functioning of international financial markets. It identified four basic forms of bilateral and multilateral netting and the basic types of risks underlying the use of netting for the clearing and settlement of transactions in securities[9].

The Lamfalussy Report of 1990

In 1989, the central banks associated in the Group of Ten established the Committee on Interbank Netting Schemes, headed by Alexandre Lamfalussy[10].

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[7] Switzerland, which at first was an observer, obtained membership in the Group as the 11th country in 1984.

[8] Wayne D. Angell, Ph.D., has performed the following functions: Director of the Federal Reserve Bank of Kansas City (1979-1985), Member of the Kansas House of Representatives (1961-1967) and member of the Board of Governors at the Federal Reserve of the USA (1986-1994).

[9] Credit risk, liquidity risk, settlement risk, and systemic risk.

[10] Alexandre Lamfalussy has been, among others, the general director of the BIS (1985-1993) and the founding president of the European Monetary Institute (1994-1997).

The aim of the Committee was to analyse the multilateral cross-border netting schemes of multi-currency operations, and to propose a method for central banks to exercise systemic oversight of those schemes. The work resulted in the document entitled *Report of the Committee on Interbank Netting Schemes of the central banks of the Group of Ten countries*, published in November 1990 (hereinafter referred to as the Lamfalussy Report of 1990)[11]. It contained two groups of standards: six minimum standards for netting schemes, and five principles for cooperative central bank oversight. Although the Lamfalussy Report of 1990 did not refer directly to securities settlement systems, the majority of the standards included in the report could be applied to those systems. The extensive analysis of the possibility of applying the Lamfalussy Report of 1990 to these systems is presented in a report published by the BIS two years ago and entitled *Delivery versus payment in securities settlement systems*[12]. Many years later, the principles of oversight laid down in the report were used to prepare the principles of oversight of securities settlement systems.

CPSS

Based on the recommendations of the 1990 Lamfalussy Report, the Group of Ten created the Committee on Payment and Settlement Systems (CPSS). It is one of the four permanent central bank committees[13] at BIS and it took over the responsibilities of the Payment System Expert Group. The CPSS consists of representatives of the ECB, the central banks of Belgium, Canada, France, Germany, Hong Kong, Italy, Japan, the Netherlands, Singapore, Sweden, Switzerland and United Kingdom, the FRBNY[14] and members of the Board of Governors of the Federal Reserve System. At the request of the Group of Ten, the CPSS conducts research into the effectiveness and security of payment systems[15] and securities clearing and settlement systems, especially in the area of their impact on the most important financial markets. The Committee carries out its tasks regarding SSSs partly in cooperation with the International Organisation of Securities Commissions (IOSCO).

The majority of CPSS publications are analytical reports, concerning, *inter alia*, securities and derivatives clearing and settlement systems and related

[11] http://www.bis.org/publ/cpss04.htm

[12] More on the report: see below.

[13] Together with the Basel Committee on Banking Supervision (BCBS), Committee on the Global Financial System (CGFS) and Markets Committee.

[14] Federal Reserve Bank of New York.

[15] CPSS published many studies on the subject of payment systems, known as the Red Book, as well as a report, titled *Core principles for systemically important payment systems* in January 2001.

large-value payment systems. CPSS has so far published, *in particular* the following documents on the subject of securities clearing and settlement,: *Delivery versus payment in securities settlement systems* (1992), *Cross-Border Securities Settlements* (March 1995), *Disclosure framework for securities settlement systems* (February 1997, in cooperation with IOSCO[16]), *Securities lending transactions: market developments and implications* (July 1999, in cooperation with IOSCO), *Recommendations for Securities Settlement Systems* (November 2001, in cooperation with IOSCO), *Recommendations for central counterparties* (November 2004, in cooperation with IOSCO) and *Central bank oversight of payment and settlement systems* (May 2005).

The most important CPSS reports on the functioning of SSSs include: *Central Bank Payment and Settlement Services with respect to Cross-Border and Multi-Currency Transactions* (the so-called Noël Report, September 1993), *Payment Systems in the Group of Ten Countries* (December 1993), *Settlement Risk in Foreign Exchange Transactions* (the so-called Allsopp Report, March 1996), *Real-Time Gross Settlement Systems* (March 1997), *Clearing arrangements for exchange-traded derivatives* (March 1997), *Core Principles for Systematically Important Payment Systems* (January 2001), *New developments in large-value payment systems* (May 2005), *Cross-border collateral arrangements* (January 2006), *General guidance for national payment system development* (January 2006) and *New developments in clearing and settlement arrangements for OTC derivatives* (March 2007).

DvP Report

After the 1987 crisis in the capital markets, the central banks of the Group of Ten commenced work on strengthening and unifying securities settlements systems. As a result, at the initiative of the CPSS, a group of experts headed by Patrick Parkinson was appointed and it was entrusted with the task of analysing selected issues regarding SSS processing. In September 1992, the group presented a report titled *Delivery versus payment in securities settlement systems* (hereafter referred to as the DvP Report). It was the first in-depth analysis of settlement using the DvP principle within the SSS. It describes three models of settlement carried out on a DvP basis: gross settlement in securities and funds transfers (Model 1 BIS), gross settlement of securities transfers followed by net settlement of funds transfers (Model 2 BIS) and simultaneous net settlement of securities and funds transfers (Model 3 BIS). Moreover, the report described the liquidity risk and credit risk in SSSs and different ways of managing these risks. The last part of the report was devoted to the analysis of the influence of the organisation and functioning of SSSs on central bank policy of ensuring

[16] More on reports prepared by the CPSS in cooperation with IOSCO in section 3.2.2.3 "Common initiatives of BIS and IOSCO".

financial stability. The report also included a proposal to make use of standards presented in the 1990 Lamfalussy Report, concerning net payment systems in SSS in order to reduce systemic risk in these systems.

Cross-border settlement

The DvP Report was devoted to the settlement of transactions in securities via direct participants of one SSS. Another report, titled *Cross-Border Securities Settlements*, prepared by another group of experts, also managed by P. Parkinson, and published in March 1995, described the mechanisms of the settlement of cross-border transactions, whose number started to grow significantly at that time. The report identified the main channels of cross-border transactions settlement:

- Via direct access of the central depository institution in the country where the traded securities were issued,
- Through a local agent acting as a direct participant of the central depository institution in the country where the traded securities were issued,
- Through a global custodian linked with a local agent acting as a sub-custodian,
- Via an international central securities depository (ICSD) linked with the central depository institution in the country where the traded securities were issued,
- Via a central securities depository linked with the central depository institution in the country where the traded securities were issued.

In addition, the report presents the analysis of the risk connected with the different methods used and the effect of such settlement on the financial policy of central banks.

Central banks oversight of payment and settlement systems

A report entitled *Central bank oversight of payment and settlement systems* was published in May 2005. It provides essential information on the safety of the payment and security settlement systems. It was prepared by a working group headed by Martin Andersson of the Bank of Sweden. The report is the first comprehensive presentation of the effective central bank oversight of payment and settlement systems. It included an analysis of the reasons, needs, basics, scope and ways of exercising the oversight by central banks. The oversight function consists of monitoring and assessment of the systems and inducing changes in them. The report shows that payment and securities systems are the main elements of the financial infrastructure of a country. It is therefore of the utmost importance, especially for central banks responsible for the proper

functioning of the financial system, to operate in a safe and efficient manner. Moreover, the report lays down 10 principles for effective oversight carried out in an independent way by central banks (General oversight principles: transparency, international standards, effective powers and capacity, compliance and cooperation with other authorities) and through international cooperation with other banks and institutions (Principles for international cooperative oversight: notification, primary responsibility, assessment of the system as a whole, settlement arrangements and unsound systems). The principles for international oversight in cooperation with other institutions were created on the basis of the standards presented in the 1990 Lamfalussy Report.

3.2.2.2. The role of IOSCO

IOSCO was created in 1983[17] as the successor of an inter-American regional association of securities commissions[18]. As this was a time of capital market globalisation and rapid growth of international investments, in the following year the organisation was joined by the first regulators from outside the American continent, e.g. from France, Indonesia, South Korea and the United Kingdom. At present IOSCO is the largest[19] and the most important international organisation for international cooperation between capital market regulators and for setting standards in that area. The organisation consists of four Regional Standing Committees covering the regions of Europe, North and South America, Africa and Middle East, and the Asia – Pacific region. It has published many papers on the functioning of the capital market, including subjects such as the oversight of the market, trading in financial instruments (including derivatives), trading platforms, financial institutions operation, investment and clearing and settlement of operations involving financial instruments. The papers often deal with different aspects of the capital market operations, i.e. legal aspects, internationalisation of trading, cooperation between overseers, market transparency, and market development. Reports on the latter subject are prepared by the Emerging Markets Committee at IOSCO (formerly Development Committee). The most important documents on SSSs published by the organisation include: *Clearing and Settlement, Report of the Technical Committee* (July 1990), *Clearing and Settlement in Emerging Markets – A Blueprint, Report of*

[17] The decision to transform a regional organisation into an international organisation was taken during the meeting in Quito, Ecuador, in April 1983.

[18] The association was created in the 70s at the initiative of the American regulator in order to promote American practices of capital market regulation in Latin America.

[19] It brings together regulatory agencies from over 100 countries.

the Development Committee (October 1992), *Report on Internationalization*, *Report of the Development Committee* (October 1993), *Report on Privatization*, *Report of the Development Committee* (October 1993), *Clearance and Settlement in the Markets of the Members of the Technical Committee – Implementation of the Group of Thirty Recommendations*, *Report of the General Secretariat* (1993 and reissued in 1994, 1995 and 1996), *Report on Cooperation Between Market Authorities and Default Procedures* (1996, the so-called IOSCO Report) and *Objectives and Principles of Securities Regulation* (1998), which is presently recognised as a guideline for capital markets regulations. Moreover, in 2002, the organisation adopted a multilateral agreement (IOSCO MOU)[20] enabling cross-border exchange of information between market regulators.

Clearing and Settlement – Report of the Technical Committee

In July 1990, IOSCO published a report titled *Clearing and Settlement, Report of the Technical Committee.* It was prepared on the basis of the 1989 Group of Thirty[21] report and includes 9 recommendations for the SSSs. Between 1993 and 1996, IOSCO published further reports, titled *Clearance and Settlement in the Markets of the Members of the Technical Committee – Implementation of the Group of Thirty Recommendations*, *Report of the General Secretariat,* concerning the scope of implementation of the Group of Thirty recommendations.

The IOSCO Principles

Published in 1998, *Objectives and Principles of Securities Regulation*[22] (hereafter referred to as the IOSCO Principles) set out objectives and principles of securities regulation and oversight, both at the national as well as at the international level. The document is based on the assumption that proper market regulation should facilitate capital formation and economic growth. It points out three objectives of securities oversight: protection of investors, ensuring that markets are fair, efficient and transparent and reduction of systemic risk. To achieve the abovementioned objectives, 30 principles were developed which should be implemented in the relevant legal framework and which should become the basis of market regulation. The principles were divided into 8 categories relating to: the regulator, the self-regulatory organisations (SRO), the implementation of securities regulations, cooperation in the area of regulations, issuers, collective investment schemes (CIS), market intermediaries and the secondary market.

[20] IOSCO Memorandum of Understanding.

[21] More on the G30 in section 3.2.3.1 "Work of the Group of Thirty".

[22] In 2003, the document was supplemented with the methodology for the assessment of the level of fulfilment of the principles ((IOSCO Principles Assessment Methodology).

The authors of the document point out that the implementation of the above mentioned principles should not be expected to remove all risks from the capital market, but will make it possible to mitigate risks considerably.

3.2.2.3. The common initiatives of BIS and IOSCO

Disclosure framework for securities settlement systems

The first document prepared jointly by the CPSS and IOSCO was a survey form addressed to SSSs titled *Disclosure framework for securities settlement systems*, published in February 1997. The document was prepared by the Working Group on Disclosure by Securities Settlement Systems, appointed for that purpose in 1996, consisting of public sector representatives, including regulators and central banks, and the private sector, including SSS operators from both developed and developing markets. The group was headed by Adam Gilbert, representing the FRBNY. That common report was the result of both organisations' interest in risk in local and international capital markets, expressed previously in their independent publications[23]. The aim of the document was to increase transparency of the mechanisms of the modern capital markets. According to its authors, it was necessary to take action in that area, as there still existed significant differences in the way individual markets and their related systems operated, in spite of the development of cross-border securities trading. The most important aspect for market participants was to become acquainted with the rules and procedures of a given system. At the same time, obtaining such information could be difficult owing to the fact that the ways of revealing it and its scope depended on the system operators. The survey, addressed to SSS operators and prepared jointly by the CPSS and IOSCO, was supposed to provide direct and indirect market participants with an easy and standardised access to the most important information regarding the functioning of the system and enable them to assess the risk underlying the activities in a given market. The survey examined the following issues concerning the functioning of the systems: the organisational and ownership structure, rules and procedures, participant relations, links with other SSSs, funds and securities transfer procedures, settlement guarantee, settlement of back-to-back transactions and risk management. The survey, filled in by system operators, was to be made available to market participants, regulators and other interested parties. The answers were to be

[23] Including the following documents published by the CPSS: *Report on DvP* (1992), *Cross-Border Securities Settlements Report* (1995) and the following IOSCO reports: *Clearing and Settlement, Report of Technical Committee* (1990 and reissued in 1993-1996), *Clearing and Settlement in Emerging Markets — A Blueprint* (1992) and *Report on Cooperation Between Market Authorities and Default Procedures* (1996).

updated regularly, at least once a year, by the respondents. Many settlement system operators publish the answers to the survey on their websites, making them available to all stakeholders[24].

RSSS and RCCP

The most important contribution of the CPSS and IOSCO into the integration and security improvement of the SSS functioning were the recommendations for SSSs and CCPs, prepared by the Task Force on Securities Settlement Systems[25], containing principles for their organisation and operation. They were based on recommendations published by the G-30 and ISSA[26], which were supplemented with ten new points of a more technical nature.

The Recommendations for Securities Settlement Systems (RSSS) report, published in November 2001, comprises 19 recommendations for domestic and cross-border systems and includes a survey aimed at helping countries assess the level of implementation in the reviewed systems. The assessment of the implementation of the recommendations in a given SSS was entrusted to the system regulators and overseers. In November 2002, the report was supplemented with the methodology for assessing the fulfilment of the above recommendations. The recommendations were divided into groups (*inter alia*, according to the type of underlying risk) relating to: legal risk, pre-settlement risk, settlement risk, operational risk, custody risk as well as governance, system access, transparency and oversight. Developing recommendations for the SSSs was particularly important due to the rapid development of domestic and cross-border securities trading. They were also the first comprehensive recommendations for the SSSs since the G-30's Standards were published in 1989. In comparison with the G-30's Standards, the RSSS are more up-to-date and they extend the scope of SSS regulation into the areas of legal basis for settlement, transparency, access, regulation and oversight.

The second of the reports, i.e. Recommendations for Central Counterparties (RCCP) was published in November 2004. It was the first such document dedicated entirely to CCPs. The report comprises 15 recommendations present-

[24] The disclosure framework for the National Depository of Securities (KDPW) is available at http://www.kdpw.com.pl/informacje/pliki/inf_ankiety/D_framework_2007.pdf and for the Register of Securities (RPW) at http://www.nbp.pl/en/System_platniczy/disclosure_framework_012008.pdf.

[25] Headed by co-chairmen: Patrick Parkinson (FRBNY, USA), Shane Tregillis (Securities and Investments Commission, Australia) and Giovanni Sabatini (Commissione Nazionale per le Società e la Borsa, Italy).

[26] See section 3.2.3.2 "The work of ISSA".

ing risks connected with the functioning of CCPs and the methodology for the assessment of their implementation.

3.2.3. International initiatives

3.2.3.1. The work of the Group of Thirty

The Group of Thirty (Consultative Group on International Economic and Monetary Affairs, Inc., G-30), established in 1978, is a private international body composed of economic and financial experts, which analyses global economic problems and searches for ways of solving them. The Group meets twice a year in plenary sessions and organises numerous seminars and symposia. It also publishes papers regarding various aspects of the global economy and establishes committees and study groups for the analysis of the specific problems. One of the Group's focus areas is securities clearing and settlement.

The 1987 stock market crash revealed the influence of sudden changes in exchange rates on post-trading processes and made it evident that it was necessary to improve the stability and security of securities clearing and settlement systems. In 1989, the Group published a paper titled Clearance and Settlement Systems in the World's Securities Markets, which comprised 9 recommendations concerning principles for securities clearing and settlement, including: time limit for confirmation of trade terms and conditions between market participants (not later than T+1), creating a securities depository and introducing netting mechanisms in each country, introducing DvP procedures and enabling access to funds on the settlement date, carrying out final settlement no later than T+3, developing securities loans as a means of improving settlement liquidity, and adopting ISO standards for securities numbering and message formats by all countries. The G-30 recommendations drew massive response worldwide, as national regulators were keen to show to the international banking community that their markets were secure and deserved the attention of foreign investors. Although the recommendations have not been fully implemented in all markets, they have fostered significant changes in the depository and settlement infrastructure in many countries. In March 1990, the Group organised a conference in London devoted to the publication and the recommendations themselves. Their implementation was subsequently monitored (through surveys completed by market regulators) and presented in the following documents: *Clearance and Settlement Systems: Status Reports, Spring 1990, Clearance and Settlements Systems: Status Reports, Year End 1990 and Clearance and Settlement Systems Status Reports*: Autumn 1992.

In addition, in 1993 the Group published a paper concerning the derivatives market, titled *Derivatives: Practices and Principles*. It described the new

developing segment of the market and presented 20 recommendations for dealers and investors and suggestions regarding oversight and regulation. The publication was later supplemented with information on market practices regarding derivatives in *Survey of Industry Practice* (1993) and *Follow-Up Surveys of Industry Practice* (1994).

In January 2003, the G-30 published a report titled *Global Clearing and Settlement – a plan of action*, which was a call for a major reform of global securities markets, in order to improve the efficiency of the depository and settlement infrastructure. The reform would include: development and implementation of global technical and operational standards, improvement of risk management practices, further harmonisation of the global legal and regulatory environment and improvement of governance of institutions providing clearing and settlement services. The document comprised 20 detailed recommendations which, when implemented within 5-7 years, would significantly improve the safety and efficiency of international securities markets. The Group established the G-30 Monitoring Committee, which was to monitor progress on the reforms proposed, and work groups, working on each recommendation, composed of representatives of various organisations pertaining to the capital market infrastructure worldwide.

In May 2006, the Group of Thirty published the final report titled *Global Clearing and Settlement: Final Monitoring Report*, closing the work of the Monitoring Committee. The report points out the areas where progress was made compared to the situation described in the 2003 report, and presents problems to be solved, including: inefficiency of the exchange of information regarding transactions and settlement (due to the lack of global standards for messages), lack of full dematerialisation of securities (which still requires changes to business processes, culture and law) and lack of synchronisation of payment and securities settlement systems on a global basis.

3.2.3.2. The work of ISSA

The International Securities Services Association (ISSA) is a private organisation comprising capital market institutions (custodian banks, clearing houses, securities depositories, stock exchanges and brokers). It was created in 1979 on the initiative of Citibank, Deutsche Bank and USB as a forum to discuss and exchange information between their representatives responsible for the banks' activities in the capital market. Later they were joined by representatives of other institutions. Presently the organisation comprises 91 members from 46 countries. It organises annual seminars on securities depository services. Seminar reports are a valuable source of information about global practices in

that area. Moreover, the Association had published the *ISSA Handbook* for many years, which was a valuable source of operational knowledge concerning global securities markets. The last, eighth edition of the Handbook was published in 2004 and no further publications are planned.

In view of the fact that many ISSA members take part in the work of the G-30, both organisations cooperate closely. In 1988, ISSA published 4 recommendations, which were a basis for the G-30 recommendations published the following year. When in the mid-1990s it became necessary to update the recommendations prepared by the Group of Thirty, ISSA reviewed them and the document *G-30/ISSA Recommendations* was published in 1995. Changes in the market provoked yet another revision of the recommendations. In 2000, ISSA published *ISSA Recommendations 2000* – a list of 8 recommendations focusing on the issues of operational efficiency of clearing and settlement systems, risk management and service costs. A year later a report was prepared which summarised the implementation of the recommendations worldwide. In 2004, the Association received a mandate from the G-30 to monitor the implementation of 5 out of 20 recommendations included in the 2003 Group's report.

ISSA coordinates work on unifying reference data and on automating and standardising asset servicing (including corporate actions). In those matters it cooperates with market entities and infrastructure institutions from all over the world (including EACH[27] and ECSDA[28]), taking into consideration work undertaken as part of regional initiatives (EU).

3.2.3.3. The work of the SMPG

The Securities Market Practice Group (SMPG) was established under the patronage of SWIFT in July 1998. SMPG comprises representative of 35 countries, including Poland. SMPG plenary meetings are held twice a year. The aim of the organisation is to develop market standards and practices enabling straight-through-processing (STP) of securities clearing and settlement and executing rights arising from them on both the national as well as the international market. Within the SMPG, 4 thematic groups were established which are responsible for the analysis of market practices and developing standards:

- Trade Initiation and Confirmation (TIC)
- Settlement and Reconciliation (S&R)
- Corporate Actions (CA)
- Investment Funds

[27] European Association of Central Counterparty Clearing Houses.

[28] European Central Securities Depositories Association.

In addition, National Market Practice Groups (NMPG) were established within the SMPG; they are composed of brokers, fund managers, custodian banks, depository institutions and domestic markets regulators. Their task is to analyse and document practices applied in their respective local markets. SWIFT gathers this information, defines common elements and distinctive practices and proposes potential scope for harmonisation. Documents presenting the practices of individual markets are published on the SMPG website. By mid-2008 the Group published descriptions of market practices for transaction settlement, selected aspects of the exercise of rights arising from securities (e.g. flow of messages, proxy voting) and initiation and confirmation of basic transactions. The remaining areas are still under examination.

3.3. Initiatives within the EU

3.3.1. The European Council and the Council of the European Union

The objective of the EU financial markets policy is to create a common European market for financial services within the so-called single market. The fundamental document setting out the position of the European Council on the main directions for development of the European financial market is the Lisbon Strategy – a development plan adopted by the European Council in Lisbon in March 2000. The main objective of the plan (adopted for the period 2000-2010) was to take the necessary action in order to improve the competitiveness and the dynamics of the EU economy, based on knowledge and innovation. The Lisbon Strategy objectives will be achieved through enhancing the initiatives aimed at market liberalisation and integration, including the financial market. Actions included in the Strategy are implemented through binding legal acts and setting out common objectives, which are later included in national and regional programs. Each year for the spring session, the European Commission prepares a periodic report[29] which analyses the progress made by the Member States in implementing the Strategy objectives.

[29] Although the Lisbon strategy is, at present, considered the most important socio-economic program of the EU, its implementation is viewed negatively. In 2004, a special team headed by Wim Kok, former Prime Minister of the Netherlands, drew up a report summarising the strategy results. According to Romano Prodi, Italian politician and former President of the EC, the report presents a pessimistic view of the strategy: since the Lisbon Summit, the gap between the EU and the USA has become even larger. Due to unsatisfactory progress on the Lisbon agenda, it was renewed in 2005.

The organisational infrastructure of part of the Council of the European Union working for the needs of the European financial market is concentrated around the Economic and Financial Affairs Council (ECOFIN), which is one of the nine sector councils of the Council of the EU. It is composed of the ministers of the economy and finance ministers of the EU Member States.

EFC

The Council also has a consultative body, the Economic and Financial Committee (EFC), established pursuant to the Treaty of Maastricht. The EFC is composed of two representatives of each Member State, the European Commission and the ECB, chosen from among economic and financial experts. The main task of the EFC it to monitor the current economic and financial situation of the Member States and the EU and to present regular reports to the Council of the EU and the European Commission. The EFC is also a forum for dialogue between high-ranking officials of the Council of the EU and the ECB.

FSC

In February 2003, the Council of the EU established the Financial Services Committee (FSC), composed of high-ranking representatives of the Ministries of Finance of the Member States, which substituted the Financial Services Policy Group (FSPG), which had previously worked at the European Commission. The ECB is one of the observers within the FSC. The main task of the Committee is to advise the ECOFIN on financial integration (including monitoring the progress in implementing EU integration programs), clearing and settlement and on corporate governance in reference to the financial markets.

3.3.2. The European Commission

3.3.2.1. Directives

The area of clearing and settlement of transactions in securities has not as yet been comprehensively regulated by the EU. However, in the last 15 years a few directives have been adopted in this respect. The first directive, which served as a basis for further regulations, was the 1993 Investment Services

Directive (ISD)[30], which entered into force on 1 January 1996. It regulated the functioning of investment companies and securities trading markets. The directive eliminated the main legal barriers in the field of the common securities market in the EU. Firstly, it enabled investment companies registered in any of the Member States to operate throughout the whole EU by introducing the single European passport. Moreover, the ISD was an attempt to liberalise access to the regulated markets in individual Member States, which facilitated the trading of securities that had been issued in one Member State, across the whole EU. The ISD also introduced the possibility of remote participation of investment firms in foreign regulated markets. It is worth noting that it was the ISD that introduced the now commonly used notion of the regulated market, which embraces both traditional stock exchanges (spot market) as well as trading platforms for derivatives (futures market). Post-trading activities were treated very generally in the ISD, which only stated that all regulations concerning access to the regulated markets and participation in them also applied to entities performing clearing and settlement operations in those markets.

Owing to the introduction of the common currency and the development of new technologies, which resulted in significant technical changes to the functioning of trading platforms and clearing and settlement systems, it was necessary to create a new regulatory framework for the European capital market. As a result of legislative work undertaken by the European Commission in April 2004[31], the ISD was replaced with the Markets in Financial Instruments Directive (MiFID). It confirmed and extended the principles included in the ISD and introduced new rules attempting to fully implement the single European market within the EU. The MiFID enhances the possibilities to execute transactions outside the regulated market by introducing regulations relating to the MTF market and defining activities of systematic internalisers[32]. It also contains several regulations aimed at improving investor protection in the capital market. Among other things, it obliges investment companies to seek best execution of clients' orders and introduces detailed regulations concerning pre- and post-trading transparency. The most important new addition in the directive related to post-trading activities is the introduction of free access of foreign investment companies to the domestic clearing and settlement systems

[30] Council Directive 93/22/EEC of 10 May 1993 on investment services in the securities field.

[31] The Directive was implemented in the national law on 31 January 2007, however the investors had to comply with the new regulations since November 2007.

[32] Under the terms of Article 4(1)(7) of MiFID, a 'systemic internaliser' means an investment firm, which, on an organised, frequent and systematic basis, deals on its own account by executing client orders outside a regulated market or an MTF.

and the right to choose the settlement system for transactions undertaken on that market by the regulated market participants[33]. According to the directive, the criteria of access to the above mentioned systems should be the same both for local and foreign companies and the Member States may not limit access to those facilities to transactions executed on a regulated market within their territory. Additionally, the Member States should ensure that operators of regulated markets functioning in their territory offer all their participants the right to designate the system for the settlement of transactions undertaken on that regulated market[34]. The directive also gives operators of regulated markets[35] and MTFs[36] the right to choose a foreign clearing and settlement system to process some or all transactions executed on a given domestic market. The main objective of the above mentioned regulations was to facilitate cross-border transactions within the EU and to create competition in that sector of the market. The MiFID was partially implemented in the Polish legal system during the work on three pieces of legislation regulating the functioning of the Polish capital market[37]. At the moment of publishing this paper, legislative work is being carried out to fully implement the directive in Polish law.

Another regulation, adopted after ISD in May 1998 and important from the point of view of post-trading activities, was the *Settlement Finality Directive* (SFD)[38], which entered into force on 11 December 1999. The basis for this directive was the 1990 Lamfalussy Report[39], which described, for the first time, the problem of settlement protection, especially the results of netting performed as part of the settlement process. The first standard of the report provided for netting to be directly regulated by legislative systems of individual EU Member States[40].

[33] Article 34 of MiFID.

[34] This depends on the existence of links between systems and appropriate organisation of oversight in the Member States. At the same time, the Directive grants the clearing or settlement system's operator the right to refuse to provide such services on the basis of justified commercial considerations.

[35] Article 46(1) of MiFID.

[36] Article 35(1) of MiFID.

[37] The Act of 29 July 2005 on Trading in Financial Instruments (Journal of Laws of 2005, No. 183, item 1538), the Act of 29 July 2005 on Public Offering and the Conditions Governing the Admission of Financial Instruments to an Organised Trading and Public Companies (Journal of Laws of 2005, No 184, item 1539) and the Act of 29 July 2005 on Capital Market Supervision (Journal of Laws of 2005, No 183, item 1537).

[38] Directive 98/26/EC of the European Parliament and of the Council of 19 May 1998 on settlement finality in payment and securities settlement system.

[39] See section 3.3.2.4 "Lamfalussy Report".

[40] Standard I: Netting schemes should have a well-founded legal basis under all relevant jurisdictions.

The main objective of the SFD was to minimise systemic risk connected with the participation in payment systems and SSSs, especially the risk connected with the declaration of the insolvency of a system participant, by guaranteeing finality of transaction settlement performed in the system. The guarantee includes irrevocability of the transfer order introduced into the system and enforceability and a binding character vis-à-vis third parties of both the order, as well as the netting performed following the order. In case of insolvency proceedings, the guarantee includes: enforceability and a binding character of netting and of the transfer order introduced into the system before the insolvency was announced and on the day of the announcement, precluding the application of retroactive insolvency regulations[41] to agreements and transactions executed before the announcement of the system participant's insolvency[42] and the exclusion from the bankruptcy estate of the funds in cash and securities accounts, including funds, which are financial collateral for credit obtained within the system and which are necessary to execute orders introduced into the system before the announcement of the insolvency.

The SFD was the first EU regulation involving securities which indicated the law applicable to determine the legal situation of system participants and parties entitled by way of collateral security (hereafter called financial collateral). Pursuant to Article 2(a) of the Directive, participants may choose the law which will govern the system[43]. Whereas, pursuant to Article 8 of the Directive, in the event of the participant's insolvency, the rights and obligations arising from the participation in the system shall be determined by the law governing that system. Regarding financial collateral, Article 9(2) of the SFD introduces the rule of conflict of laws. Pursuant to this article, the validity and enforceability of the collateral is determined under the law of the Member State where the relevant securities account, register or centralised deposit is located. This reflects the Type I PRIMA rule, based on the *lex rei sitae* principle.

Moreover, the SFD introduces or defines many important terms: system, CCP, transfer order and collateral security. It is worth noting that in the Directive, system was defined as an arrangement between three or more participants, with

[41] i.e. regulations, which provide for appealing against a legal act or set forth the ineffectiveness of an act of law.

[42] Which means rejection of the zero hour rule, according to which the announcement of insolvency or any other similar occurrence causes all transactions which took place after midnight on the day of the announcement not to be legally binding.

[43] However, they can only choose the law of a Member State in which the head office of at least one of the participants is located.

common rules for the execution of transfer orders between the participants[44]. Apart from the regulations, the SFD also includes very important procedures: notifying the Commission which systems are to be included in the scope of the Directive[45] and having notified the Commission, notifying other Member States of the opening of insolvency proceedings against a participant of the system.

When the SFD entered into force, the security of national and cross-border operations within payment systems and SSSs increased. In the first half of 2008 work was initiated on new amendments to the Directive.

The SFD was introduced into the Polish legal system by the Act of 24 August 2001 on Settlement Finality in Payment and Securities Settlement Systems and the Rules of Oversight of these Systems[46].

In order to supplement SFD rules on collateral security and to extend them to bilateral arrangements executed outside an SSS, the Financial Collateral Directive (FCD)[47] was adopted in June 2002. The FCD regulates two types of financial collateral: title transfer financial collateral (assignment) and security financial collateral (pledge)[48]. The financial collateral, which can only consist of cash or financial instruments, must remain under the control of the collateral receiver, who also holds the right of use, i.e. the right of the collateral receiver to use and dispose of financial collateral. Apart from regulations extending the rule of conflict of laws included in the SFD, the Directive also contains regulations which ensure protection of the collateral from effects of insolvency proceedings. As a result, the FCD contributed to the standardisation of EU rules on provision and execution of financial collateral. This has facilitated the cross-border use of collateral within the EU in accordance with bilateral arrangements[49] and, together with the protection provided by the SFD, it has

[44] The Polish Act on Settlement Finality distinguishes and defines separately a payment system and a securities settlement system.

[45] Article 15.3 of the Act on Settlement Finality, these regulations apply to "systems in which there is a risk that the defaulting by one system participant on their obligations might result in the defaulting by another participant or participants on their obligations (systemic risk)".

[46] The Act of 24 August 2001 on Settlement Finality in Payment and Securities Settlement Systems and the Rules of Oversight of these Systems (Journal of Laws of 2001, No. 123, item 1351).

[47] Directive 2002/47/EC of the European Parliament and of the Council of 6 June 2002 on financial collateral arrangements.

[48] The Polish Act of 2 April 2004 on Certain Forms of Financial Collateral (Journal of Laws of 2004, No. 91, item 871) distinguishes three forms of collateral which consist of 1) transfer of rights to funds and financial instruments to the collateral receiver, 2) establishment of a pledge over those rights (financial pledge) or 3) establishment of a blockade on an account or securities depository account.

[49] Which created a wider possibility to make use of master agreements.

increased the safety of conducting monetary policy operations by central banks within the euro area[50]. The FCD was introduced into the Polish legal system by the Act of April 2004 on certain forms of financial collateral[51].

Discussions on the introduction of a directive related exclusively to clearing and settlement have taken place for many years now. However, owing to the fact that the self-regulation initiative in the form of the Code of Conduct[52] of 2006 was carried out, the Commission decided to abandon, at least for the foreseeable future, the implementation of the above-mentioned project.

3.3.2.2. Communications

Many legislative initiatives and other actions concerning post-trading activities were taken up as a response to Commission documents. Among them, communications play the most important role. They include Commission recommendations and opinions on the necessary changes in a given area and directions for further development.

From the point of view of the development of the common market, one of the most important communications after the introduction of the ISD and SFD was the communication of 11 May 1999 titled *Implementing the framework for financial markets: an action plan*. The communication contained the *Financial Services Action Plan* (FSAP)[53] prepared by the European Commission at the initiative of the European Council[54]. The Plan presented objectives of the development of EU financial markets over the following 5 years and outlined the means to achieve them. The communication was prepared based on a motion by the European Council[55] following the Commission communication of 28 October 1998 titled *Financial services: building a framework for action* and was based on analysis carried out by the FSPG group, comprising representatives of the Ministries of Finance

[50] The possibility to use securities issued in one Member State as collateral for short-term credit (e.g. intraday credit) granted within the payment system of another Member State contributed to improved liquidity management in the Eurosystem.

[51] The Act on Certain Forms of Financial Collateral.

[52] See section 3.3.2.6 "Adopting the *Code of Conduct* and establishing the Monitoring Group".

[53] *Commission Communication of 11 May 1999 entitled "Implementing the framework for financial markets: action plan"* (COM(1999) 232 final).

[54] In June 1998, during the Cardiff Summit, the European Council asked the European Commission to prepare an action plan to support the development of the common market with regards to financial services.

[55] In December 1998, at the Vienna meeting, the European Council asked the European Commission immediately to prepare a program of work to fulfil objectives laid down in the 1998 communication which were agreed upon.

and the ECB. In respect of the capital market, the FSAP[56] indicated the need to take action, among others, in the following areas: establishing a common legal framework for the integrated financial instruments market, removing legal barriers to cross-border marketing of securities, standardising financial statements for public companies and creating a legal basis for the development of cross-border securities trading, among others through the mutual recognition and effectiveness of financial collateral. FSAP implementation resulted in: establishing numerous committees and groups, which created new objectives and challenges concerning the integration of the European capital market, as well as introducing or verifying many directives, including the MiFID and FCD. In order to ensure realisation of the FSAP, the document describes screening mechanisms to control progress in its implementation[57].

Another two communications concerning the capital market were of lesser importance: **Commission communication of 14 November 2000 on the application of conduct-of-business rules under Article 11 of the ISD**[58] **and Commission communication of 15 November 2000 on upgrading the ISD**[59]**.** They called for necessary changes to the ISD, arising among others from the development of new technologies. Those communications have contributed to the adoption of the MiFID.

The key communications concerning post-trading activities were consultative communications directed to all market participants concerned published in 2002 and 2004, in which the European Commission presented its position on the desired form of the depository, clearing and settlement infrastructure in the EU market. Due to the consultative nature of both communications, the European Commission set a three-month period for each case to allow time for comments and answers to questions included in the communications.

[56] FSAP mainly presented means of implementation (especially introducing necessary legislative changes) of the following strategic objectives: creating a single wholesale capital market, creating an open and secure retail market, introducing state-of-the-art prudential rules and supervision; and a general objective: creating wider conditions for an optimal single financial market.

[57] As a follow-up, the European Commission prepared biannual Progress Reports, out of which some were published. According to the last special report, which evaluated the action taken, 98% of activities described in the document were implemented on time, i.e. by the end of 2005.

[58] *Commission communication of 14 November 2000 on the application of conduct-of-business rules under Article 11 of Directive* **93/22/EEC (COM(2000) 722 final), not published.**

[59] *Commission communication of 15 November 2000 on upgrading the Investment Services Directive* (COM(2000) 729 *final*)**, not published.**

Commission Communication of 3 June 2002 titled *Clearing and Settlement in the European Union: Main policy issues and future challenges*[60] indicates the need to improve ways of providing services with respect to clearing and settlement of transactions involving financial instruments in cross-border trading within the EU. In that matter the European Commission set itself a target of eliminating barriers to the finalisation of individual cross-border transactions and removing any obstacles to the development of competition in cross-border trading[61]. The European Commission pointed out that it considered clearing and settlement to be of particular importance for the effective and safe functioning of the whole capital market in the EU. It also indicated who should eliminate the barriers described in the Giovannini Report[62] and by what means. The European Commission also presented the idea to create a framework directive regulating certain aspects of functioning of the securities settlement systems for consultation.

The next consultative communication titled *Commission communication on Clearing and Settlement in the European Union – The way forward* of 28 April 2004, which was a continuation of the 2002 Commission communication, referred directly to the need to apply the rules included in the FSAP to post-trading activities. Moreover, the European Commission presented in it a suggestion to establish a framework Directive on clearing and settlement of securities transactions. The Directive was to include regulations ensuring equal access to all EU markets to service providers, q common regulatory framework, investor protection and enhanced integration of individual systems within the EU. As has already been mentioned, the European Commission eventually abandoned the idea to develop the Directive as a means of achieving the above-mentioned objectives. Furthermore, the European Commission called in the communication for the creation of an advisory group, which would handle the oversight of work aimed at eliminating the Giovannini barriers[63] and two expert groups on legal and tax issues related to clearing and settlement. As a result, the following European Commission advisory groups were created: CESAME, LCG and FISCO[64]. These groups cooperate with each other and with other securities

[60] *Communication from the Commission to the Council and the European Parliament "Clearing and Settlement in the European Union: Main policy issues and future challenges"* COM(2002)257, Brussels, 28 May 2002.

[61] In particular, the Commission indicated the high costs of services in comparison with the USA.

[62] See section 3.3.2.5 "Giovannini Reports".

[63] See section 3.3.2.5 "Giovannini Reports".

[64] More on those groups below.

industry organisations (e.g. the Group of Thirty)[65], which handle clearing and settlement of securities.

CESAME

The first meeting of *The Clearing and Settlement Advisory and Monitoring Experts' Group* (CESAME) established by the European Commission took place on 16 July 2004 in Brussels. The group advised the European Commission on clearing and settlement systems. CESAME comprised of twenty high-ranked representatives of different, mainly private, institutions involved in the clearing and settlement process (including ECSDA) and four observers seconded from selected public bodies. The Principal Policy Advisor to the group was Alberto Giovannini.[66] The National Bank of Poland also had a representative in CESAME. The group constituted a forum for cooperation between the public and private sectors. The aim of the cooperation was to achieve full integration of the EU capital markets in a way determined by the market itself, including elimination of the Giovannini barriers[67]. In addition, CESAME's task was to disseminate information on the progress in the market integration process and to raise awareness on the need to reform the post-trading services sector in order to facilitate the development of the European capital market and implement the Lisbon strategy.

As the CESAME mandate expired in June 2008, a new group, CESAME II, comprising 30 members was established in order to continue work on eliminating barriers to clearing and settlement of cross-border transactions.

LCG

The Legal Certainty Group (LCG) was established in January 2005 on the initiative of the European Commission, in accordance with the guidelines laid down in the Commission communication of 2004. The aim of the Group is to analyse barriers and legal uncertainty, which hinder the

[65] See section 3.2.3.1 "Work of the Group of Thirty".

[66] Dr. Alberto Giovannini is an Italian theoretician and financial adviser, well-known in financial markets. He worked, *inter alia*, as the Deputy General Manager of Banco di Roma, was a Board Member of the Italian stock exchange (Borsa Italiana SpA) and the Italian securities depository (Monte Titoli SpA). Dr. A. Giovannini cooperated, *inter alia*, with the Jerome A. Chazen Institute of the Columbia Business School.

[67] See section 3.3.2.5 "Giovannini Reports".

harmonisation of the European clearing and settlement systems and the development of cross-border services in this area. The Group comprises 30 legal experts from academia and the public and private sectors, who represent their own opinions and views. The Group is headed by the EC.

Its tasks include undertaking in-depth legal analysis of the issues raised in the above-mentioned communication, which concern defining rights arising from securities entered into accounts maintained by intermediaries in different countries. The issues analysed by the Group in particular include the absence of an EU-wide framework providing for the manner of exercising rights with respect to securities held with an intermediary and the differences in national legal provisions in that matter (e.g. discrepancies in laws as to the determination of the exact moment when a purchaser is considered to be the legal owner of a security), which is conductive, among others, to the lack of harmonisation between operations involving securities and shareholders' rights in different countries (which is a part of Giovannini barrier 3).[68] In this context, the Group monitors work on the UNIDROIT Convention. Other issues analysed by the Group include restrictions to the issuer's ability to choose the location of its securities and other legal obstacles indicated in the Giovannini reports[69]. The Group has developed the following documents: *Comparative survey* (of 26 July 2006), which comprises a comparative analysis of the EU Member States' legal systems with a view to securities definitions and regulation of the way record keeping is managed, and *The Advice of the Legal Certainty Group* (of 28 July 2006) and *Second Advice of the Legal Certainty Group Solutions to Legal Barriers related to Post-Trading within the EU* (of 22 August 2008)[70], which define rules and recommendations concerning harmonisation of regulations governing cross-border trading of securities held with an intermediary in the EU.

In addition, the Group advises the European Commission on the issues analysed and cooperates with other groups established at the initiative of the Commission, like FISCO or CESAME, in resolving problems connected with clearing and settlement.

[68] See section 3.3.2.5 "Giovannini Reports".

[69] See section 3.3.2.5 "Giovannini Reports".

[70] Documents are available on the Group's website http://ec.europa.eu/internal_market/financial-markets/clearing/certainty_en.htm.

FISCO

The Clearing and Settlement Fiscal Compliance Expert Group (FISCO) was established by the European Commission in March 2005 in order to develop ways to overcome tax barriers, which hamper the clearing and settlement of cross-border transactions within the EU. The Group's area of interest includes issues concerning taxes on capital gains, lump-sum taxes on income from securities and transaction taxes. The Group comprises 15 high-ranked tax experts mainly from the private sector and academia. FISCO is headed by the European Commission and is also its advisory body.

The Group's tasks include first and foremost: examining the fiscal barriers identified in the Giovannini reports[71] and during the 2002 Commission communication consultations (as well as identifying other inconsistencies in tax law, which influence clearing and settlement) and assessing their relevance, estimating the influence of the potential harmonisation of fiscal regulations on tax revenue of Member States and analysing alternative ways of ensuring a sufficient level of tax revenue, which at the same time allow all financial institutions in the EU to compete on equal terms. The first step towards fulfilling the Group's tasks was performing a study of procedures and fiscal regulations, which influence clearing and settlement of transactions involving securities in the EU Member States[72]. The study is a starting point for the analysis of the possibility to standardise local fiscal regulations through the elimination or significant reduction of inconsistencies between them. In October 2007, FISCO published its second report[73], which included proposals on how to eliminate fiscal barriers. At the beginning of 2009, the European Commission is planning to publish recommendations for the Member States based on the report.

3.3.2.3. White Paper on Financial Services Policy 2005-2010

Apart from communications, which dominate European Commission publications, the Commission also issues other documents in which it expresses its position on the integration of the EU financial market. They are white papers, frequently preceded by a Green Paper. In May 2005, the European Commission

[71] See section 3.3.2.5 "Giovannini Reports".

[72] *First report: Fact-finding study in Fiscal Compliance Procedures Related to Clearing and Settlement within the EU*, published in April 2006.

[73] *Second report: Solutions to fiscal compliance barriers related to post-trading within the EU*, published in October 2007.

issued a Green Paper on Financial Services Policy 2005-2010[74]. The decision on issuing the document was made in connection with the approaching deadline for implementing FSAP. The White Paper on Financial Services Policy 2005-2010[75], issued in December 2005, sets forth priority measures which should be undertaken to achieve full integration of the financial market within the EU. In this respect, the document underlines the need to continue the process initiated by FSAP, to remove the existing barriers in the European capital market, and act towards the development of EU legislation and the supervision of its implementation in each Member State[76]. In relative terms, the document concentrates its greatest attention to legal issues. It primarily stipulates taking the following measures aimed at supporting the development of a uniform legal basis of the European capital market: publishing relevant information on websites, compliance analysis of regulations on securities in individual Member States, verifying the regularity of implementing EU legislation in the legal systems of individual Member States and, in case of irregularities, taking appropriate steps to address them. The Commission adopted a four-step model proposed in the Lamfalussy Report[77] as the basis for executing regulatory and supervisory functions in the capital market. Introducing any amendments to the law, including the drafting of a framework directive on clearing and settlement, should be preceded by open consultation and an analysis of the effects of their introduction. As concerns supervisory issues, the European Commission stressed the significance of cooperation, particularly in respect of the exchange of information among supervisory bodies operating in individual EU markets. It also underscored the very important role of market users in pursuing the financial services policy, and indicated the necessity to enhance transparency and comparability of financial products present in the European capital market. At the international level, the Commission announced that cooperation would be extended with the United States, Japan, China, Russia, and India in order to establish uniform standards for capital markets across the world. At the same time, the European Commission stressed the need for active participation of EU representatives in the work of international bodies, i.e. IOSCO or

[74] *Commission Green Paper of 3 May 2005 on Financial Services Policy 2005-2010* (COM(2005) 177 *final*), unpublished.

[75] *Commission White Paper of 1 December 2005 on Financial Services Policy 2005-2010* (COM(2005) 629 *final*), unpublished.

[76] In this respect, the White Paper stipulates drafting an annual report on progress and ex-post evaluation of all legislative measures taken in respect of the absorption of funds provided by the FSAP.

[77] See section 3.3.2.4 "Lamfalussy Report".

UNIDROIT, where Member States should present a single position on issues important for the EU.

ESME

In March 2006, the European Commission established the European Securities Markets Expert Group (ESME), composed of 20 members. The basic task of the Group is to identify flawed legal solutions which negatively impact the functioning of securities markets, and to propose appropriate recommendations to the European Commission in this respect. The ESME also analyses the functioning and effects of directives regulating the securities market in practice; and proposes appropriate amendments if necessary. It also functions as an advisory body to the EC. The group meets not more than four times a year. It was established to ensure the implementation of White Paper provisions; it is also the main element of an improved regulation project in respect of financial services, implemented by the European Commission since 2001. Group members were selected from experts from the entire EU[78].

3.3.2.4. Lamfalussy Report

In connection with the need to implement the Lisbon Strategy and the FSAP, and significant changes in the European financial market (introduction of the single currency, development of cross-border trade in financial instruments, and integration initiatives in the market), in July 2000, the ECOFIN decided to appoint a committee of independent experts to support the European Commission in this field. The Committee, also referred to as the Committee of Wise Men on the Regulation of European Securities Markets), was obliged to draft solutions which would enable to adapt regulatory action at the EU level to the quickly changing market environment. The seven-person Committee was chaired by Alexandre Lamfalussy. The work of the Committee, which started in August 2000, was divided in two stages. The first stage, during which consultations were held with representatives of the EC, ECB, Member States, and the market, was aimed at presenting the market situation and generating preliminary solutions. It was completed by submitting an initial report (further

[78] A representative of a Polish bank is one of the members of ESME.

on referred to as the Initial Lamfalussy Report)[79] to the ECOFIN in November 2000. The second stage of the work of the Committee of Wise Men ended with the publishing of the final report (further on referred to as the Lamfalussy Report)[80] in February 2001.

The Lamfalussy Report covered many recommendations targeted primarily at the EC, European Parliament, Council of the European Union, and representatives of the market and regulators. The recommendations concerned the integration of the securities market in the EU. The report stated primarily that the legislative procedures currently in force in the EU were slow, overly restrictive and complex. It also stated that different Member States implemented EU legislation to a varying extent, which encouraged unequal treatment of similar entities within the EU. As a result, the report underscored the necessity to amend the legislative process in the EU as an essential condition of FSAP implementation and the need to ensure smooth and fast adaptation of the legislation to the changing market environment. Chapter 2 of the report entitled "Regulatory reform: the Committee's recommendations" presents a proposal of a four-level regulatory approach to implementing new recommendations and solutions for the integration of the securities market. The procedure includes:

Level 1:	Framework principles to be adopted by the European Parliament and the Council under the co-decision procedure;
Level 2:	Technical implementing measures to be adopted by the Commission for the development of projects in cooperation with specially appointed committees (the European Securities Committee (ESC) and the Committee of European Securities Regulators (CESR)) under a modified commitology procedure that was to be introduced into the Treaty establishing the European Community (TEC);
Level 3:	Implementation of regulations by Member States, coordinated by the CESR;
Level 4:	Monitoring the implementation of regulations adopted in the way described above in the Member States.

[79] *Initial Report of the Committee of Wise Men on the Regulation of European Securities Markets*, Brussels, 9 November 2000.

[80] *Final Report of the Committee of Wise Men on the Regulation of European Securities Markets*, Brussels, 15 February 2001.

The four-level decision-making procedure was approved by the European Council in March 2001. On this basis, the European Commission appointed two committees that very year: the ESC and the CESR.

ESC

The European Commission has decided that the European Securities Committee (ESC)[81] is of fundamental importance; the ESC was granted regulatory functions (at Level 2 as a Committee appointed pursuant to Article 202 of the TEC), and advisory functions at Level 1 and Level 2 of the four-level decision-making procedure. The Committee acting under the auspices of the European Commission is composed of members nominated by individual Member States from among high level state officials[82]. The Committee is chaired by a representative of the Internal Market Directorate General of the EC. The Committee, whose meetings take place a few times a year as necessary, acts on a collegiality basis, transparently and openly.

CESR

The CESR[83] is another committee appointed by the EC, to which the following functions have been assigned: advisory functions at Level 2 of the four-level decision-making procedure, and the function of an independent committee of regulators ensuring the harmonious implementation of EU regulations in Member States at Level 3 of the procedure. The Committee is made up of heads of regulatory or capital market supervisory authorities of individual Member States. The chairperson, who enjoys the rights of an ESC observer, is selected from among CESR members. The CESR holds the status of an independent advisory body of the European Commission (remaining outside the commitology procedure stipulated by the TEC). Its secretariat is located in Paris. CESR members meet at least four times a year. The Committee submits a report of its operations once a year to the EC, the European Parliament, and the Council of the European Union.

[81] The ESC was established by way of a decision of the EC of 6 June 2001 (2001/528/EC).

[82] There is currently a representative of the Ministry of Finance as part of the Polish party,.

[83] The CESR replaced the Forum of European Securities Commissions (FESCO), which had operated since 1998. The Lamfalussy Report refers to the CESR as the European Securities Regulators Committee (ESRC). The CESR was established by way of a decision of the EC of 6 June 2001 (2001/527/EC).

IIMG

The efficiency and effectiveness of the Lamfalussy process is monitored on an ongoing basis, in line with the recommendation included in the Lamfalussy Report itself. The process overseeing function is entrusted to monitoring groups appointed specifically for that purpose for a fixed period of time; they are composed of six members appointed jointly by the EC, the European parliament, and the Council of the European Union from outside the group. The group is obliged each time to provide the above institutions with a specified number of reports on the progress of work on EU financial market integration in sectors indicated in the decision on its establishment. Until now, two Inter-Institutional Monitoring Groups (IIMG) have been established; the first one for the years 2002-2004, and the second for the years 2005-2007. The secretariat is provided to the Groups by the European Commission .

In addition to the above-mentioned proposal to establish a four-level decision-making procedure, the Lamfalussy Report contains several more general recommendations concerning, *inter alia*, analysing the progress of European financial market integration, defining cross-border trade barriers, completing tasks set forth in the FSAP until the end of 2003, as well as strengthening cooperation between regulators and financial market supervisors acting in each Member State. With regard to the clearing and settlement of securities, the report recommends continuation of work on reviewing the ISD and work conducted by the Giovannini Group[84], considering the need to introduce regulations on clearing and settlement, analysing general systemic problems in the context of monetary policy and the smooth operation of payment systems, and an in-depth analysis of the competitiveness issue to be carried out by the EC. The Recommendations of the Committee of Wise Men on post-trading activities were put forward by its members who believed that there was a need to continue work in respect of restructuring clearing and settlement in the EU. In the opinion of the Committee, the consolidation process should be based on market forces, and should set its limits, including the scope of inter-system links and the potential need for one central counterparty in the European capital market. Should the private sector fail to establish an efficient pan-European clearing and settlement system within a reasonable time, it will be necessary for the public sector to take appropriate steps. If this proves unnecessary, the role of public bodies will be limited to ensuring competition, triggered *inter alia*, by the requirement of equal access

[84] See section 3.3.2.5 “Giovannini Reports”.

criteria to systems, counteracting monopolistic practices, and removing other obstacles of market consolidation. It was also stressed that the need to separate the clearing and the settlement spheres may arise.

3.3.2.5. Giovannini Reports

As concerns the barriers preventing the establishment of an integrated financial system in Europe, the Lamfalussy Report highlighted the fragmentation of market liquidity and high trading costs. The highest proportion of costs come from cross-border settlements stemming from the vast number of transaction, clearing and settlement systems. The problem attracted the attention of the EC; it ordered investigating the underlying reasons to an expert group headed by Alberto Giovannini (hereinafter referred to as the Giovannini Group)[85], which operated from 1996 under the auspices of the Economic and Financial affairs Directorate General.

In November 2001, the Group published a report entitled "Cross-border Clearing and Settlement Arrangements in the European Union" (hereinafter referred to as the Giovannini Report), in which it identifies 15 barriers (hereinafter referred to as the Giovannini barriers) that prevent the efficient settlement of cross-border transactions owing to differences between national markets. The barriers relate to:

- Technical requirements and market practice – e.g. differences in information technology, legal restrictions obliging investors to use the national depository, clearing and settlement system, difficulties in direct use of clearing and settlement system by institutions from other countries, different length of settlement cycles, the monopoly of depositories in the area of holding securities issued in a given country;
- Taxation procedures – e.g. the existence of a tax on transactions in certain countries, indirectly making investors use the national settlement system by granting it monopoly for transaction tax clearing; inconsistent and complicated taxation principles in Member States;
- Legal aspects of investors' uncertainty as to the nature of their rights with respect to securities held with intermediaries in different Member States – e.g. diverse approaches to ownership rights in different Member States, differences of legal definitions (e.g. pledge, settlement finality), differences in setting the moment of ownership transfer (upon the execution of the transaction, at the time of the scheduled settlement, or at the actual time of settlement).

[85] *Consultative Group on the Impact of the Euro on European Capital Markets at the European Union*

The Giovannini Report also presents ways in which to remove these barriers – by appropriate action by market institutions (unification of technical requirements and market practice) and harmonising legal systems and regulations by Member State authorities (removing barriers related to taxes and legal aspects of settlement). Removing regulatory barriers – by harmonising legislation in Member States and cooperation of national regulators – is considered a condition for the success of market initiatives.

In April 2003, the Giovannini Group presented a report entitled "Second Report on EU Clearing and Settlement Arrangement" (hereinafter referred to as the Second Giovannini Report). It features proposed actions which would allow to overcome the barriers indicated in the first report within three years, and lists institutions and organisations responsible for introducing specific solutions. Organisations associating market participants, such as the European association of central securities depositories - ECSDA[86], and European banking sector associations - ECSA[87]. were entrusted with the harmonisation of principles concerning the working time of clearing and settlement systems, the length of settlement cycles, a protocol for system messages, rules for processing corporate actions, and ensuring intraday finality of cross-border settlements. The report foresees the following tasks for Member State governments, coordinated by the Council of the European Union:

- Introducing legislative changes which allow foreign financial and clearing institutions to offer the same services (particularly in respect of tax clearing) currently offered by national institutions;
- Harmonising regulations on the finality of entries in securities accounts and implementing the FCD;
- Abolishing limitations on the location of securities and the place of clearing and settlement (relevant provisions were subsequently introduced into the MiFID);
- Granting foreign investment companies access to national financial market infrastructure.

The report also points to the need of close cooperation between institutions making up the capital market and governmental and supervisory bodies.

Work on eliminating the Giovannini barriers constitutes the main part of processes aimed at harmonising capital market infrastructure in the EU. It covers both public sector initiatives and actions of market entities targeted at improving the efficiency of post-trading processes[88].

[86] See section 3.3.4.1. "ECSDA".

[87] European Credit Sector Associations

[88] See the work of CESAME, LCG, and FISCO.

3.3.2.6. Adopting the Code of Conduct and establishing the Monitoring Group

The Commission communication of 2002 includes a proposal of drafting a directive to regulate depository, clearing, and settlement services. As a result of discussions held in July 2006 with representatives of the capital market on the advisability of devising new regulations and the possibility of replacing them with other solutions, the European Commission consented to self-regulation. It aims at harmonising the operating rules of capital market infrastructure and enhancing the competitiveness of services related to handling transactions within the EU, which could eliminate the need for a new directive. In his speech delivered to the European Parliament on 11 July 2006, Charlie McCreevy, Commissioner responsible for Internal Market and Services, called for devising appropriate sector-based solutions in respect of securities clearing and settlement. On 7 November 2006, in response to European Commission stipulations, market infrastructure institutions of the Member States (stock exchanges, clearing houses, and central depositories) drafted and signed the "European Code of Conduct for Clearing and Settlement" (CoC)[89], in the presence of representatives of the Commission.

MOG

In order to supervise the implementation of the CoC, the European Commission established a Monitoring Group (MOG) composed of representatives of the EC, i.e. Directorate General for Internal Market, Directorate General for Economic and Financial Affairs, and Directorate General for Competition, as well as representatives of the ECB and the CESR. The work of the Group progresses under the leadership of the EC. The Monitoring Group's task is to hold consultations with capital market participants (investors, regulators, independent auditors, financial intermediaries, and infrastructure institutions), and to verify the efficiency of the CoC.

3.3.2.7. Financial Integration Monitor

In June 2000, the Council of the European Union asked the European Commission to devise financial indicators for monitoring financial markets. In June 2003, the European Commission presented the ECOFIN with a document entitled *Tracking financial integration*. The aim of the measure was to propose an instrument

[89] More on the CoC in section 3.3.4 "European securities industry initiatives".

which would facilitate keeping track of the process of financial market integration in the EU, point to its benefits, and set priorities in this respect in line with FSAP assumptions. As a result, since 2004 the European Commission has published an annual report entitled *Financial Integration Monitor* (FIM), which contains analysis of selected aspects of the operation of the EU financial market. A total of three reports have been published since then. In 2007, the report formula was altered. Instead, the *European Financial Integration Report* (EFIR) was published, which discusses issues previously covered by the FIM, as well as issues related to the amendments to corporate law, corporate governance principles, accounting and audit rules. The report describes, *inter alia*, the processes of financial integration, market structures, competition, efficiency, innovation, and the stability of financial markets.

Table 7 presents a list of selected EU bodies dealing with securities clearing and settlement issues.

Table 7. Selected EU bodies dealing with securities clearing and settlement issues

Abbreviated name of the body	Full name of the body	Institution supervising the body	Year established	Nature of the body	Initiative upon which the body was established
EFC	Economic and Financial Committee	Council of the European Union	1998	Advisory committee, forum for dialogue between the Council of the European Union and the ECB	Treaty of Maastricht
FSC	Financial Services Committee	Council of the European Union	2003	Advisory committee	The Committee was established by the transformation of the FSPG group, which previously had been supervised by the Council of the European Union

Abbreviated name of the body	Full name of the body	Institution supervising the body	Year established	Nature of the body	Initiative upon which the body was established
ESC	European Securities Committee	European Commission	2001	Advisory committee established on the basis of Article 202 of TEC	Lamfalussy Report
CESR	Committee of European Securities Regulators	European Commission	2001	Advisory committee, forum for cooperation of the EC with the market	Lamfalussy Report
IIMG	Inter-institutional Monitoring Group	European Commission	2002-2004 2005-2007	Temporary monitoring groups	Lamfalussy Report
CESAME	Clearing and Settlement Advisory and Monitoring Experts' Group	European Commission	2004	Expert group	Commission communication of 2004
LCG	Legal Certainty Group	European Commission	2005	Expert group	Commission communication of 2004
FISCO	Fiscal Compliance Group	European Commission	2005	Expert group	Commission communication of 2004
ESME	European Securities Markets Expert Group	European Commission	2006	Expert group	White Paper

Abbreviated name of the body	Full name of the body	Institution supervising the body	Year established	Nature of the body	Initiative upon which the body was established
MOG	Monitoring Group	European Commission	2007	Monitoring group	CoC

Source: NBP

3.3.3. The European System of Central Banks and the European Central Bank

The ECB and the ESCB were established on 1 June 1998 as successors to the European Monetary Institute (EMI), which was simultaneously disbanded (it had functioned since January 1994). Starting from 1 January 1999, i.e. since the beginning of the third stage of Economic and Monetary Union and the introduction of the single currency in the EU, the ECB has been pursuing the monetary policy of the euro area Member States. The legal basis for the single monetary policy is the Treaty of the EC (TEC) and the Statute of the ESCB, which forms an annex to the Treaty. Pursuant to international legislation, the ECB has legal personality as a public institution. The ESCB is a system composed of the ECB and the national central banks of all EU Member States – including those outside the Eurosystem. The main decision-making body of the ECB is the Governing Council, which consists of ECB Executive Board members and governors of central banks from Eurosystem Member States. The Council gathers twice a month. The Executive Board is composed of six members, including the President and Vice President appointed jointly by Eurosystem Member States, and is responsible for pursuing the policy established by the Governing Council. The General Council, made up of the President and Vice President of the ECB and governors of all central banks of EU Member States will operate until all Member States have introduced the single currency. In addition to Eurosystem policy, the basic tasks of the ECB comprise: ensuring the smooth and safe functioning of payment systems, promoting stability of the EU financial system, issuing notes, managing currency reserves, foreign exchange operations, and collecting statistical data.

The role of the ESCB in respect of post-trading services is diversified. First, it exercises oversight[90] of clearing and settlement systems. Second, the central

[90] According to the BIS definition, oversight stands for: "a central bank activity principally intended to promote the safety and efficiency of payment and securities settlement systems and in particular to reduce systemic risk".

banks which make up the ESCB use depository, clearing, and settlement infrastructure to carry out their own tasks. Third, they actively participate in creating the infrastructure. Fourth, they promote the security and efficiency of post-trading services in the EU market.

3.3.3.1. The oversight function of the ESCB

The Eurosystem exercises oversight of securities clearing and settlement systems for four main reasons:

1. Payments made via the securities settlement system may significantly affect the security and efficiency of payment systems due to their large number and value. In accordance with the TEC, the Eurosystem is responsible for the oversight of payment systems. Because of the strong relationship between the payment systems and the securities settlement systems, it is necessary for the Eurosystem to assume oversight over the latter as well.
2. In accordance with the TEC, the Eurosystem may only lend against "adequate collateral". As a result, an inappropriate operation of the securities infrastructure would negatively influence the capacity of the Eurosystem to carry out monetary policy operations and to run TARGET2[91].
3. The security and efficiency of post-trading infrastructure in the euro area are important for ensuring financial stability, confidence of market participants, and confidence in the currency.
4. The majority of national central banks which constitute an integral part of the Eurosystem enjoy direct authorisation to exercise oversight of securities settlement systems granted by national legislation.

Oversight of EU central banks in respect of securities settlement systems has not been directly regulated by legal acts on the functioning of the ESCB, i.e. in the TEC and the Statute of the ESCB, most likely because the significance of these systems for the execution of central bank operations was realised only too late. As a result, the legal basis for exercising oversight of securities settlement systems stems from Article 105 (2) of the TEC, which states the basic task of the Eurosystem to be the promotion of the efficient operation of payment systems, and from Article 22 of the Statute of the ESCB, pursuant to which the ECB and national central banks may provide facilities, and the ECB may make regulations, to ensure efficient and sound clearing and payment systems within the Community and with other countries.

[91] See section 3.3.3.3 "Participation of the ESCB in creating post-trading infrastructure".

Information on the legal basis and practical aspects of oversight of securities settlement systems by individual central banks of the EU, including the NBP, is presented in sections 1.2.8 and 2.1.2.3.

3.3.3.2. The ESCB as post-trading infrastructure user

As the Eurosystem conducts monetary policy operations and extends intraday credit in TARGET2, it must protect itself against losses or the inability to perform its tasks in an efficient way. Thus, the Eurosystem conducts credit operations solely with eligible counterparties, only after obtaining eligible collateral[92], and only via eligible securities settlement systems and eligible links.

In order to evaluate securities settlement systems and their links from the point of view of the security and efficiency of the processing of credit operations, nine user standards entitled "Standards for the use of EU securities settlement systems in ESCB credit operations" were devised in 1998 in accordance with universally acknowledged standards. Meeting the standards by securities settlement systems or their links is particularly conducive to eliminating risks connected with credit transactions settlement and depositing collateral during operations. The standards particularly concern the legal aspects of securities settlement system operation, conducting settlement in central bank money, principles for depositing securities, oversight of securities settlement systems by competent authorities, rules of system participation, methods of management of different types of risk, transaction settlement finality throughout the business day, hours and operational days of securities settlement systems, and protection against operational risk.

Regular assessment of the functioning of securities settlement systems and their links in the euro area is conducted on the basis of the above standards according to methodology devised specifically for that purpose. Assessment of securities settlement systems and their links is conducted by system operators as well as central banks from a given country whose assessment is verified by

[92] Apart from securities and other financial instruments, this can include receivables and - since 1 January 2007 - also credit claims. The rules of selecting appropriate property, including securities, which meet the highest credit standards have been set forth by ECAF (Eurosystem credit assessment framework). The assessment covers: credit assessment performed by external credit assessment institutions (ECAI) (currently the Eurosystem uses assessments by Fitch Ratings, Moody's, and Standard & Poor's), self-assessment of a central bank (in-house credit assessment systems, ICAS, currently maintained by the central banks of Germany, Spain, France, Austria, and Ireland), own systems for assessment of parties (internal ratings-based systems, IRB), and rating tools provided by third parties (RT). Indicating the selected property as an object of collateral of ESCB credit operations is aimed to minimise financial risk by ensuring collateral of appropriate quality.

a central bank appointed from another euro area country. At the last stage, the ECB compares the results of assessment of both central banks and drafts a report, which may include recommendations for securities settlement systems, as necessary. The report as a whole is approved by the Governing Council. Meeting the recommendations by the securities settlement system conditions its use in Eurosystem credit operations. Systems and links which meet the above standards are included in a list of eligible systems and eligible links which may be used to conduct ESCB credit operations. The list is published on the ECB website.

In the years 2003-2004, at the initiative of the ECB, an unofficial assessment of securities settlement systems of the RPW (SKARBNET) and KDPW in respect of *User standards* was conducted. It was aimed at preparing the securities settlement systems of the new EU Member States to process ESCB credit operations. Assessment results show that both systems largely meet *User standards*. A few recommendations as to adjustments were issued. In 2005, an analogous assessment of the link between the securities settlement system maintained by KDPW and the Austrian securities settlement system maintained by Oesterreichische Kontrollbank AG (OeKB) was conducted. According to the report presented by the ECB in June 2005, the link between KDPW and the OeKB was deemed fully compliant with the *User standards* and no recommendations were issued. The above assessment was also of an informal nature. Before the systems of the RPW and KDPW and the link between KDPW and OeKB (or other links established or yet to be established by KDPW) are used for credit operations of the Eurosystem, it is necessary to conduct a direct formal assessment before Poland joins the euro area.

3.3.3.3. Participation of the ESCB in creating post-trading infrastructure

The ESCB has played an important role in creating infrastructure of payment systems and securities settlement systems for many years now. In respect of payment systems, central banks have organised real time gross settlement systems (RTGS) within their structures. The RTGS systems ensure the secure and efficient settlement of large value domestic payments in central bank money. With regard to securities, many EU central banks have established securities depositories intended for safekeeping Treasury securities or securities issued by the central bank, and clearing transactions executed there, mainly monetary policy operations. In connection with the introduction of the euro, the ESCB became engaged in establishing infrastructure which would meet the needs of the Eurosystem as a whole.

TARGET/TARGET2

With the onset of the implementation of the third stage of EMU and the introduction of the euro as the single currency in January 1999, the Trans-European Automated Real-time Gross Settlement Express Transfer System (TARGET), established by the ESCB, was launched. The decision to build it was triggered by the need to establish a reliable and efficient set of tools to conduct operations of the single monetary policy and develop mechanisms ensuring smooth and secure flows of euro payments. TARGET was decentralised, both legally and technically. It was composed of RTGS systems maintained by central banks of individual Member States which belong to the Eurosystem, in addition to Denmark, Sweden, the United Kingdom, and the so-called ECB Payment Mechanism (EPM) maintained by the ECB and linked via the Interlinking network. Communication within the network was based on SWIFT standards. Participation in TARGET was mandatory for central banks of those Member States which had adopted the euro as their national currency. Credit institutions from the European Economic Area (EEA) subject to oversight[93] could also participate in TARGET. As an exception[94], upon the consent of a competent central bank, the following entities could become participants of a domestic RTGS system:

- Ministries of the Treasury or similar bodies of central or regional authorities of Member States operating in monetary markets;
- Public sector institutions of Member States authorised to operate customers' accounts;
- Investment companies;
- Institutions which provide clearing and settlement services subject to oversight by relevant authorities;
- Central banks located in the EU, whose RTGS systems had not been connected to TARGET.

The TARGET participation structure consisted of two-levels. A direct participant was a participant holding an RTGS account denominated in euro

[93] Within the meaning of Article 1 (1) of the Directive of the European Parliament and of the Council of 20 March 2000 relating to the taking up and pursuit of the business of credit institutions (OJ L 126 of 26 May 2000, pp. 0001-0059).

[94] Notwithstanding Article 7 (1) of the *Guideline of the European Central Bank of 30 December 2005 on a Trans-European Automated Real-time Gross settlement Express Transfer system* (TARGET) (ECB/2005/16), which stipulates that: "The direction, management and control of TARGET shall fall within the competence of the Governing Council of the ECB. The Governing Council may determine the terms and conditions under which cross-border payment systems other than the national RTGS systems may use the cross-border facilities of TARGET or be connected to TARGET".

in a central bank. Indirect participants were those holding euro accounts with a direct participant which then became their settlement bank.

In March 2005 the NBP, and in November 2006 the Bank of Estonia, joined TARGET on a voluntary basis with the Bank of Italy acting as intermediary. The Bank of Slovenia joined TARGET through Deutsche Bundesbank upon adopting the euro as the national currency in January 2007. Also at the beginning of 2007, the central Bank of Sweden left the system as a result of an earlier decision.

The significance of TARGET had been important since the very beginning. It became one of the largest systems clearing large value payments in the world. In 2007, over 10,000 banks including branches and field branches used the services of TARGET; the payments it cleared were received by over 52,000 banks worldwide. In the same year, the system processed over 93 million transactions whose value was close to EUR 617 trillion, which translates into 61% of the total number of payments and 89% of the value of all payments processed by all large value euro payment systems. TARGET thus played a key role in promoting an integrated euro area market; this constituted the basis for efficient single monetary policy and was conducive to integrating financial markets in the euro area[95].

In connection with the planned EU enlargement and in order to increase harmonisation in the area of clearing and further streamline and simplify the transfer of euro payments, in October 2002 the ECB Governing Council decided to start work on a new system – TARGET2 – which was to replace TARGET. The system started operations on 19 November 2007. For half a year, i.e. until 18 may 2008, it operated simultaneously with TARGET. The decision on the gradual transfer of participants from TARGET to TARGET2 (in three batches, one every quarter) followed on from the need to minimise systemic risk which could occur if TARGET was completely replaced by TARGET2 in one day.

From the legal point of view, TARGET2 remains decentralised. However, it is centralised technically, as it is based on the Single Shared Platform (SSP), contrary to its predecessor. The SSP is composed of modules. Using certain modules (e.g. the Payment Module, PM) is mandatory for its participants and voluntary for other entities. Communication within the system is based on SWIFT.

The participation structure of TARGET2 is two-level. Apart from central banks of EU Member States, the following entities are authorised to directly participate in the system[96]:

[95] *TARGET Annual Report 2007*.

[96] Of the EU central banks which do not belong to the Eurosystem, i.e. those not obliged to participate in TARGET2, the central banks of the following countries decided to participate: Cyprus, Denmark, Estonia, Lithuania, Latvia, Malta, and Poland.

(a) Credit institutions located within the EEA, also if they operate through a branch located within the EEA;
(b) Credit institutions located outside the EEA, if they operate through a branch located within the EEA.

Additionally, entities which provide clearing and settlement services that are located within the EEA and subject to oversight by a competent body may become direct participants of TARGET2, with the consent of a competent central bank. In TARGET2, every direct participant holds an account in the PM on the SSP. A credit institution located within the EEA which has concluded an agreement with a direct participant on sending payment orders and accepting payments through an account in the PM of the direct participant and was approved as an indirect participant may become an indirect participant of TARGET2. An indirect participant holds an account with a direct participant which directs payment orders to TARGET2 on its behalf and accepts them from the system[97].

Apart from (direct or indirect) participation, there are two other solutions allowing access to TARGET2.

- Multi-addressee access. The solution provides credit institutions located within the EEA or their branches, with access to TARGET2 by placing payment orders or accepting payments directly in the system. Selected entities are authorised to place payment orders via an account in the PM of a direct participant without its intervention.
- The status of an addressable BIC[98] holder. The status may be granted to an entity which is not registered as an indirect participant but holds a BIC and is a correspondent or a customer of a direct participant or a branch of a direct or indirect participant, and may place payment orders with TARGET2 and accept payments from the system through a direct participant.

From a technical point of view, multi-addressee access and the status of an addressable BIC holder provide the participant with the same possibility to perform clearing through TARGET2 as direct and indirect participation in the system. In the legal sense, however, entities using the solutions do not enjoy the rights which stem from the status of a participant, e.g. they are not covered with the provisions of the Directive concerning settlement finality, as they are not acknowledged participants of TARGET2.

[97] According to the decision of the ECB Governing Council, central banks as direct participants may act as intermediaries in access to TARGET2 only in the so-called transition period lasting for four years from the transition of a certain bank onto the SSP.

[98] BIC – Bank Identifier Code – a unique identifier of an entity within SWIFT.

TARGET2, as compared to TARGET, has an extensive liquidity management system. Its essence lies in the possibility to establish a joint liquidity pool by groups of entities. The solution serves the efficient management of liquidity by group members and minimising costs stemming from TARGET2 participation.

The fee for servicing a single TARGET2 transaction is from EUR 0.85 to EUR 0.175 (in one of two tariff options in TARGET2; similar to TARGET, a regressive fee structure is applied, i.e. the more payments sent by a participant for clearing, the smaller the fee it pays for a single payment).

The implementation of TARGET2 is of extreme significance to the operation of securities settlement systems. Securities settlement systems participated in TARGET through the agency of central banks of individual Member States as direct participants of local RTGS systems. In TARGET2, securities settlement systems may be direct participants as so-called Ancillary Systems (AS). They obtain a connection with the SSP through a dedicated Ancillary System Interface (ASI), or through a normal user Payment Interface (PI). The direct participation of securities settlement systems in TARGET2, particularly placing their accounts directly on the SSP, considerably facilitated cash settlement stemming from cross-border transactions. TARGET2 technically allows securities settlement systems to direct their payments to their national participants, to their participants located in foreign countries, and to a cash account on the SSP in another payment area within clearing sessions. The function may be useful in developing DvP links between national central securities depositories. TARGET2 has also introduced a new functionality (as compared to TARGET), which allows cash settlement of transactions during night-time processing in a securities depository using central bank money. From a technical point of view, the introduction of the new TARGET2 system has without doubt significantly influenced the efficiency of cash settlement processed within securities settlement systems.

TARGET2 has replaced TARGET in handling large value payments in the euro area. As it is more harmonised and its solutions are modern, it is expected to contribute even more to the integration of European financial markets.

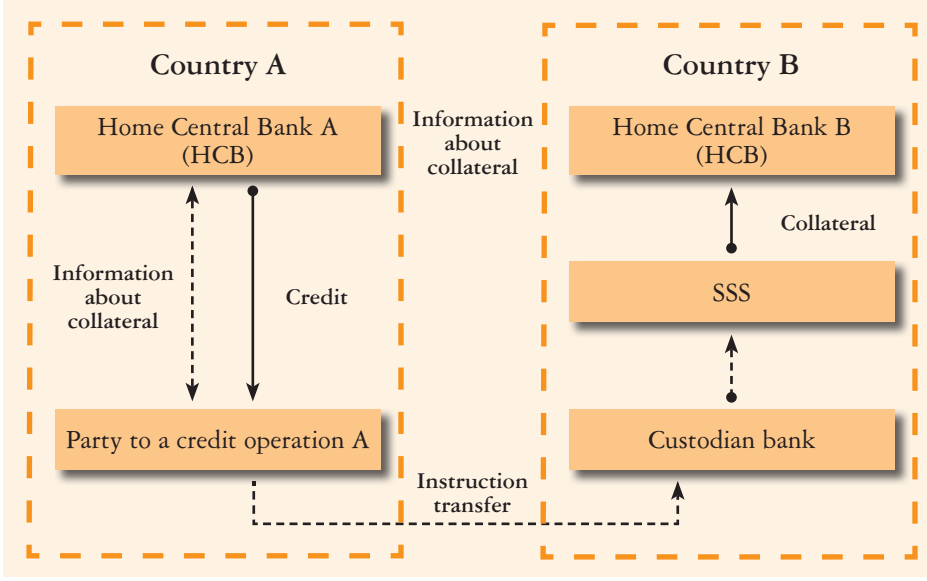
CCBM/CCBM2

In order to allow for the cross-border use of collateral in Eurosystem credit operations, and for the needs of intra-day credit extended by central banks within the framework of TARGET, the so-called Correspondent Central Banking Model (CCBM) was introduced on 4 January 1999. Establishing CCBM was related to the restriction introduced within the Eurosystem according to which, banks are allowed, for the purposes of credit operations, to obtain credit only from national central banks. CCBM provides credit operation counterparties

with the possibility to use all eligible assets they hold as collateral, regardless of which Eurosystem country they are deposited.

In this way, the CCBM makes it possible to obtain credit in euros from a Home Central Bank (HCB) against collateral consisting of securities held in an account with a Correspondent Central Bank (CCB). For the CCB to be able to deposit collateral for a credit operation on behalf of a HCB, the party to a credit operation must first order the transfer of assets which constitute the collateral from its account in a securities settlement system operating in a CCB to an account in a CCB.

Diagram 4. Flow chart of CCBM operations



Source: On the basis of a flow chart prepared by the ECB.

When using the CCBM, parties should be aware of the existence of different forms of collateral (pledge, repos) in individual Member States as well as of the different methods of safekeeping securities and different operating procedures of individual securities settlement systems.

The CCBM was initially introduced for five years until an alternative solution was created by market participants. Due to the lack of such initiatives, the operation of CCBM was extended for another five years. Currently, the only alternative to the CCBM is using eligible links, i.e. those positively verified for compliance with User standards, to establish cross-border collateral[99]. Until now, the CCBM has been used twice as frequently as eligible links. In December

[99] See section 3.3.3.2 "ESCB as post-trading infrastructure user".

2007, cross-border collateral provided using the CCBM represented 39.62% of all collateral in Eurosystem credit operations. The figure stood at 8.89% for eligible links (51.48% of collateral was domestic)[100].

As the CCBM has many drawbacks (primarily, a variable level of straight through processing in individual central banks, inconsistency of the system's procedures with procedures applied locally, and the lack of standardisation), the Governing Council of the ECB decided to start work on a new collateral management system called CCBM2 (Collateral Central Bank Management) in March 2007. CCBM2 will service both domestic and foreign collateral, and cover all types of eligible collateral (the CCBM only services cross-border collateral). It is expected that CCBM2 should also be used for purposes other than the credit operations of the Eurosystem.

According to preliminary assumptions, the new system will take the form of a single platform, which will be established using existing systems, i.e. the single system of collateral management of the central banks of Belgium and the Netherlands. CCBM2 will thus be centralised, but will retain decentralised business relations between central banks and their counterparties in credit operations. It is assumed that participation in CCBM2 will be voluntary.

The CCBM2 will be highly harmonised, as it will offer a uniform level of services for all eligible assets, a uniform user interface based on SWIFT standards, and a uniform structure of fees for its services.

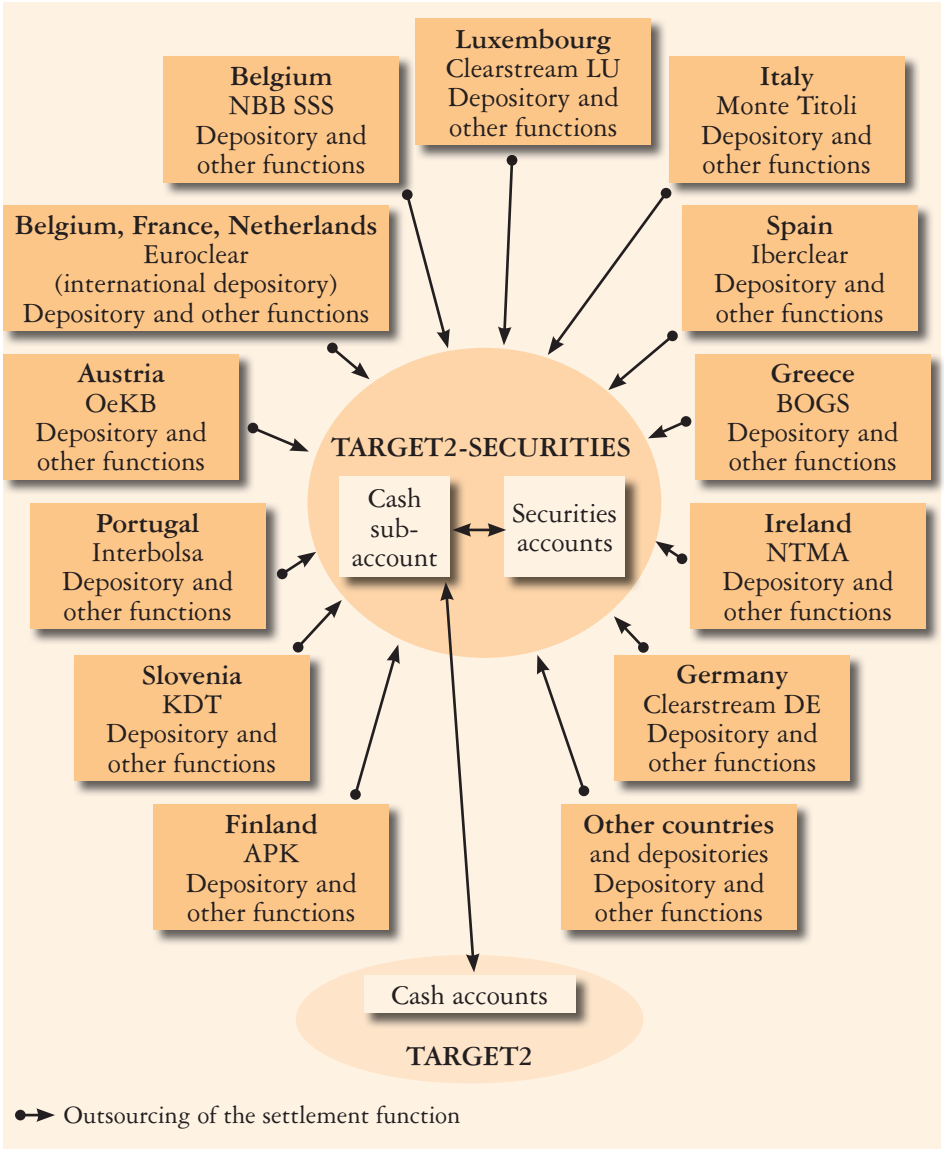
The CCBM2 is to enhance the efficiency of collateral use in credit operations of the Eurosystem as a result of using the existing consolidated system, operating in real time on an STP basis, and full compatibility with other systems. i.e. TARGET2 and TARGET2-Securities (work on the project will be carried out simultaneously with the work on T2S). It is expected that CCBM2 will be implemented together with TARGET2-Securities, i.e. in 2013 or even earlier.

TARGET2-Securities

In connection with the introduction of TARGET2, the Eurosystem started to consider the possibility of using its functions to ensure the safe and efficient settlement of securities transactions in central bank money on a shared platform. In July 2006, the Governing Council of the ECB decided to start public consultations on the basic principles of the project of a new system called TARGET2-Securities (T2S). On 8 March 2007, the Governing Council made the decision to launch the project's first stage, which covers consultation for establishing the T2S user requirements. The T2S project is aimed at creating

[100] European Central Bank, *Blue Book: Payment and securities settlement systems in the European Union: euro area countries*, Frankfurt, August 2007.

Diagram 5. Flow chart of T2S



Source: On the basis of a flow chart prepared by the ECB

a technical platform for securities transactions settlement, which would not act as a European central depository for securities.

In line with the basic assumption of the project, the settlement function of central securities depositories which join the system, in relation to financial instruments marked with ISIN codes registered in accounts they manage will be transferred to T2S on an outsourcing basis. Central securities depositories will still perform their depository functions, including the processing of rights arising under securities, and will also provide other services. The responsibility

of central depositories will also be to feed information into databases, necessary for T2S settlement. Participation in the system is to be voluntary.

Settlement in T2S will be performed on an FoP and DvP basis, in accordance with BIS Model 1, enriched with an optimisation mechanism (technical netting and use of other algorithms) and the so-called recycling mechanism[101]. The system will operate in a day (according to the daily schedule of TARGET2) and in a night cycle.

Central banks will manage central depository users' access to central bank money. T2S will open and maintain cash accounts as dedicated cash sub-accounts of TARGET2, which will ensure settlement in securities and cash on a single platform[102]. In principle, T2S will service transactions settled in the euro. In case of demand from a given market, it will be possible to process settlement in other currencies, on condition that the central bank for the given currency takes on the responsibility for cash settlement.

It is assumed that work on the project will take four to six years and will be carried out in three stages: devising user requirements and the first draft of the Detailed Functional Specifications (DFS); devising and implementing the system, including the completion of the DFS and conducting tests; as well as testing and transfer of data and functions to the system (the work is to continue from the fourth quarter of 2010 to the first quarter of 2013). Work on T2S is conducted by the Eurosystem in close cooperation with market participants, i.e. securities depositories, banks, and other institutions involved in post-trading activities.

The ECB hopes that the T2S project will be instrumental in integrating existing securities settlement systems, will ensure harmonised settlement in central bank money in the EU and lead to a reduction of transaction settlement costs. The ECB particularly assumes that cross-border transaction settlement will become equally effective as the settlement of domestic transactions, uniform settlement fees will be applied, conditions of competition between central securities depositories will improve, issuers will gain wider access to investors, and investors will gain less expensive access to foreign financial instruments, thus having greater possibilities of diversifying their portfolios.

[101] A mechanism which allows further processing of instructions whose settlement was not successful the first time. The mechanism foreseen within T2S will allow processing of such instructions to continue on the next business day as well.

[102] Both systems are to operate on the same technical platform.

3.3.3.4. The role of the ESCB in promoting safety and efficiency of clearing and settlement

Apart from the oversight of settlement and clearing systems, using post-trading infrastructure to perform tasks, and participation in building settlement and clearing infrastructure, the ESCB also plays an important role in promoting financial market integration, including raising the safety and efficiency of clearing and settlement of securities transactions. To that end, the ESCB actively participates in many pan-European initiatives (e.g. removing Giovannini barriers[103], devising ESCB-CESR standards), cooperates closely with various EU institutions (e.g. the EC, CESR) and with market participants (depositories, central counterparties, banks, associations of entities related to clearing and settlement), and disseminates knowledge on clearing and settlement through numerous publications (e.g. the Blue Book). Examples of such work is presented below.

ESCB-CESR standards

In October 2001, the ESCB and CESR decided to cooperate in respect of the clearing and settlement of securities. As a result of the decision, a joint Working Group of ESCB-CESR was appointed (hereinafter referred to as the Group), composed of representatives of central banks of individual Member States of the EU, the ECB, and CESR. The following entities participated in the work of the Group as observers: the European Commission, the Banking Supervision Committee (BSC), and the Committee of European Banking Supervisors (CEBS). The Group also cooperated closely with market participants, e.g. by holding public consultations. The Group was obliged to prepare uniform standards for entities which provide clearing and settlement services in the EU on the basis of the existing international recommendations of CPSS-IOSCO, which were to be adapted to a European setting. In September 2004, the Group finalised its work on the document entitled "Standards for securities clearing and settlement in the European Union"[104], which was published on the ECB's website. The document is mainly devoted to standards for central securities depositories. Subsequently, the Group enlarged to include representatives of new EU Member States, started to create a methodology for the assessment of compliance with the above standards and to adapt the standards for central counterparties and the methodology to assess their application in the European environment. Group members were divided into working parties

[103] See section 3.3.2.5 "Giovannini Reports."

[104] *Standards for securities clearing and settlement in the European Union*, September 2004.

handling individual aspects of standards and the methodology of how they met set criteria. Representatives of the NBP participated in the work of the ESCB-CESR Working Group, the Group responsible for central counterparty issues, and the Group responsible for oversight. A representative of the former Securities and Exchange Commission also took part in the work of the ESCB-CESR Working Group. In October 2005, when work on the standards was almost complete, a decision was made to suspend the project. This was a result of certain substantial differences (concerning the status of central securities depositories and applying the standards to custodian banks) as well as formal controversies (which concerned the procedures of establishing EU regulations) raised by a few Member States.

Work on ESCB-CESR standards was suspended mainly due to a proposal of the European Commission included in two communications of 2002 and 2004 to introduce a directive on clearing and settlement. Finally, in 2006, the European Commission decided not to issue a directive and have the Code of Conduct[105] adopted by market participants. Owing to this decision, in 2007 the European Commission and the ECB put forward a proposal to adopt a compromise solution on the substantial issues and the remaining formal ones. The question of ESCB-CESR standards was the subject of ECOFIN deliberations in 2007 and 2008. Work on ESCB-CESR standards was resumed in 2008.

Finalising work on the ESCB-CESR standards and their implementation are of utmost importance to the development of post-trading services in the EU. The standards promote the safety of clearing and settlement of transactions in financial instruments. This should lead to minimising systemic risk and increasing investor protection. The ESCB-CESR standards will also enhance the efficiency of clearing and settlement, which should trigger an increase in the level of integration and competitiveness of the European market. Introducing uniform standards throughout the EU would also be conducive to unifying supervisory requirements applied in individual EU markets.

COGESI

The ESCB closely cooperates with market participants in respect of clearing and settlement. The establishment of a Contact Group on Euro Securities Infrastructure (COGESI) is an example of such cooperation. COGESI is composed of representatives of euro area central banks and the ECB, representatives of the largest commercial banks, central securities depositories and central counterparties, originating mostly from the euro area, and associations of those entities, e.g. ECSDA, EACH. The Group is chaired by the Deputy

[105] See section 3.3.4.4 “Code of Conduct”.

Director of the Payment Systems and Market Infrastructure Department of the ECB. The central banks of the Member States which have not adopted the single currency are represented by delegates, who have the status of observer. The European Commission also has its observer in COGESI. COGESI holds meetings twice a year.

The group deals with the development and integration of securities settlement infrastructure in the euro area, including issues related to the management of financial collateral and liquidity.

The Blue Book

EU central banks have disseminated knowledge on clearing and settlement since 1992. To that end, they regularly draft and publish a study, popularly called the Blue Book, devoted to the organisation and operation of payment systems and securities settlement systems in Member States and EU candidate countries. The Blue Book was first issued in 1992; 1996 and 2001 saw its subsequent issues. Two editions of the Blue Book devoted to candidate countries, including Poland, were issued in 1999 and 2002. Its fourth edition, which covered the 27 Member States, was published in August 2007. The chapters devoted to individual countries cover the following groups of issues: institutional aspects, forms of cash settlement applied by non-bank entities, inter-bank clearing, settlement systems and issues related to securities, i.e. information on trading platforms, clearing systems and securities settlement systems.

The Blue Book is supplemented by the Blue Book Addendum, published annually. It includes statistical data on cash clearing, payment systems, and securities settlement systems. Another edition of the Blue Book Addendum, which covers statistical data for the years 2001-2005, was published on 22 December 2006.

In order to ensure a legal basis for providing statistical data for the Blue Book, on 30 May 2006 an agreement was signed between the NBP and KDPW on cooperation in respect of submitting statistical data.

3.3.4. European securities industry initiatives

The need to harmonise depository, settlement, and clearing services was perceived not only at the public level as an element of policy for financial market integration in the EU; it was also noticed by participants and institutions of the capital market infrastructure. Organisations which represent market entities operating both in Europe and globally took many steps aimed at standardising post-trading services (out of their own initiative, as a result of a mention in the Giovannini Report, or inspired by the EC). The initiatives resulted in

establishing "soft" norms regulating post-trading services, such as standards, recommendations, or codes of good practice.

3.3.4.1. ECSDA

The second Giovannini Report points to the responsibility of market entities for removing certain barriers to harmonisation of the European capital market. The task of lifting some of these barriers was entrusted to ECSDA. They were: Barrier 3 concerning harmonisation of processing securities operations; Barrier 4 concerning intraday finality of settlement, and Barrier 7 which concerned harmonisation of opening days and hours of depository and settlement systems and settlement deadlines.

The European Central Securities Depositories Association (ECSDA) was established in 1997 as a forum for exchanging views and cooperation of Western European depositories. Since its inception, the work of the Association was concentrated on issues of safe and efficient cross-border settlement; later it also covered issues related to settlement risk mitigation and integration of the European capital market. ECSDA advises EU institutions on issues connected with securities settlement. In 2006, ECSDA was merged with the Central and Eastern European Central Securities Depositories and Clearing Houses Association (CEECSDA) which had operated since 1998 and associated depositories from 15 countries. Currently, ECSDA represents 42 securities depositories (including international depositories) from Europe, including Russia and Turkey.

In April 2004, the Working Group for harmonisation which operates within ECSDA published a document entitled "The European Central Securities Depositories Association's Response to the Giovannini Report"[106]. It features ten standards relating to the harmonisation of business days and hours of settlement systems and settlement finality which need to be implemented by institutions conducting settlement with a view to removing Barriers 4 and 7. The Group monitors the compliance of individual ECSDA members to the standards on an ongoing basis. The Association is also working on standards related to the processing of corporate actions, with the aim of eliminating Barrier 3. In June 2005, a document[107] was published which includes 16 standards concerning the so-called mandatory distributions (payments which are not discretionary for

[106] The European Central Securities Depositories Association's Response to the Giovannini Report, April 2004.

[107] *The European Central Securities Depositories Association's Response to the Giovannini Report, Barrier 3, Corporate Actions - Part 1 Mandatory Distributions*, 30 June 2005.

investors, e.g. payments of dividend or interest). Another document[108] featuring ten standards concerning processing of market claims was published in July 2006. Further standardisation work is underway on the remaining types of securities operations (optional distributions, i.e. pecuniary and non-pecuniary benefits from the issuer whose execution may be conditional on the investor's decision; and reorganisation, i.e. corporate actions which result in changes to characteristics of securities, such as assimilation, conversion or stock split).

In addition, ECSDA, in cooperation with the European Securities Services Forum (ESSF), drafted and published a set of 17 standards concerning harmonisation of rules for matching settlement instructions in October 2006[109].

3.3.4.2. EACH

The European Association of Central Counterparty Clearing Houses (EACH) was established in 1991; it associates European institutions, which perform CCP functions (currently it is composed of 15 members). The Association actively participates in drafting and implementing the provisions of the Code of Conduct, establishes own standards for risk management, and serves as an advisory body for drafting ESCB-CESR standards and other projects aimed at integration.

3.3.4.3. FESE

The Federation of European Securities Exchanges (FESE) associates operators of European markets for securities and derivatives. In October 2008, FESE had 23 full members and represented 42 stock exchanges from EU Member States, Iceland, Norway, and Switzerland[110]. FESE acts in favour of enhancing competitiveness of European stock exchanges on a global scale, building the image of stock exchanges and increasing their input in the European and global economy, it is also a forum for debate on capital markets.

FESE is a charter member of the European Capital Markets Institute (ECMI) and a member of the European Corporate Governance Institute (ECGI). FESE cooperates with EACH and ECSDA through its members and their connections with the regulatory environment, particularly in respect of actions connected with the Code of Conduct. Furthermore, FESE remains in contact with the European Commission, the European Parliament, ECOFIN, ESC, and CESR.

[108] *The European Central Securities Depositories Association's Response to the Giovannini Report, Barrier 3, Corporate Actions - Part 2 Market Claims*, July 2006.

[109] ESSF ECSDA Matching Standards.

[110] www.fese.be.

There are three categories of FESE membership:

- Full Membership awarded to regulated markets in the EU, EEA, and Switzerland;
- Associate Membership - status awarded to regulated markets from European countries which are attempting to join the EU;
- Corresponding Exchange status – granted to main market operators who are not ready to become Associated Members or whose countries are not formally in EU accession negotiations.

The Warsaw Stock Exchange has been a FESE correspondent since 1992 and a Full Member of the Federation since 2004.

3.3.4.4. Code of Conduct

At the initiative of and in close cooperation with the EC[111], market entities drafted the European Code of Conduct for Clearing and Settlement (Code of Conduct, CoC). The Code was drafted as a result of cooperation between three of the most important associations of the trading and post-trading infrastructure: FESE, EACH, and ECSDA. The aim of the CoC is to introduce a level playing field for competition between infrastructure institutions by ensuring transparency and comparability of services they offer and the fees they collect, as well as establishing general rules of operational relations and interoperability between them. The CoC covers post-trading services (clearing services, services provided by central counterparties, settlement services, and custody services); it also partially applies to the execution of transactions.

The provisions of the CoC concern three areas:

- Introducing **price transparency** of fees charged for services rendered by stock exchanges, clearing houses, and institutions conducting securities settlement – by publishing comparable price lists together with rules on rebates and discounts and sample calculations of costs incurred by participants; the deadline for implementing this part of CoC was set for 31 December 2006;
- Adopting formal rules of **access** to infrastructure institutions and **interoperability** ensuring non-discriminatory, transparent conditions of access to those institutions; the deadline for implementing those provisions of CoC was set for 30 June 2007;
- Introducing **service unbundling** and **accounting separation** of the revenues generated by infrastructure institutions, according to designated categories, which is to ensure that their customers have the

[111] See section 3.3.2.6 "Adopting the *Code of Conduct* and establishing the Monitoring Group".

ability to select the scope of services rendered to them; the deadline for implementing this part of the CoC was established for 1 January 2008.

Signatories of the CoC are under the obligation to conduct an annual assessment of their activities' compliance with the provisions of CoC and to submit implementation reports to their local regulators and the CoC Monitoring Group.

A list of selected initiatives in respect of clearing and settlement of securities is featured in Table 8.

Table 8. A list of selected initiatives in respect of clearing and settlement of securities

Date	Initiative	Author	Initiator
February 1989	Angell Report	Expert Group on Payment Systems	BIS, Group of Ten
March 1989	Report of the G-30: *Clearance and Settlement Systems in the World's Securities Markets*	Group of Thirty	
November 1990	Lamfalussy Report of 1990	Committee on Interbank Netting Schemes	BIS, Group of Ten
September 1992	DvP Report	CPSS	BIS, Group of Ten
1993 (entered force on 1 January 1996)	Directive: ISD	Council of the European Union, European Parliament	EC
1995	*Update of the Original G-30 Recommendations* (Report of G-30 of 1989)	ISSA	
January 1998	*User standards*	ECB	ECB
January 1998	IOSCO *Principles*	IOSCO	IOSCO

Date	Initiative	Author	Initiator
1998 (entered force on 11 December 1999)	Directive: SFD	Council of the European Union, European Parliament	EC
11 May 1999	Communication which included FSAP	EC	EC
March 2000	Lisbon Strategy	European Council	European Council
14 November 2000	Communication on application of the conduct-of-business principle in accordance with Article 11 of ISD	EC	EC
9 November 2000	Initial Lamfalussy Report	Committee of Wise Men acting at the EC	ECOFIN
15 November 2000	Communication on verification of ISD	EC	EC
15 February 2001	Lamfalussy Report	Committee of Wise Men acting at the EC	ECOFIN
November 2001	Giovannini Report	Giovannini Group	EC
November 2001	Report: RSSS	CPSS-IOSCO	CPSS
2002	Directive: FCD	Council of the European Union, European Parliament	EC
3 June 2002	Commission Communication of 2002	EC	EC
December 2002	Hague Convention	Hague Convention	Hague Convention

Date	Initiative	Author	Initiator
January 2003	Report: *"Global Clearing and Settlement – a plan of action"*	Group of Thirty	
April 2003	Second Giovannini Report	Giovannini Group	EC
October 2004	ESCB-CESR standards (not approved, not implemented)	Joint working group of ESCB/CESR	ESCB and CESR
28 April 2004	Commission Communication of 2004	EC	EC
April 2004	Directive: MiFID	Council of the European Union and the European Parliament	EC
November 2004	Report: RCCP	CPSS-IOSCO	CPSS
May 2005	Green paper on Financial Services Policy (2005-2010)	EC	EC
December 2005	White Paper on Financial Services Policy (2005-2010)	EC	EC
May 2006	Report: *Global Clearing and Settlement: Final Monitoring Report*	Group of Thirty	
7 November 2006	Code of Conduct	Market infrastructure institutions of EU countries	EC
	UNIDROIT Convention	International Committee of Experts, UNIDROIT	UNIDROIT

Source: NBP

3.4. Development of capital market infrastructure in Poland

3.4.1. Government programs

Schedule of capital market development until 2001

The first government program following the 1989 transformation that related to the capital market was included in a document entitled "Schedule of capital market development until 2001". The program was prepared by the former Securities and Exchange Commission (*Komisja Papierów Wartościowych i Giełd*, KPWiG) and approved by the Economic Committee of the Council of Ministers (*Komitet Ekonomiczny Rady Ministrów*, KERM) in 1998. The document stipulated, *inter alia*, the transformation of the WSE into a public company in 2002.

Entrepreneurship – Development – Work

In January 2002, the Council of Ministers adopted the Government's Economic Strategy for the years 2002-2005 entitled "Entrepreneurship – Development – Work." According to the basic assumptions of the Strategy, measures taken by the Council of Ministers in respect of capital market development were to concentrate on streamlining and cutting costs of WSE and KDPW operations, as well as adapting the institutions to meet EU standards and including them in the infrastructure of the European capital market. The above actions included, *inter alia*, ownership transformations of basic capital market institutions. The Strategy also envisaged better use of the potential of open pension funds.

In order to ensure the implementation of the agenda set out in the Strategy, the President of the Council of Ministers established a new auxiliary body at the Council of Ministers in February 2002: the Team for Monitoring, Coordination, and Control of the Implementation of the Government's Economic Strategy. Basic tasks of the Team included: coordination, monitoring, and control of the implementation of the Strategy, verification of compliance of draft government documents submitted to the Council of Ministers for approval with the Strategy.

Outline of the capital market development strategy and the Action Plan for capital market development

In March 2002, the Council of Ministers adopted another two program documents: "Outline of the strategy for capital market development" and the "Action Plan for capital market development". The documents specified the Government's Economic Strategy. They were prepared by a working group chaired by the Undersecretary of State in the Ministry of Finance appointed

specifically for that purpose in January 2001 by the Committee of the Council of Ministers (*Komitet Rady Ministrów*, KRM). The first of the above documents establishes three basic goals in respect of gathering and use of additional savings, i.e. integration with the EU (including e.g. ownership transformations of basic capital market institutions), use of potential in open pension funds (including e.g. privatisation of important Treasury owned companies through the public capital market and development of debt securities and the Treasury Securities Dealers system, DSPW), as well as development of the public capital market as a source of capital (including e.g. preparing new tax solutions, improving the efficiency of prosecution of crimes related to public trading in securities, and enhancing competitiveness of the Polish capital market). The second program document of the Government presented measures aimed at reaching those goals and indicated the necessary means and legislative changes, as well as deadlines and institutions responsible.

Strategy for the capital market development "Agenda Warsaw City 2010"

In April 2004, the Council of Ministers adopted a strategy for capital market development entitled "Agenda Warsaw City 2010" prepared by the Ministry of Finance. It sets out objectives and measures for their achievement. The basic objective of the strategy was the establishment of an inexpensive, safe, and efficient capital market in Poland by 2010 and thus ensure the creation of a strong regional financial centre in Warsaw. The document sets out the following specific objectives in this respect:

Objective 1: enlarging the capital market, including: increasing the significance of the public share market whose capitalisation should reach a level of 50% of GDP in 2010; developing the market for corporate bonds (as a source of capital for enterprises alternative to bank loans) whose size in 2010 should represent at least 8% of GDP; and developing venture capital funds – the value of funds invested by 2010 should reach at least 0.25% of GDP;

Objective 2: improving the efficiency of the market by enhancing its liquidity so that the ratio of the annual value of trade in a given market to its capitalisation should reach a level of 0.7-0.9 in 2010;

Objective 3: enhancing the safety of the market by strengthening competition and efficiency of administrative oversight, as well as private control and mechanisms for pursuing claim.

Achieving those objectives was to be facilitated by taking a number of measures divided into the following groups:

– Legislative: implementation of EU regulations into Polish legislation, simplification and harmonisation of legislation in force at the time, supporting development and competitiveness of investment services, building public confidence in the capital market mainly through improved law enforcement, as well as introducing fiscal solutions stimulating capital market development;

– Organisational: including e.g. development of corporate governance mechanisms, establishing a code of good practice, supporting centralisation of trade in Treasury debt securities, rationalisation of costs connected with oversight of capital market institutions;

– Infrastructural: lowering the costs of servicing the capital market (particularly by the WSE, CeTO SA, and KDPW), supporting extending the scope of operation by the above institutions and rapid preparation of strategic changes to their ownership structure and operating principles, establishing a trading platform for higher risk companies intended for eligible investors;

– Privatisation: enhancing the use of the WSE as a privatisation path for Treasury-owned companies and preparing a list of public offers of companies earmarked for privatisation.

The implementation of the Strategy was divided into two stages. The first stage covered measures stipulated by Agenda Warsaw City 2010 (the years 2004-2006). The second was to see independent development of the capital market based on previously implemented solutions and a process of intensive promotion in Poland and abroad (the years 2007-2010). The Strategy also set forth measures aimed at ensuring its effective implementation: entrusting the Minister of Finance with the coordination and monitoring of actions taken by individual institutions participating in the implementation of the Strategy, and establishing the Capital Market Council (*Rada Rynku Kapitałowego*, RRK) under the supervision of the Minister of Finance. as well as a special Commission for Financial Services at the Polish Parliament.

The Annex to the Strategy includes a chapter entitled "Scenarios for the development of the Warsaw Stock Exchange, Central Table of Offers, and the National Depository for Securities (KDPW)". The Strategy features three theoretical models of relations of the above institutions with foreign entities: retaining the model of independent operations, alliance (capital or operational)

with a leading European institution or establishing a strong regional capital market, potentially linked with one of the European alliances.

Introducing changes to the shareholder structure of those institutions was recognised as a key issue for the infrastructure of the Polish capital market. The changes would allow, *inter alia*, to respond to increasing competition from highly developed EU markets. In respect of KDPW, the Strategy stressed the need to create a strategic majority shareholder within the institution, which would be able to define its strategic development, in particular, prepare KDPW for:

- Centralisation of custody and clearing processes of the Polish capital market both for securities admitted to official listing as well as remaining securities;
- Acting as a clearing member representing national participants in the European clearing house within the framework of operational cooperation, whose consequence may also be the processing of cash clearing (obtaining a special-banking licence);
- Potential separation of the depository and settlement functions as not-for profit operations, from clearing activity which would be commercial;
- KDPW potentially acting as the CCP;
- Adjusting KDPW's functioning to ECB requirements included in the User standards.

The privatisation processes of KDPW and the WSE should be timed to take place together, particularly in relation to decisions on the alliance of the WSE or KDPW with one of the European platforms. With regard to the WSE, the Strategy anticipated the need to reduce State Treasury involvement in the shareholding of the WSE to a level below 30% in favour of private capital representing financial institutions and individual investors.

Actions of the Capital Market Council and the Financial Market Development Council

The Capital Market Council (*Rada Rynku Kapitałowego*, RRK) was established by the President of the Council of Ministers by way of an Ordinance of 20 December 2004 on the Capital Market Council[112] as an advisory and consultative body for the Minister of Finance handling capital market issues. Representatives of Polish capital market infrastructure institutions (heads of the WSE, KDPW, and MTS-CeTO SA) and persons presiding over institutions, which represent capital market circles, as well as representatives of the administration, became Council members.

[112] Official Gazette (Monitor Polski) No. 54 of 2004, item 909.

The Council was appointed to support the development of the Polish capital market, particularly, to stimulate actions aimed at establishing a regional financial services centre in Warsaw. The Council became a forum for discussion on current problems facing the capital market, took part in consultations on draft legal acts and systemic solutions concerning the shape of the market in Poland. Particular issues discussed during Council meetings tackled the development of infrastructure institutions of the Polish capital market taking into account their position in the European market, particularly the impact of potential ownership transformations of those institutions on other capital market participants in Poland, their competitiveness and development capacity.

Pursuant to a Decision of the President of the Council of Ministers of 11 September 2006, the Council was dissolved. To replace it, the Financial Market Development Council (*Rada Rozwoju Rynku Finansowego*, RRRF) was established on 14 September 2006 by way of an Ordinance[113] of the Minister of Finance. It is a consultative and advisory body under the Minister of Finance, which handles financial market issues. Its goal is to develop a strategy for operation and development of the Polish financial market in cooperation with market circles in a wide sense. The Council allows financial market institutions to participate in establishing the legal framework of the market's operation in Poland; it is also used as a discussion forum, e.g. to agree on the Polish position during the work of EU committees.

The Council is composed of representatives of financial market participants as well as institutions exercising oversight of the market. Other persons are also invited to Council sittings, such as experts. The work of the Council is managed by the Minister of Finance or an Undersecretary of State of his choice. The Council bases its operations mainly on work carried out by experts divided into teams and working groups selected by the President in order to research issues significant from the point of view of Council's responsibilities. The following bodies had been appointed before June 2008:

Working groups:

- for information memorandum;
- for securities lending and short sales;
- for omnibus accounts;
- for the new system of insurance solvency (Solvency II);
- for the review of banking law regulations;

[113] Ordinance of the Minister of Finance No. 25 of 14 September 2006 on Establishing the Financial Market Development Council (Official Journal of the Minister of Finance of 2006, No. 11, item 80).

– for the review of commercial insurance law regulations;
– for mortgage loans;
– for payment services;
– for the review of the law in respect of possibilities to invest assets in open pension funds;
– for removing fiscal obstacles in the financial institutions sector;

Sub-group:
– for capital adequacy of investment companies;
– for defining the operational principles of investment companies and custodian banks;
– for VAT in motor vehicle insurance indemnity;
– for the review of executive acts accompanying the Act on Investment Funds;
– for the transposition of the reinsurance Directive.

The working groups work on an ongoing basis. The Council meets once a quarter. The meetings are devoted to summarising the work of working groups and teams, as well as discussing legislative action in respect of the financial market. The Working group for the information memorandum and for securities lending and short sales ended their work in 2007. The working group for the information memorandum developed the concept of regulations on conditions to be met by the information memorandum. They were reflected in an ordinance regulating the content of the memorandum[114]. The proposed solutions should facilitate raising funds in the capital market by small and medium-sized enterprises; they should also be conducive to the development of a new market on the Warsaw Stock Exchange.

The work of the Working group for securities lending and short sales resulted in the adoption of a proposal of systemic changes which allow development of short sales mechanisms on the regulated market and of securities lending transactions by simplifying the principles and conditions of the manner in which these transactions are executed. The solutions may be conducive to improving the liquidity of the capital market.

[114] Ordinance of the Minister of Finance of 6 July 2007 on Detailed Conditions to be met by an informational memorandum (Official Journal of the Minister of Finance of 2007, No. 132, item 916) referred to in Article 39(1) and Article 42(1) of the Act of 29 July 2005 on Public Offering and the Conditions Governing Admission of Financial Instruments to an Organised Trading and on Public Companies (Journal of Laws of 2005, No. 184, item 1539).

Privatisation Program 2008-2011

The Council of Ministers adopted the "Privatisation Program 2008-2011" on 22 April 2008. It envisaged the privatisation of the WSE in two stages. The first stage was scheduled for 2008 and it covered *inter alia* a public offer of the WSE. The second stage was scheduled for the subsequent 2-3 years. The Program also concerned the privatisation of KDPW in the years 2009-2010.

Due to the present financial crisis, as well as regulatory conditions related to the entry into force of the new Act on Trading in Financial Instruments, the final privatisation model of the WSE is currently undergoing modification and will be further detailed.

3.4.2. Impact of the activities and strategic development trends of the WSE on the integration of infrastructure for the safekeeping, clearing, and settlement of securities in Poland

The WSE was established in 1991 at the beginning of the transformation of the economy. The role of the WSE was to ensure trading and clearing of securities admitted to stock exchange trading. In 1994, the National Depository for Securities (KDPW) was separated from stock exchange structures.

Poland's accession to the European Union in 2004 paved the way to stock exchange internationalisation. Simplifying regulations allowed investment firms and foreign companies operating and raising capital on the WSE on the basis of the so-called single passport, i.e. on the basis of an authorisation obtained in the home country.

3.4.2.1 Strategy of the Warsaw Stock Exchange

In the initial years of its operation, the WSE concentrated on laying the foundations and strengthening the capital market, including establishing an appropriate market infrastructure.

The main strategic objective of the WSE is the establishment of a regional, Central European trading centre in representative financial instruments for Polish and international investors. The objective is being pursued through actions targeted at internationalising, strengthening, and developing the stock exchange market, including in particular, improving the quality and competitiveness of the market, as well as building the competence and the image of the WSE as a regional market.

Internationalisation of the market is carried out by the WSE by attracting issuers and financial intermediaries pursuing business in the region. The regional

strategy of the WSE also includes building business relations with exchanges in the region. Attracting foreign companies covers the Central and Eastern European, Southern European regions, as well as certain other countries. At the end of September 2008, twenty five foreign companies from 16 countries were listed on the WSE.

In order to strengthen the local market, the WSE also seeks domestic issuers. The WSE is a market open to small and medium-sized companies. It enhances its role in the economy as a mechanism of capital allocation.

The stock exchange extends its network of business partners, which support the process of attracting domestic and foreign issuers and investors, as well as building its image. Actions carried out in the domestic market that are aimed at attracting issuers and investors are supported by entities recruited under the following programs: Stock Exchange Partner Company for Small and Medium-Sized Enterprises and Stock Exchange Partner Company – Primary Market Leader. The WSE launched the WSE IPO Partner program intended to attract foreign investment firms. The Stock Exchange also actively solicits among potential investment firms (domestic and foreign) – future stock exchange members, particularly in Central and Eastern Europe. At the end of September 2008, the WSE had 19 remote foreign members from nine countries.

The WSE strives hard to introduce high quality and competitiveness standards. Its main tasks in this respect encompass: improvement of market liquidity, elimination of barriers and introduction of solutions meeting the needs of the developing market, supporting innovation in the Polish economy (by launching the Innovative Economy program on the WSE and further development of the NewConnect market).

Enhancing trade liquidity of listed Polish and foreign companies takes place through the cooperation of the WSE with domestic and foreign market participants, development of channels to communicate with the market, including information portals, and taking actions aimed at encouraging large companies to be listed on the main market.

The objective of the WSE with regard to regulations is to eliminate barriers limiting the development of the Polish market and delays in introducing solutions already operating in developed markets (e.g. the securities lending market, short selling), and investment limitations (e.g. the inability of pension funds to use derivatives to hedge portfolios, the inability to provide omnibus accounts for foreign intermediaries).

In order to face international competition, the WSE adapts to European standards and solutions (e.g. prolonging the session, improving the speed of transaction execution). The WSE is also planning to introduce a new stock exchange system.

Promoting innovation and development of new technologies in the Polish economy will constitute an important element of a wide program implemented by the WSE. The Stock Exchange intends to increase companies' awareness of the significance of improving innovation processes of their operations and the competitive advantage they may gain.

As part of its strategy implementation, the WSE established the NewConnect market addressed at start-up companies with high growth potential. This market is maintained outside the regulated market as an alternative trading system. The WSE intends to further develop the NewConnect market, which is also an attractive place to obtain capital for foreign companies from Central and Eastern Europe.

The WSE enhances market attractiveness by diversifying its product offer. In addition to standard instruments such as shares and bonds, the offer of the WSE was extended to include derivatives (futures contracts, options), and recently also structured products.[115] In future, the WSE intends to develop and launch new products to enrich different classes of assets with stock market instruments that are not available in the Polish capital market.

The WSE also carries out marketing and educational activities that support the implementation of its strategic objectives. It continues to build up the image of the Stock Exchange as an attractive source of capital and the mechanism to support innovation in the economy.

3.4.2.2. Impact of the WSE strategic development trends on the future of the settlement system

The internationalisation of the stock market - understood as attracting new customers (primarily foreign companies in the framework of dual listing or remote foreign members) - is invariably connected with ensuring an efficient transaction, clearing and settlement infrastructure.

The further evolution of the NewConnect market where small and medium-sized enterprises from Central and Eastern Europe (e.g. from Ukraine) will be listed will require market participants, including infrastructure institutions, to adapt to new customers and markets, *inter alia* in respect of setting up a clearing capacity or a hedge fund.

[115] Structured products are financial instruments whose price depends on the value of a selected market indicator (e.g. share or share basket prices, values of stock exchange indices, exchange rates).

Launching new products and implementing new projects by the WSE, such as the scheduled launch of the market for non-Treasury debt, particularly debt securities of local government entities; it will also require ensuring an inexpensive, efficient, and safe clearing and settlement process.

The WSE aims at boosting market competitiveness through actions taken e.g. in the field of regulations and efficient launching of functional solutions, in cooperation with the remaining capital market participants (KDPW, investment firms). Enhancing market liquidity is very important from that point of view. Launching short selling and organising a central market for securities lending are elements that will be conducive to reaching that purpose. It is also important to facilitate access to the market by foreign investors and issuers. This will be achieved, *inter alia*, by direct transaction clearing and settlement by remote foreign stock exchange members, who will be able to perform these actions in much the same way as Polish entities. The WSE and KDPW are working towards the introduction of omnibus accounts in KDPW. From the point of view of ensuring competition, the costs of executing, clearing and settling transactions are significant. The WSE and KDPW will pursue a cohesive policy of lowering transaction clearing and settlement fees.

In the event that the WSE acquires stock exchanges located in Central and Eastern Europe, it will integrate them in operational terms. As a result, quotations of all financial instruments of respective exchanges will be carried out on a single platform. Such measures will stimulate operational cooperation and integration of deposits in the region.

3.4.3. Expected development trends of the KDPW system and participation in harmonisation

3.4.3.1. Strategy of KDPW

KDPW pursues a policy of constant development as an institution which renders services on a market which has undergone considerable changes in recent years, *inter alia*, due to European and global harmonisation initiatives. The strategy of KDPW is formulated in a document entitled "KDPW Strategic Goals 2006-2010" adopted by the KDPW Supervisory Board on 13 September 2006. The document defines KDPW's mission as: "the creation and provision of new services, essential for the development of the Polish capital market, as well as raising the quality of existing services while maintaining overall business efficiency". It also presents the vision of KDPW as a "securities depository and settlement institution which will become a permanent fixture in the European depository-settlement environment, ensuring at the same time the

best possible conditions for the evolution of the Polish capital market as part of the EU market as a whole". In its attempts to implement the above plans, with ongoing integration of the European capital market taking place and the resulting increase of competition among suppliers of services in respect of clearing, settlement, and maintenance of a securities depository on the market, KDPW pursues strategic goals, including the following:

- Participation in building a regional capital market centre – by developing links to enable foreign issued securities to be listed in the Polish market and harmonising and standardising products and services in order to create improved conditions for foreign issuers to enter the Polish market;
- System harmonisation – making operating principles within the Polish market in respect of maintaining the central depository, settlement, and clearing processes as similar as possible to European and global standards by initiating amendments to regulations and standards;
- Achieving actual interoperability with other European systems and remote membership of foreign financial institutions – e.g. by eliminating legal and fiscal barriers to such cooperation, as well as building links with other CSDs on a DvP basis and extending the scope of services offered in order to allow the links to be established;
- Changes to the KDPW ownership structure – to strengthen the number and profile of the users of services provided by KDPW;
- Consolidating the KDPW financial model as a not-for-profit organisation – by projecting revenues that would cover the costs of service processing and expenses connected with company development, as well as allowing the meeting of the capital adequacy requirements of financial institutions (*inter alia* in connection with membership in clearing houses and establishing the CCP), while at the same time preserving price competitiveness;
- Adding new functionality – modernisation of services and extending their scope through improvements to the IT system, membership in foreign clearing houses as a clearing member;
- Adapting the current central counterparty model to a CCP model based on legal responsibility for obligations;
- Changes to the KDPW corporate structure – if the need to separate custody services from clearing functions (triggered e.g. by introducing legal liability of a clearing house for clearing obligations) arises, adopting the structure of a holding company may be considered.

KDPW activities connected with meeting its strategic objectives are described below.

Extending the scope of services

KDPW began processing clearing and settlement of transactions executed on the new MTF market launched by the WSE – NewConnect – and established a clearing fund for the market in August 2007. Launching the new depository and settlement system based on a modern flexible structure of deposit accounts and offering many improvements and new functionalities, such as pre-matching of transaction details, the possibility of settling linked transactions and enriching settlement instructions by a participant was scheduled for the beginning of 2009. With the launching of the new system, it will also be possible to introduce new principles of risk management that will be uniform for the spot market and the futures market.

A project for launching a settlement system for debt instruments of the non-public market is being implemented in cooperation with the Polish Bank Association (*Związek Banków Polskich*, ZBP).

A concept for KDPW to perform the role of communication platform operator servicing processes connected with the exercise of shareholder voting rights was also prepared. Initial assumptions of the system processing so-called electronic proxy voting relying fully on electronic communication were outlined. The system is to provide participants of the depository and settlement system with standardised information and documents concerning general shareholders' meetings called by the issuer, appointing a proxy, the voting method, and results of votes during a shareholders' meeting.

Launching a new risk management system is also scheduled for 2009. It assumes that risk management methods for the spot and futures market will be uniform as a result of introducing a two-level guarantee system based on margin deposits and a clearing fund for both markets. The new system also envisages significant improvement in risk management methodology by participants and commercial customers through applications available in the market used to establish margin deposits and analyse the risk portfolio.

Technological upgrade and introducing new global communication standards

KDPW development plans connected with the introduction of a new depository and settlement system take into account the recommendations included in the protocol concerning the elimination of the first Giovannini barrier, both in the area of communication and data structure. The introduction of the possibility to process all operations by way of communications compliant with ISO 15022/ISO 20022 standards is anticipated. Work on streamlining and automating processes is underway, e.g. in respect of processing corporate actions, securities lending, and in the ESDI data exchange system, with a view to enhancing efficiency and reliability of the system.

Operational cooperation with foreign depository and clearing institutions

KDPW has enlarged the circle of foreign depository and clearing institutions with which it holds operational links since 2004. New FoP connections have been established, increasing the number of foreign markets from which securities quoted on the Polish market originate. In September 2008, there were direct links between KDPW and foreign central securities depositories which covered the Austrian, Hungarian, Slovak, and Estonian market. KDPW also has direct links with international depositories, i.e. with Clearstream Banking Luxembourg and Euroclear Bank through which it processed transfers of financial instruments with the French, Czech, Italian, American, Swedish, British, and Dutch depositories. The interest of foreign securities depositories in cooperating with KDPW has been noted. Work is underway on the possibility of KDPW to process cross-border settlement in accordance with the DvP principle.

Standardisation and harmonisation efforts

KDPW actively participates in work on system harmonisation whose priority is to harmonise operating principles of the Polish market in relation to the management of a central securities depository, as well as securities clearing and settlement, through the active participation in preparing changes to regulations, standards and technological solutions.

3.4.3.2. Participation in the work of ECSDA

As an ECSDA member, KDPW participates in the organisation's work, for instance in drafting the CoC. It is also a CoC signatory and has implemented its provisions, e.g. by publishing the required information on the fees it collects on its website (in the form of a table of fees in Polish and in English with a detailed description of all items and examples which explain the way they are calculated).

Representatives of KDPW also take part in the work of ECSDA working groups which study the issues of clearing and settlement of cross-border transactions as well as the scope of the Giovannini barriers. In particular, they participate in work on establishing standards for matching settlement instructions, setting detailed CoC rules in respect of access to post-trading infrastructure and interoperability, devising standards on working days and hours of settlement systems and settlement finality, standards related to market claims in relation to the right to securities benefits, and in standardisation work on the so-called optional distributions (benefits paid by the issuer whose receipt may

be conditional on the investor's decision) and reorganisations (processing of corporate actions which result in changes to the character of securities).

The above studies assume that introducing standards developed by ECSDA working groups into European markets is to take place at the initiative and under the supervision of local working groups, the so-called Market Implementation Groups (MIG). MIGs are responsible for preparing and monitoring national implementation plans of standards concerning the third Giovannini barrier. The principle has been adopted that only one working group operates in one national market; the group prepares one implementation plan for standards agreed in the European forum.

As a consequence, at the initiative of KDPW and the Council of Custodian Banks (*Rada Banków Depozytariuszy*, RBD), the Giovannini Barrier Three Polish Working Group was established at the RBD in August 2006. Representatives of KDPW, RBD, WSE, the Association of Stock Exchange Issuers (*Stowarzyszenie Emitentów Giełdowych*, SEG), KNF, and the NBP take part in the Group's work. It acts as a MIG in the Polish market and is preparing a plan to introduce ECSDA standards and the recommendations of the European banking associations ECSA on processing corporate actions in Poland. The group which works in a cycle of monthly working meetings indicated that Polish market practice did not comply with ECSDA and ECSA recommendations, and prepared a list of changes essential to eliminate the discrepancies, as well as a list of institutions which should take on the responsibility for introducing the changes. Work conducted at the end of 2006 and at the beginning of 2007 focused on introducing standards concerning mandatory distributions. As a result, a plan of introducing standards for the Polish market was devised. The Polish market meets most ECSDA/ECSA recommendations. The proposed changes concern primarily communication between issuers and KDPW as the central securities depository, and between KDPW and its participants (pursuant to the recommendations, communication should take place by exchanging electronic messages compliant with ISO 6166 and ISO 15022/20022 standards), information policy of issuers (recommendations state that issuers should publish information on a corporate action on a website, at least in English), and corporate practice (the requirement to shorten the period between the record date used to determine those entitled to rights from securities and the payment date, e.g. of dividend). The Group presented, *inter alia*, its own proposals of corporate governance principles taking these standards into account. They were included by the WSE Management Board in the document entitled "Good practices of the WSE-listed companies" adopted in July 2007. In future, the group intends to outline plans of introducing standards relating to the remaining groups of corporate actions and monitor the process of their implementation.

3.4.3.3. Participation in the work of EACH

As an EACH member, KDPW actively participates in its work, *inter alia* it drafts and issues opinions on the content of the Code of Conduct, takes action aimed at its implementation, and cooperates with EU institutions. It also takes part in EACH's work on standards and recommendations.

3.4.3.4. Participation in the work of SMPG

Representatives of KDPW take part in the work of working groups of the SMPG organisation, aimed at drafting standards and market practices to achieve full STP, i.e. straight through processing, the automation of processes in areas connected with securities clearing and settlement, as well as execution of resulting rights both in the domestic and the international market. Currently, there are two NMPG groups operating in Poland: S&R NMPG PL, the group for transaction settlement, and CA NMPG PL, the group for execution of rights in respect of securities. Representatives of brokerage houses, banks, and KDPW participate in the work of the groups. Their goal is to devise domestic standards of market practice in respect of clearing and settlement of transactions and execution of rights in respect of securities, primarily for information exchange procedures and establishing the appropriate settlement instructions for the Polish market, compliant with ISO 15022 standards.

3.4.3.5. Participation in the work of RRRF

KDPW also participates in the work of the Financial Market Development Council (RRRF) – the Working Group for securities lending and short sales (now no longer active)[116] and of the Working Group for omnibus accounts. KDPW takes part in devising the concept of the introduction of omnibus accounts into the Polish law which would allow securities omnibus accounts to be maintained for foreign intermediaries – central securities depositories, custodians, and other investment companies.

3.4.3.6. Participation in legislative work

KDPW takes part in legislative work connected with the implementation of EU law, including work on the amended Act on Trading in Financial Instruments, the Act on Public Offerings and Terms for Introducing Financial Instruments

[116] See section 3.4.2 "Government programs".

to Organised Trading Systems and on Public Companies (implementing MiFID and Directive 2004/109/EC of the European Parliament and of the Council of 15 December 2004 on the harmonisation of transparency requirements in relation to information about issuers whose securities are admitted to trading on a regulated market). It also participates in consultations on amendments to EU law.

3.4.4. NBP activities in respect of the development of post-trading services

The NBP conducts activities connected with the development of securities transaction clearing and settlement services – both at the domestic level and in the ESCB.

At the national level, the NBP participates in legislative work aimed in particular at implementing directives and other EU legal acts into Polish law, and in government actions aimed at developing the capital market. Its participation takes the form of consultations. The NBP has its representatives in the RRRF, as well as in working groups at the RRRF, e.g. for omnibus accounts. As an operator of RTGS systems in zloty and euro, which clear the cash positions of KDPW and RPW, the NBP aims at enhancing efficiency and safety of cash settlement on an ongoing basis by modernising the systems and adapting them to solutions implemented in the EU. For example, the SORBNET-EURO system was established in 2005 and connected to TARGET; recently, one such action was the participation of the NBP in TARGET2. As a co-owner of KDPW, the NBP acts as a positive force in the development of the KDPW system and other services provided by the company by taking part in the work of the Management Board and the general shareholders' meeting.

At the EU level, the NBP participates in all initiatives in which the ESCB[117] is engaged.

RPW development trends

In addition to depository, clearing, and settlement operations in respect of securities, the RPW also executes the function of an agent for the NBP for the issue of Treasury securities (TS). RPW operations and its development in respect of TSs, particularly Treasury bills, depend largely on the "Public Finance Sector Debt Management Strategy" adopted by the Ministry of Finance[118]. In the document, the Ministry of Finance sets forth the method of financing

[117] See section 3.3.3 "European System of Central Banks and the European Central Bank".

[118] "Public Finance Sector Debt Management Strategy in the years 2008-10", Ministry of Finance, Warsaw, September 2007, www.mf.gov.pl.

the borrowing needs of the State Treasury: it indicates markets, instruments, and securities issue deadlines. The most important tasks of the Strategy are linked with the development of the primary and secondary market in TS. RPW operations have recently been influenced by the admittance of foreign institutions' to the Treasury Securities Dealers market (*Dealerzy Skarbowych Papierów Wartościowych*, DSPW) as well as shortening the time necessary to clear bond tenders (T+2), which led to a considerable mitigation of investor risk that was being generated from the limited possibilities of investors to trade in securities before clearing auctions. The Strategy sets forth the most important tasks necessary to attaining its goal within the coming years. They are, in particular: enhancing liquidity and efficiency of the SPW market, further development of the DSPW system and the electronic SPW market, extending the group of investors and good communication with financial market participants. The RPW is focused on efficient cooperation with the Ministry of Finance and the performance of tasks derived from its function of an agent for issues of Treasury bills and an organiser of SPW tenders.

Within the framework of cooperation, the RPW adapts the IT and system infrastructure to changing market conditions and individual needs of RPW participants. Taking into account the progress in IT technologies, the need to introduce new functionalities, and the increasing activity of foreign Treasury securities dealers, the RPW intends to start work on the new version of the application used to service the electronic tendering system in the near future. The new system will primarily facilitate customer service, increase operational performance, and simplify procedures for participation in the primary market of Treasury bills and bonds.

The RPW meets most Eurosystem standards in respect of maintaining a depository for securities, which significantly limits risks connected with securities safekeeping and settlement. RPW is also preparing a system for increased integration of the domestic SPW market with the European market and for clearing ESCB credit operations in the future. The fact that RPW has been covered by the NBP's risk management system has contributed considerably to mitigating and monitoring risk. The NBP pays significant attention to enhancing safety of its operations. Work is underway on extending a comprehensive Risk Management System. Within the framework of the system, the following will be devised and introduced:

1) Key Risk Indicators;
2) Risk profile and risk maps;
3) Analysis of main processes of the NBP;
4) Methods of estimating operational losses;
5) Quantitative methods of measuring operational risk.

Ongoing work on streamlining the Risk Management System have a major impact on enhancing operational safety of the RPW and thus on extending RPW participant protection. Safety is also improved by the Business Continuity Plan in place in the NBP, which ensures uninterrupted work of the Bank and sets forth detailed principles for proceedings to be taken in the event of emergencies.

Conclusions

In the past dozen years, great progress has been made in the European Union in the area of custody, clearing, and settlement services. It is primarily the effect of consolidation and harmonisation efforts aimed at establishing the single European financial market, in particular through lifting barriers which derive from regulatory discrepancies, diverse market practices, and technologies involved in processing cross-border transactions. The barriers hinder trading and increase its cost.

Post-trading infrastructure used to be very fragmented in the European Union: central counterparties and securities depositories managed separated markets. As a result, it was frequently the case that a number of entities providing depository, clearing, and settlement services operated within one country. High running costs first triggered numerous consolidations of domestic institutions, followed by the process of a broad process of integration, including consolidation, of entities which provide post-trading services at the EU level. This process has been continuing to-date. One of its effects is a significant decrease in the number of those institutions, while institutions managing local markets were absorbed by those operating in international markets. LCH.Clearnet is an example of such a clearing institution, and Euroclear Plc – an example of a depository and settlement institution.

Progress in the area of post-trading services harmonisation both across the world and in the European Union is the result of a major involvement of many securities industry institutions, regulators, and supervisors connected with the capital market. On the global scale, such institutions include, among others: BIS, IOSCO, the Group of Thirty, ISSA, and SMPG. They work on creating standards and recommendations, which set development trends and models of activity for custody, settlement, and clearing systems across the world. In addition to adopting globally recognised standards on maintaining the safety level of post-trading services, the European Union also takes harmonisation measures aimed at unifying the principles for the provision of services and establishing a single European capital market. Actions taken to this end by public institutions acting on the European level (such as the European Commission or the ESCB) are supplemented by securities industry initiatives coordinated by ECSDA, EACH, and FESE. These institutions have taken a large number of initiatives. The most significant are: issuing directives, communications of the EC, reports (e.g. the Lamfalussy Report, the Giovannini Report), developing the Code of Conduct, and establishing EU-wide infrastructure, e.g. TARGET, TARGET2, and CCBM, as well as appointing a number of bodies whose main

goal and achievement is enhancing safety, efficiency and harmonisation of EU post-trading services.

The role of oversight authorities has become fundamental in the changing landscape of European post-trading infrastructure. Their scope of activities traditionally covered only local financial markets. In the wake of cross-border operations of many supervised entities, particularly as a result of their supranational consolidation, the scope of oversight was extended from the national to the international level. This required efficient cooperation of oversight authorities from different EU countries in many forms, e.g. bringing together oversight authorities in different associations and devising common oversight principles, concluding agreements on exercising oversight of entities operating in a number of countries, and extensive exchange of information. Moreover, the need emerged to develop a policy of oversight of entities providing services on a very wide scale as they concentrate risk connected with clearing and settlement functions.

In the last decade, the role of central banks in the area of oversight of entities providing clearing and settlement services has also increased. Initially, emphasis was put on central bank oversight of mainly payment systems; central banks did not have the powers or legal instruments enabling them to influence securities clearing and settlement systems. Central banks therefore used to exercise primarily their ownership rights or used moral suasion based on the prestige of a central bank. Yet it soon turned out that the operation of payment systems and the operation of securities settlement systems are closely connected and disruptions experienced by the latter may trigger serious consequences for the former. In view of the above and taking into account other very important tasks of central banks, i.e. responsibility for efficient monetary policy operations cleared within securities settlement systems, and ensuring financial stability which may be negatively influenced by disruptions in the systems, the majority of central banks from EU countries were provided with statutory powers and instruments to exercise oversight of securities clearing and settlement systems. The remaining central banks still exercise ownership rights.

Although the last dozen years saw considerable progress in efficiency and safety of post-trading services in the EU, there is still much work remaining in the area. Access to services allowing efficient cross-border operation remains unequal for EU-based investors. The fees for clearing and settlement of cross-border transactions are much higher than the fees for similar services in domestic trading. Securities industry organisations, oversight authorities, and regulators do not content themselves with their achievements and are ready to take up new initiatives aimed at full harmonisation of post-trading services in the single

European market. Examples of most recent initiatives are the Code of Conduct, CCBM2, and TARGET2-Securities.

Changes in the Polish capital market infrastructure can also be observed. On the one hand, the local market is growing and new instruments are introduced. On the other hand, the market's internationalisation is taking place as foreign investors and issuers enter the market. Actions in this respect are taken by the WSE – by building an investor-friendly and foreign-issuer-friendly market – as well as by KDPW which initiates operational links with foreign partners. As an RPW operator, the NBP aims at developing the primary and the secondary market for Treasury securities by extending functionalities, safety, and efficiency of depository and settlement services. All three institutions actively participate in many EU initiatives aimed at harmonising post-trading services while pursuing their own tasks and objectives.

Actions taken by infrastructure institutions are supported by government initiatives, *inter alia* plans to privatise the WSE in the years 2008-2011 and KDPW in the years 2009-2010. This is to facilitate the institutions their international expansion and support implementation of the project of establishing a regional Central European centre for trade in financial instruments for Polish and international investors in Warsaw.

It is difficult to predict the shape of Polish and European post-trading infrastructure in a few years from now, yet it is plausible to assume that it will be better integrated and harmonised than it is today, as well as safer and more efficient.

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