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De Nederlandsche Bank

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*Oversight of payment and  
settlement systems 2011*

*March 2012*



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## I. Introduction

This report describes the activities of De Nederlandsche Bank (DNB) in discharging its responsibility for the oversight of payment and settlement systems. The international Committee on Payment and Settlement Systems (CPSS) sets standards for the transparency of the oversight function of central banks as described in the 2005 CPSS report on oversight: *‘Central banks should set out publicly their oversight policies, including the policy requirements or standards for systems and the criteria for determining which systems these apply to’* (see [www.bis.org/publ/cpss68.pdf](http://www.bis.org/publ/cpss68.pdf)). DNB ensures that it meets this requirement effectively by publishing the assessment criteria and the results of its assessments.

This report describes the degree to which payment and settlement systems in the Netherlands comply with national and international oversight standards. The results are based on oversight activities performed by DNB in 2011, where relevant in conjunction with the Netherlands Authority for the Financial Markets (*Autoriteit Financiële Markten / AFM*) and foreign regulatory authorities. DNB has published a summary of its oversight activities in its Annual Report since the 2006 reporting year. From 2011, the results of the oversight are presented in this separate publication.

Chapter 2 describes the purpose of oversight and the methods used. It also gives a list of oversight subjects covered in 2011. Chapter 3 outlines the latest developments in relation to oversight. Chapters 4, 5 and 6 discuss the results of the assessments, divided into three main oversight categories: large-value payments, securities settlement systems and retail payment systems and products. The closing date of this report is 1 March 2012.

## 2. Oversight: goals and methods

Oversight is a form of supervision aimed at increasing the security and efficiency of payment and settlement systems. For DNB this encompasses all payment systems, payment products and securities settlement systems that are relevant for the Netherlands. Oversight is intended to mitigate the risks in Dutch payments and to prevent systemic risks emanating from the relevant payment and settlement systems. Oversight of payments is a task that DNB performs both pursuant to Sections 4(2) and 3(1)(e) of the Dutch Bank Act 1998 and in accordance with the European System of Central Banks (the Treaty on the Functioning of the European Union, Article 127(2)), which charge DNB and the ESCB respectively with ensuring the smooth operation of payment systems. Oversight of securities settlement system is based in part on Section 5:30(e) of the Dutch Financial Supervision Act (*Wet op het financieel toezicht* / Wft) and the derived licences for operating a regulated market or trading platform. This oversight is carried out jointly with the AFM.

DNB is responsible for oversight of all institutions, systems and products that are of significance for Dutch large-value and retail payments. The oversight of securities clearing and settlement systems encompasses oversight of all institutions and systems providing securities clearing and settlement services that are relevant for the Netherlands. DNB is jointly responsible for oversight of international systems. Table 2.1 summarises the national and international oversight arrangements in which DNB participates.

**Table 2.1 National and international oversight arrangements 2011**

Oversight subject	Lead overseer/regulator	Other overseers/regulators
<b>Large-value payment systems</b>		
TARGET <sub>2</sub>	ECB	Euro system NCBs
TARGET <sub>2</sub> .NL	DNB	
EURO <sub>1</sub>	ECB	Euro system NCBs
CLS	Federal Reserve	G10 central banks and other central banks of the 17 currencies concerned
SWIFT	NBB	Other G10 central banks
<b>Securities clearing and settlement systems</b>		
LCH.Clearnet SA	Rotating presidency of regulators from Euronext countries	AFM, DNB and regulators from Belgium, France and Portugal
LCH.Clearnet Group Ltd	Autorité de Contrôle Prudentiel	AFM, DNB and regulators from Belgium, France, Portugal and the UK
EMCF	AFM and DNB	FSA and regulators from Denmark, Finland, Hungary, Iceland and Sweden
Euroclear SA	NBB	AFM, DNB and regulators from Belgium, Finland, France, Ireland, the UK and Sweden
Euroclear NL	AFM and DNB	
Euroclear ESES	NBB	AFM, DNB and regulators from Belgium and France
EuroCCP	FSA	AFM and DNB
ECC	BaFin	Bundesbank, AFM and DNB
Holland Clearing House	AFM and DNB	
<b>Retail payment systems and products</b>		
Equens (SE, CSS, CSM and Switch)	DNB	
VISA Europe (VISA and V Pay)	ECB	Euro system NCBs
MasterCard Europe (MasterCard and Maestro)	NBB	Other euro system NCBs and ECB
Currence (Chipknip, Acceptgiro, PIN, Incasso, iDEAL)	DNB	
NVB (Spoedopdracht)	DNB	
UPSS	DNB	

Additional business continuity requirements apply to all oversight subjects that are part of the financial core infrastructure (Business Continuity Management (Financial Core Infrastructure) Assessment Framework, DNB, 2011).

Oversight takes the form of assessments and regular oversight activities. Assessments are carried out when a new system or product is introduced or undergoes a major change. The oversight subject is fully assessed against standards that apply for that system or product (see summary in Table 2.2).






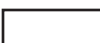
Partial assessments are also possible, for example in the event of minor changes to a product or system. Regular oversight includes monitoring on the basis of reports as well as periodic interviews with the management and auditors concerned. Progress in implementing recommendations is monitored, as are proposed developments or changes to the product or system.

**Table 2.2 Applicable oversight standards**

Oversight subject	Applicable standards in 2011
<b>Large-value payment systems</b>	
TARGET <sub>2</sub> , TARGET <sub>2</sub> .NL, EURO <sub>1</sub> , CLS	Core Principles for Systemically Important Payment Systems (BIS, 2001)
SWIFT	High Level Expectations (SWIFT)
<b>Securities clearing and settlement systems</b>	
LCH.Clearnet SA, LCH.Clearnet group Ltd., EMCF, HCH, EuroCCP, ECC, Euroclear SA, Euroclear NL, Euroclear ESES	Recommendations for securities settlement systems and recommendations for central counterparties in the European Union (ESCB & CESR, 2009)
<b>Retail payment systems and products</b>	
Equens SE, CSS, CSM, Switch	Terms of reference for the oversight assessment of euro systemically and prominently important payment systems against the core principles (ECB, 2007)
VISA, V Pay, MasterCard, Maestro, PIN	Oversight framework for Card Payment Schemes (ECB, 2008)
Currence Chipknip	None (not yet available)
Currence Acceptgiro	Oversight Framework for Credit Transfer Schemes (ECB, 2010)
Currence Incasso	Oversight Framework for Direct Debit Schemes (ECB, 2010)
Currence iDEAL	Recommendations for payment products ( <i>Aanbevelingen voor betaalproducten</i> ) (DNB, 2006)
NVB (Spoedopdracht), UPSS	None (light oversight regime)

The results of assessments are presented in a table that shows the extent to which the product or system meets all the standards at the time of the assessment. The scoring system used is in keeping with international standards and is as follows:

**Table Legend**

Colour	Meaning	Explanation
	Observed	Meets all requirements
	Broadly observed	There are minor deficiencies, which have a limited impact on the security and efficiency of the system
	Partly observed	There are serious deficiencies for which measures are being taken in the short term
	Not observed	There are serious deficiencies for which no measures are planned in the short term
	Not applicable	
	Not assessed	Initial assessment against this standard has not yet taken place

The table is updated annually for each oversight subject to indicate the current level of compliance or show where improvements have been identified. This updating is based on information from the regular oversight and any follow-up assessments. The table therefore describes the level of compliance of each product or system with all standards, even if a full assessment has not been carried out in the past year.

A system or product that is not compliant (red block) with one or more of the standards should, in principle, be barred until the deficiencies have been rectified. However, there are two situations in which a non-compliant system or product can remain operational.

The first situation relates to systems that are not (or not yet) of material importance, but require a licence before they can become operational; this prior approval may be issued so that the system can be initiated. The decision to allow a system to start in such cases depends on several factors, including the type of standard not observed and how fast the system is expected to grow. One condition is that if the system becomes more significant, it must comply with the standard and the deficiency must thus be rectified.

The second – currently theoretical – situation in which a system becomes operational despite serious deficiencies is where DNB has no powers to compel discontinuation of the activities and the system continues despite DNB's objections. Such a situation could arise in areas where DNB has no formal enforcement framework and where informal instruments such as moral suasion prove ineffective. A bill formalising the supervision of payment and settlement systems has been in preparation for some years. It should be passed into law quickly since such systems are already subject to oversight under the Bank Act and this would create the opportunity to impose sanctions, thereby giving teeth to the oversight of payment and settlement systems.



## 3. Oversight: developments in 2011

### 3.1 Retail payments landscape

The retail payments market is currently in a state of flux, due in part to the introduction of SEPA as well as to ongoing product innovation and the emergence of new providers of payment services. These developments affect the current method of oversight of payment systems and products. In order to gauge the possible consequences, a survey was carried out in 2011 on the basis of the information already available while supplementary information was obtained from various institutions.

Although almost all retail payments are in the process of change, the most significant change affecting oversight concerns point-of-sale (POS) payments by debit card. The POS payment landscape is set to change drastically through the introduction of EMV and the migration from PIN to Maestro and V Pay. First of all, the debit cards have changed: the technology of the EMV card is safer (but also more complex) than that of the magnetic stripe (magstripe) card, and Currence is no longer the owner of the debit card most commonly used in the Netherlands; the foreign companies MasterCard Europe and Visa Europe own Maestro and V Pay respectively.

Another development that is becoming increasingly visible is the emergence of foreign networks, alongside the current terminal networks, in the Dutch market. This has consequences for the routing of authorisations and transactions; as international brands enter the Dutch market for debit cards, these authorisations and transactions will be routed not only through Equens but also through the MasterCard and VISA networks.

### 3.2 Legislation

In response to an initiative by DNB and the AFM, the Ministry of Finance is drafting legislation to regulate supervision of the financial infrastructure. DNB will be responsible for the system supervision of the financial infrastructure. The AFM will implement the conduct-of-business supervision component. It is not yet certain at what point this legislation will be introduced since the bill is currently on hold. It has been presented to the Lower House of Dutch Parliament, which has reported on the bill. The Ministry of Finance has informed the Lower House that it will not yet draw up a paper in response to the report because a proposal of the European Commission for a regulation on the same subject is presently being studied. This regulation is described below in section 3.3 (European Markets Infrastructure Regulation / EMIR). It does not seem worthwhile proceeding with the introduction of national legislation for securities oversight in anticipation of the regulation since EMIR is due to enter into force on 1 January 2013. However, the position is different regarding retail payments. DNB has therefore urged the Ministry of Finance to arrange for the rapid introduction of statutory instruments for the oversight of retail payments.

### **3.3 European Markets Infrastructure Regulation**

Since the financial crisis of September 2008, over-the-counter (OTC) derivatives have been at the centre of attention. In September 2009, it was agreed at the G20 meeting that, wherever possible, derivatives should be cleared through central counterparties (CCPs) by the end of 2012 at the latest. It was also agreed that OTC derivative contracts should be reported to trade repositories (TRs). Non-centrally cleared contracts should be subject to higher capital requirements. As a result of this G20 decision, European and US authorities are drafting legislation. The aim of this legislation is to reduce the counterparty risk of market participants and thus minimise the systemic risk of derivatives trading. Another aim is to increase the transparency of derivatives trading and improve its supervision.

The legislation to implement the G20 decision in Europe is the European Markets Infrastructure Regulation (EMIR), and the American equivalent is the Dodd-Frank Act. On 15 September 2010, the European Commission published a proposal on EMIR. This regulation contains provisions for OTC and other derivative contracts, and uniform provisions for the implementation of the activities of CCPs and TRs. EMIR will become the statutory supervision framework used by DNB and the AFM in supervising CCPs. The European Commission plans to have the regulation enter into force on 1 January 2013, as agreed in the G20. On 4 October 2011, the EMIR proposal was approved by ECOFIN. This marked the start of the negotiations between ECOFIN, the European Parliament and the European Commission ('the Trilogue negotiations'). The political negotiations on the EMIR text have now (February 2012) been completed.

In addition, the technical standards for CCPs and TRs are being developed. The standards for CCPs are being drafted by a working group consisting of members of the European Securities and Markets Authority (ESMA) and the European System of Central Banks (ESCB), in which both AFM and DNB are represented.

DNB's aim is to ensure consistency with the worldwide CPSS-IOSCO standards, which are also being developed (see section 3.4), and, where necessary, ascertain whether stricter standards can be defined for Europe.

The working group has used the input of market participants in developing the standards. Consultation of the market about the draft technical standards is scheduled for June 2012, and the standards should be finalised by September 2012. ESMA's Board of Supervisors will then send the proposal for the standards to the European Commission for inclusion in the EMIR text and for subsequent approval and implementation.

### **3.4 Development of CPSS-IOSCO standards for FMIs**

Partly in response to the crisis, existing oversight standards are being harmonised and strengthened worldwide. The CPSS-IOSCO recommendations for central counterparties, securities settlement systems and central securities depositories are being combined with the CPSS recommendations for systemically important payment systems to form a single document with principles that apply to all these entities, known as Financial Market Infrastructures (FMIs). The principles are minimum standards and are applicable to entities that are actively engaged in securities transactions and systemically relevant payment systems. Some of the principles are of relevance to trade repositories (a relatively new type of FMI). Trade repositories are companies that collect, update and make available information about derivative contracts. Five major TRs are active worldwide at present.

An important change in this new report is the inclusion of new principles governing liquidity risk, business risk and 'segregation and portability'. The principle of segregation and portability means that CCPs should organise their accounts in such a way that the positions of individual clearing members can be isolated quickly and easily in their books and then transferred to another clearing house, for example if a clearing member is dissatisfied about the service provided by the CCP or fears that the CCP may get into difficulties. The bar is raised higher for certain risks. For example, there is a new requirement that CCPs that operate internationally must be able to cope with the insolvency of their two largest participants (previously only one). The report mentions not only the principles applicable to the systems and their operators but also the responsibilities of the central bank and FMI securities regulators.

In response to the market consultation process initiated by CPSS-IOSCO in respect of these new principles, DNB organised a national consultation day. This was held on 30 June 2011. The 53 participants were from entities to which the principles will apply, the market participants in the systems, law firms, the Ministry of Finance, the AFM and DNB. The final principles and an assessment of the methodology will be announced in mid-April 2012. These new principles and the assessment methodology will form part of the supervision instruments of the Oversight Department and replace the existing standards.

### **3.5 Development of standards for retail payment systems**

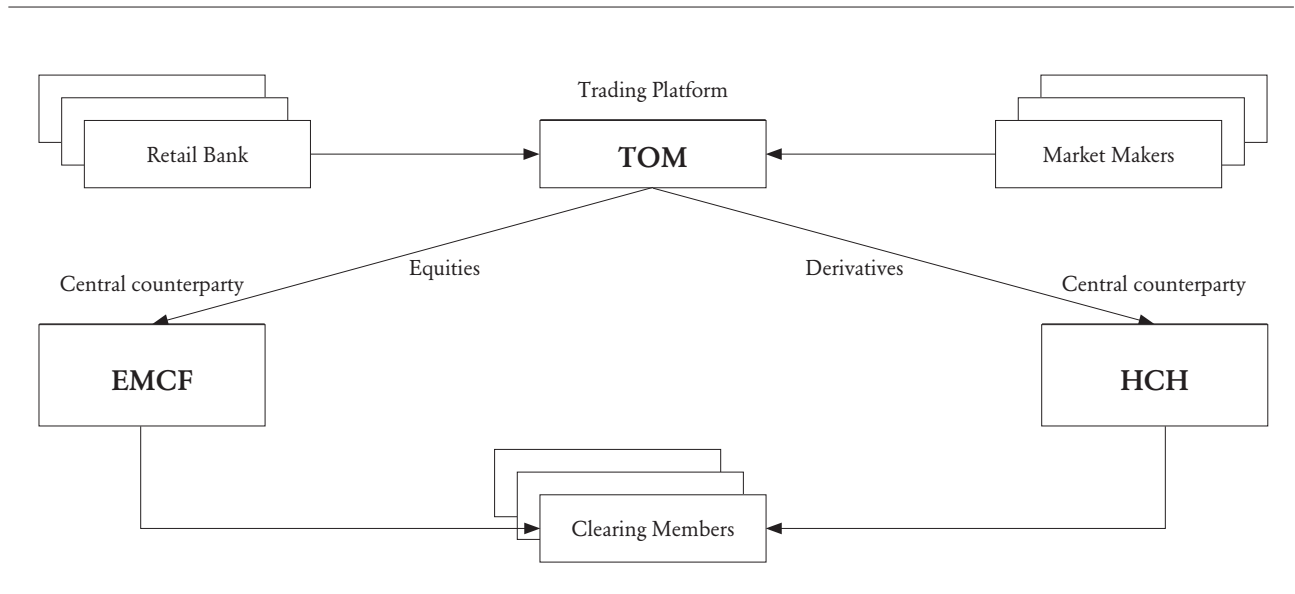
Payments made by consumers and businesses, such as credit transfers and direct debits, are generally processed in retail payment systems. A feature of these systems is the large number of payments of relatively small amounts. As the proper operation of these retail payment systems is of major importance to the payment system in general, they are overseen by DNB. An ESCB task force has been set up to ensure that all retail payment systems in Europe, depending on their national and European importance, are assessed by the same standards. These standards will be derived from the new CPSS-IOSCO standards (see section 3.4). In this way a European level playing field will be created for the oversight of these systems.

The retail payment systems in Europe, including the Dutch system Equens, have formed mutual operational links in recent years. These links enable payments between consumers and retailers in different countries. To assess whether these links between retail payment systems constitute a source of financial risk, the ESCB is also developing oversight standards for these links between retail payment systems. Following a public consultation process initiated at the beginning of 2012, these standards are expected to be applied in the course of this year.

### **3.6 Holland Clearing House: new central counterparty**

Since 1 July 2011, there has been a new Dutch central counterparty, namely Holland Clearing House N.V. (HCH). HCH is the CCP for derivative transactions conducted on The Order Machine (TOM), a Dutch trading platform. HCH is the third CCP in the Netherlands, alongside LCH.Clearnet SA and EMCF. HCH was founded by ABN AMRO Clearing Bank N.V. HCH's activities are still in their early stages. In 2011, the new CCP had one participant and in January 2012 a second participant became active.

Figure 3.1 Clearing structure of TOM trading platform



In due course, however, HCH can expand either by increasing its trading volume on TOM or establishing a link with other trading platforms. TOM trading platform was founded by BinckBank and Optiver for derivative transactions in Dutch equities. In addition, TOM has operated an equity trading platform since the autumn of 2010, with clearing through EMCF (see Figure 3.1).

## 4. Assessment results: large-value payment systems

### TARGET<sub>2</sub>

TARGET<sub>2</sub> is the main system for interbank payments in euros, and has been in use in Europe since 2008. Legally it comprises a collection of payment systems operated by the 17 national central banks (NCBs) in the euro area, plus the European Central Bank and the central banks of a number of other European countries (Bulgaria, Denmark, Latvia, Lithuania and Poland). The Dutch system is designated TARGET<sub>2</sub>.NL. Transactions are processed on a common platform; this task has been formally outsourced to the NCBs of Germany, Italy and France, which have built and operate this platform.

The annual new Single Shared Platform release of TARGET<sub>2</sub> in November 2011 consisted of only a few changes of a minor nature in terms of both number and impact. The main modification in this release was the introduction of a contingency network to provide for the situation that the existing network is no longer available. DNB's oversight function will assess the change by reference to Core Principle 1 (legal basis). The contingency network has already been assessed and approved by reference to the other Core Principles (by the ECB, Banca d'Italia and DNB). As the other changes have also been approved, the conclusion is that TARGET<sub>2</sub> complies with all relevant Core Principles.

**Table 4.1 Oversight assessment of TARGET<sub>2</sub>**

Core Principles for Systemically Important Payment Systems	Assessment		
	2009	2010	2011
Legal basis	Observed	Observed	Observed
Understanding of financial risks	Observed	Observed	Observed
Management of financial risks	Observed	Observed	Observed
Prompt final settlement	Observed	Observed	Observed
Multilateral netting systems	Not applicable	Not applicable	Not applicable
Settlement assets	Observed	Observed	Observed
Operational reliability	Observed	Observed	Observed
Efficiency	Observed	Observed	Observed
Access	Observed	Observed	Observed
Governance	Observed	Observed	Observed

An important aspect of the oversight of the national component of TARGET2 is the Business Continuity Management (BCM) policy. The first action in 2011 was the completion of the follow-up assessment of the 2009 BCM recommendations. The general conclusion was that the policy plan of the TARGET2.NL operator formed a sufficient basis for effective and efficient business continuity management. One of the recommendations was that risk analyses be carried out to identify any residual risks. This was done, for example, in the new BCM assessment of TARGET2.NL, which was carried out in the autumn as part of the sector-wide BCM assessment of the Financial Core Infrastructure. This study showed that the earlier recommendations had been acted upon. The TARGET2.NL operator has endorsed the findings and recommendations.

## EURO1

EURO1 is a large-value payment system for cross-border and domestic transactions in euros between banks in the European Union. It is managed by EBA Clearing Company, which was founded by the Euro Banking Association (EBA). EURO1 was launched at the time of the introduction of the euro and was developed to provide an efficient, secure and profitable infrastructure for large-value interbank payments. Oversight takes place on a cooperative basis, with the ECB as lead overseer.

The assessment of EURO1 against the Core Principles (CP) was completed in 2011. This assessment was carried out by the ECB, together with the Bundesbank, Banca d'Italia, Banco de España and DNB. The conclusion is that EURO1 complies with all CPs except CP10 (Governance), which it observes only broadly (see Table 4.2). The reason is that EBA Clearing does not have a separate risk management unit or internal audit service. In response, the EBA Clearing Board decided in September 2011 to establish a Risk Management Unit.

**Table 4.2 Oversight assessment of EURO1**

Core Principles for Systemically Important Payment Systems	2011	
	Observed	Not observed
Legal basis	Observed	Not observed
Understanding of financial risks	Observed	Not observed
Management of financial risks	Observed	Not observed
Prompt final settlement	Observed	Not observed
Multilateral netting systems	Observed	Not observed
Settlement assets	Observed	Not observed
Operational reliability	Observed	Not observed
Efficiency	Observed	Not observed
Access	Observed	Not observed
Governance	Broadly observed	Not observed

In 2011, EBA Clearing also made a number of changes to the risk and liquidity management instruments available to banks in EURO1. For example, the number of windows in the EURO1- TARGET2 liquidity bridge was increased from four to six, thereby allowing better coordination of the liquidity management in EURO1 and TARGET2. In addition, the bilateral limits on EURO1 participants were adjusted. The mandatory credit limit was lowered from EUR 5 million to EUR 2 million and the discretionary credit limit was raised from EUR 25 million to EUR 50 million. Finally, the deadline for a bank to change discretionary bilateral limits was moved from 19.00 hrs on the preceding day to 07.00 hrs on settlement day. The changes to the procedures for the determination of bilateral limits should make it possible to respond more promptly and effectively to changes in counterparty exposures.



## 5. Assessment results: securities clearing and settlement systems

### **LCH.Clearnet SA**

LCH.Clearnet SA is the Central Counterparty (CCP) for transactions executed on the Euronext stock and derivatives exchanges, including Euronext Amsterdam. It also acts as the central counterparty for bond and repo transactions. A major development for LCH.Clearnet SA in 2010 was the cancellation by NYSE Euronext of the equity and derivatives clearing contract with effect from the end of 2012 as it intended to set up its own clearing house. At present, NYSE Euronext still accounts for 60-70% of the total volumes within LCH.Clearnet SA. In 2011 NYSE Euronext renewed the equity and derivatives clearing contracts with LCH.Clearnet SA until December 2013 and June 2013 respectively.

In 2011, the joint regulators initiated a full assessment, based on the ESCB-CESR Recommendations. This is scheduled for completion in 2012. The 2010 oversight report contained the latest update on the compliance of LCH.Clearnet SA with the applicable oversight standards.

In 2011, DNB was also involved in assessing the clearing of Credit Default Swaps (CDS) by LCH.Clearnet SA. The CDS clearing offering is being introduced in stages and started in 2010. As the clearing funds are separate and CDS clearing is subject to specific rules, the regulatory authorities had no objection to this activity. French banks are already making use of the CDS clearing offering of LCH.Clearnet SA, and UK and US banks may also participate in due course.

The degree of availability of the UCS cash clearing system in the Netherlands was 100% in 2011 and thus exceeded the 98.5% standard set by LCH.Clearnet SA itself.

LCH.Clearnet SA forms part of the LCH.Clearnet Group Ltd and is a sister company of LCH.Clearnet Ltd. The sister company carries out clearing for The London Stock Exchange (LSE) and others and is also the world's largest player (under the name Swapclear) in the clearing of OTC interest rate swaps.

The cancellation of the clearing contract by NYSE Euronext and the announcement of a possible merger between Deutsche Börse and NYSE Euronext have set in motion a process of strategic review and internal organisational change at LCH.Clearnet. The joint regulators have been informed by LCH.Clearnet Group Ltd of the results of the analysis. It is now up to LCH.Clearnet Group Ltd to embark on implementation; the approval of the joint regulators will be required for specific parts of the implementation process. This will be assessed in 2012.

### **European Multilateral Clearing Facility**

European Multilateral Clearing Facility (EMCF) is a Dutch organisation that acts as a central counterparty (CCP) between trading parties. EMCF assumes the counterparty risk of executed transactions, nets the outstanding positions of



each counterparty / clearing participant and requests collateral from the clearing participants to cover the risk. EMCF was founded in 2007 and achieved explosive growth in its initial years. In 2011, growth levelled off slightly, but by the end of 2011 EMCF had a market share of 30-35% of transactions in European blue-chip stocks. In November 2011, EMCF was responsible for the clearing of seven trading platforms (Chi-X, BATS, Burgundy, Quote, Nasdaq OMX Nordic, TOM Trading and First North) and was one of the biggest players in Europe in securities clearing. Since 2010 EMCF has also been active in an increasing number of markets (see Figure 5.1).

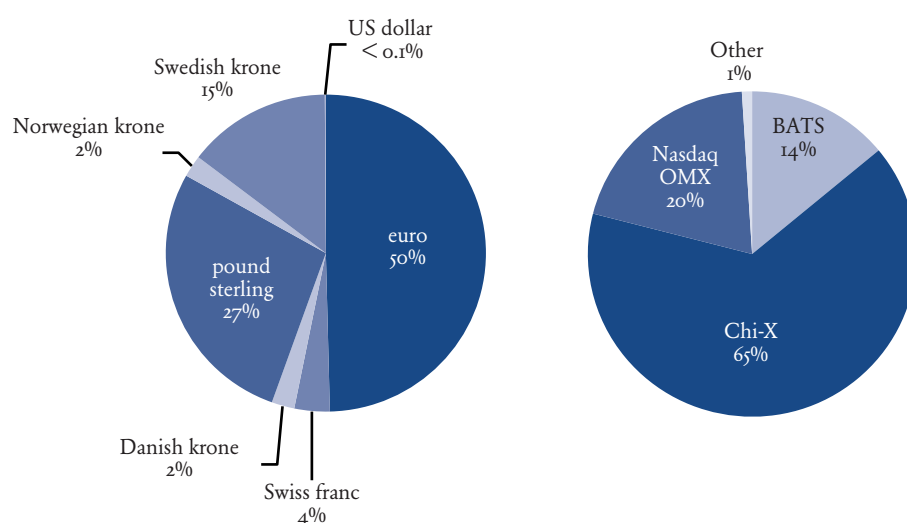
In 2010/2011, DNB and the AFM together carried out an assessment on the basis of the ESCB-CESR Recommendations for CCPs. EMCF complied with eleven of the fifteen standards in 2011 (see Table 5.2). Standard 11 was not assessed as EMCF did not have links with other CCPs at the time of assessment. However, in early 2012 an application from EMCF for interoperability with three other CCPs was approved, and EMCF now has links with EuroCCP, LCH.Clearnet Ltd and SIX x-clear. EMCF complies with standard 11 for links (see also below).

EMCF observes the following four recommendations only broadly: financial resources, custody risks, money settlements and physical deliveries. Its scores on these recommendations are due, in part, to its heavy dependence on ABN AMRO Clearing Bank. Other points for action previously identified by the Oversight Department have now largely been resolved.

Although EMCF is taking further steps to improve the assessment results, it should be noted that full compliance with the recommendations does not seem feasible in the short term, partly due to the settlement model used by EMCF. At present, DNB and EMCF are working to establish a settlement system in central bank money. The access by EMCF to CSDs could possibly be solved by future European CSD legislation.

As the interoperability was approved on 4 January 2012, standard 11 has become applicable.

Figure 5.1 EMCF: Analysis of cleared contracts by currency and trading platform



Source: EMCF (position as at December 2011)

**Table 5.2 Oversight assessment of EMCF**

Recommendations for Central Counterparties	2009	2010	2011
	Legal risk	Observed	Observed
Participation requirements	Observed	Observed	Observed
Management of credit risks	Observed	Observed	Observed
Collateral requirements	Observed	Observed	Observed
Financial resources	Broadly observed	Broadly observed	Broadly observed
Default procedures	Observed	Observed	Observed
Custody risks	Broadly observed	Broadly observed	Broadly observed
Operational reliability	Observed	Observed	Observed
Settlement assets	Broadly observed	Broadly observed	Broadly observed
Physical deliveries	Broadly observed	Broadly observed	Broadly observed
Risks in links between CCPs	Not applicable	Not applicable	Observed
Efficiency	Observed	Observed	Observed
Governance	Broadly observed	Broadly observed	Observed
Transparency	Observed	Observed	Observed
Regulation and oversight	Observed	Observed	Observed

The first application for interoperability was received by the AFM and DNB from EMCF in 2010. This concerned links with three other CCPs: LCH.Clearnet Ltd., EuroCCP and SIX x-clear. This application was considered at that time in consultation with the regulators of the other CCPs, namely the UK Financial Services Authority (for EuroCCP and LCH.Clearnet Ltd) and the Eidgenössische Finanzmarktaufsicht and Schweizerische National Bank of Switzerland (for SIX x-clear). At that time there were still deficiencies in the application, for example concerning the legal certainty of the interoperability fund and the timing of margin amounts to be exchanged between the CCPs. In September 2011, EMCF submitted a renewed application for interoperability, which contained solutions for the previous deficiencies. Ultimately, DNB and the AFM jointly approved this application for interoperability for the Chi-X and BATS platforms on 4 January 2012. EMCF became interoperable on 6 January.

In order to reduce EMCF's dependence on commercial banks for its liquidity, the possibility of intraday credit in central bank money has been arranged in consultation with EMCF. The securities that EMCF has deposited in its TARGET2 account at DNB will serve as collateral for any exceptional liquidity requirements it may have. The intention is for EMCF ultimately to have sufficient resources in its TARGET2 account for the financing of its regular settlements.

In addition, EMCF has started, in consultation with its clearing members, to change the manner in which margin requirements are met from a pledge system to a system based on transfer of ownership. EMCF will use these moneys as liquidity to help

fund settlements and thus become less dependent on its liquidity providers such as ABN AMRO Bank. This project will be introduced in stages.

As a consequence of the recent ESCB-CESR assessment, DNB and the AFM asked EMCF to configure the risk framework in such a way that no shortfalls could occur, even in the event of extreme stress scenarios. EMCF has resolved this by incorporating extra buffers. DNB and the AFM regard this as a solution for the identified deficiency in the risk framework.

To increase settlement efficiency, EMCF made a proposal in 2011 for the introduction of a fail fee. The fail fee would be set at such a level that it would be more cost-effective for clearing members to make settlement than to incur the fail fee. As a result of changed market circumstances, EMCF has not yet rolled out this fail fee system.

As part of the Financial Core Infrastructure (FCI) EMCF was subject to a BCM assessment in 2011. This was carried out by the ICT Expertise Centre and Oversight. The findings of the assessment are predominantly positive for EMCF.

In 2011, EMCF started clearing a limited number of OTC transactions. These are transactions in structured products executed on a Citibank platform and not on an MTF or regulated market. EMCF has also started clearing trades for the Norwegian segment of the Swedish MTF First North. Here Norwegian stocks that have recently been listed on the Norwegian exchange are traded.

### **Euroclear – ESES**







































Euroclear Nederland is the Central Securities Depository (CSD) in the Netherlands, providing settlement, custody and administration services to banks and investment institutions. In 2009 Euroclear Nederland and the Euroclear CSDs in Belgium and France launched a new securities settlement system known as Euroclear Settlement for Euronext-zone Securities (ESES). Since then, ESES has settled securities transactions, using central bank money, i.e. settlement between accounts held at a central bank. This is done largely on a ‘delivery versus payment’ basis, whereby the delivery of securities and final payment take place simultaneously, greatly reducing counterparty risks. The ESES system settles transactions on the Belgian, French and Dutch Euronext exchanges and over-the-counter trades on a single technical platform, thereby eliminating the difference between domestic and cross-border securities transactions between these three countries.

Last year the assessment of the Euroclear Securities Settlement System (ESE) was completed. This was carried out by DNB, NBB and Banque de France. The result of this assessment of Euroclear Nederland is shown in Table 5.3.

RSSS4 does not apply because the relevant CCP – LCH.Clearnet SA – is assessed separately. In 2010, Euroclear Nederland did not fully satisfy the access standard, because its terms and conditions did not admit institutions from outside the European Economic Area (EEA) to the system. This geographical restriction is contrary to the standards, which stipulate that any exclusion must be risk-based. In the Netherlands the access criteria are in fact determined by the Minister of Finance and not the CSD. The Ministry of Finance has now approved a relevant proposal submitted by Euroclear Nederland. This means that Euroclear Nederland now complies with all applicable standards.

**Table 5.3 Oversight assessment of Euroclear Nederland - ESES**

 Observed	 Not observed
 Broadly observed	 Not applicable
 Partly observed	 Not assessed

Recommendations for Securities Settlement Systems	2010	2011
Legal basis		
Transaction confirmation		
Settlement time		
Central counterparties		
Securities lending		
Dematerialisation		
Delivery versus Payment		
Settlement finality		
Credit risks		
Settlement assets		
Operational reliability		
Ownership protection		
Governance		
Access		
Efficiency		
Communication standards		
Transparency		
Regulation and oversight		
Links between CSDs		

Euroclear Nederland has requested consent from DNB and the AFM to perform three types of ancillary issuer services. The first type involves the provision of services relating to corporate actions and payment services directly to issuing institutions. These services will enable an issuer, among other things, to transfer dividend payments directly, without the intermediary of an agent, to Euroclear, which can then distribute them among the participating institutions. The potential advantages are that no credit risk is run on an agent and there is one less link in the chain.

In addition, consent has been requested for the provision of a proxy voting service (proxy voting enables a shareholder to cast votes for shares at a meeting of shareholders at which it is not present) in cooperation with Broadridge Financial Solutions Limited. Broadridge is the global market leader in this area. Once again, the main advantage for the issuing institutions is that the role of the agent in the chain is eliminated. Finally, Euroclear Nederland has requested consent to provide a shareholder identification service. This service would enable the issuing institution to check the identity of its shareholders, particularly the international shareholders.

DNB and the AFM have assessed these proposals of Euroclear Nederland. The main assessment criterion was to what extent the offering of the services by Euroclear

Nederland could adversely affect the CSD and the settlement function of Euroclear. In addition, they have examined to what extent it would remain possible for other parties to offer services to issuing institutions in keeping with the principle of open access (standard 14). DNB and the AFM have come to the conclusion that the risks are limited and that there is no objection to the offering of these ancillary services by Euroclear Nederland. Approval has therefore been granted to Euroclear Nederland.

## EuroCCP

EuroCCP is the central counterparty for transactions concluded on the trading platforms Turquoise, NYSE Smartpool, BATS and NYSE Arca Europe. EuroCCP is based in the United Kingdom and is a wholly-owned subsidiary of the US-based Depository Trust & Clearing Corporation (DTCC), which is active in the clearing and settlement of transactions in equities and bonds in the United States. The primary regulator of EuroCCP is the British Financial Services Authority (FSA). Since early 2009, DNB and the AFM have overseen EuroCCP because it is the CCP for the Dutch trading platform NYSE ARCA Europe. The AFM, DNB and the FSA have made agreements about the coordination of the supervision of EuroCCP. In 2010, the AFM and DNB carried out an initial assessment of EuroCCP, based on the CPSS-IOSCO standards for CCPs. The initial assessment showed that EuroCCP observed nine, and broadly observed five, of the fourteen standards (see Table 5.4). EuroCCP has drawn up plans to mitigate the risks in respect of the standards that are not yet fully observed. The AFM, DNB and the FSA have made agreements

**Table 5.4 Oversight assessment of EuroCCP**

Recommendations for Central Counterparties	2009	2010	2011
Legal risk	Broadly observed	Broadly observed	Broadly observed
Participation requirements	Observed	Observed	Observed
Management of credit risks	Observed	Observed	Observed
Collateral requirements	Observed	Observed	Observed
Financial resources	Broadly observed	Broadly observed	Broadly observed
Default procedures	Observed	Observed	Observed
Custody risks	Broadly observed	Broadly observed	Broadly observed
Operational reliability	Observed	Observed	Observed
Settlement assets	Broadly observed	Broadly observed	Broadly observed
Physical deliveries	Broadly observed	Broadly observed	Broadly observed
Risks in links between CCPs	Not applicable	Not applicable	Not applicable
Efficiency	Observed	Observed	Observed
Governance	Observed	Observed	Observed
Transparency	Observed	Observed	Observed
Regulation and oversight	Observed	Observed	Observed

about coordinating the supervision of EuroCCP in an MoU and an accompanying letter agreement.

Since September 2011, EuroCCP has also provided CCP services for the British trading platform BATS. Originally EMCF was the CCP for BATS. Clients of BATS can now choose between remaining with EMCF and switching to EuroCCP, LCH.Clearnet Ltd or SIX x-clear. If they choose to switch, they can make use of interoperability.

### European Commodity Clearing

The Amsterdam-based European Energy Derivatives Exchange N.V. (ENDEX) was recognised by the Ministry of Finance in October 2004 as the exchange for trading in futures contracts in electricity and (since 2006) gas as well. ENDEX has outsourced the clearing and settlement of the transactions to European Commodity Clearing (ECC) in Leipzig. ENDEX is subject to the supervision of the AFM and DNB as regards clearing and settlement, as formalised in the ENDEX Clearing and Settlement Supervision Framework. ECC is the central counterparty in the case of energy contracts that are traded on various trading platforms. One of these platforms is the Dutch trading platform ENDEX. Since 2006, ENDEX has been involved in a cooperative arrangement with ECC for the clearing of gas futures contracts. ECC has also arranged the clearing of the ENDEX-traded electricity contracts since June 2007.

**Table 5.5 Oversight assessment of ECC**

Recommendations for Central Counterparties	2011
Legal risk	Observed
Participation requirements	Observed
Management of credit risks	Observed
Collateral requirements	Observed
Financial resources	Observed
Default procedures	Broadly observed
Custody risks	Observed
Operational reliability	Observed
Cash settlement assets	Observed
Physical deliveries	Observed
Risks in links between CCPs	Observed
Efficiency	Observed
Governance	Observed
Transparency	Observed
Regulation and oversight	Observed

ECC has its registered office in Leipzig and is subject to the supervision of Deutsche Bundesbank and Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin). DNB and the AFM have held consultations with Bundesbank and BaFin on arrangements for exchanging information about the clearing by ECC of ENDEX-traded futures contracts. This has resulted in an MoU between the Dutch and German regulatory authorities. ECC has indicated that it will draw up plans for mitigating the risks.

In 2011, DNB and AFM, in cooperation with BaFin, carried out a full assessment of ECC on the basis of the ESCB-CESR Recommendations for Central Counterparties. ECC complies with 14 of the 15 standards (see Table 5.5) and broadly observes standard 6, default procedures. ECC can fully comply with this standard by testing its procedures at regular intervals.

## 6. Assessment results: retail payment systems and products

### Equens SE

Equens SE processes financial transactions of consumers and businesses effected using payment products. Its services cover the entire spectrum of cashless and card-based transaction processing, including clearing and settlement of these payments. DNB carries out oversight in four areas of the Equens SE activities: the Clearing and Settlement System (CSS) for clearing domestic payments; the Equens Clearing and Settlement Mechanism (CSM) for clearing SEPA payments; and Switch, the central system for the authorisation of electronic card payments. From the beginning of 2012 Equens SE will also be classified as an independent subject of oversight. This involves ensuring that the legal structure of the business, the governance and the risk management are properly organised and that Equens does not run any irresponsible business risks that might jeopardise the continuity of the other subjects of oversight within Equens.

The CSS complies with eight of the ten standards set at European level (see Table 6.1). One standard is not applicable. In 2011, an assessment was made of the business continuity of CSS. This produced various findings, as a result of which CSS broadly complies with the standard of operational reliability.

**Table 6.1 Oversight assessment of Equens CSS**

Core Principles for Systemically Important Retail Payment Systems	Assessment Results		
	2009	2010	2011
Legal basis	Observed	Observed	Observed
Transparency of financial risks	Observed	Observed	Observed
Management of financial risks	Observed	Observed	Observed
Prompt final settlement	Observed	Observed	Observed
Multilateral netting systems	Not applicable	Not applicable	Not applicable
Settlement assets	Observed	Observed	Observed
Operational reliability	Observed	Observed	Broadly observed
Efficiency	Observed	Observed	Observed
Access	Observed	Observed	Observed
Governance	Observed	Observed	Observed



Owing to the migration to SEPA products in the coming years, CSS will be phased out in favour of Equens CSM, which is consequently likely to develop very rapidly into the dominant system for Dutch retail payments. In anticipation of this development, two assessments of Equens CSM were completed in 2011. These involved evaluating the system in the light of the standards that will apply in a few years' time after the migration to SEPA products is completed. The first assessment involved evaluation of the links established by Equens CSM with other clearing and settlement systems in Europe. In addition, Equens CSM was assessed by reference to the core principles that apply to prominently important retail payment systems. These standards were applied since it was expected that CSM would become a prominently important retail payment system in the near future. CSM does not yet fully comply with all standards. For example, the strongly international character of CSM is the subject of legal findings and not all the system documentation has yet been updated and implemented. The reason why CSM is said to observe the governance standard 'broadly' is because of the absence of a formal complaints procedure for potential participants.

Equens SE operates the Interbank Authorisation Network (also referred to as IAN-Switch or simply Switch). Switch facilitates payments made using a PIN as the means of identification (guest use cash withdrawals from ATMs, POS terminal payments, loading Chipknip electronic wallet cards and Maestro transactions) as well as credit card payments. The retailer's payment terminal contacts Switch indirectly, which sends the authorisation request to the customer's bank and returns the result to the payment terminal. The high degree of business certainty offered by Switch is of great importance to society as a whole. This is evident from the public's reactions to a few disruptions that affected Switch in 2011. Although virtually all the disruptions lasted only a short time or affected only a small number of terminals, they attracted much media coverage. The first assessment of Switch was carried out in 2009 (see Table 6.3) on the basis of the three CPs most relevant to it. Switch now complies with the three core principles.

**Table 6.2 Oversight assessment of Equens CSM**

Core Principles for Prominently Important Retail Payment Systems	2011	
	Observed	Not observed
Legal basis	Broadly observed	Not observed
Transparency of financial risks	Observed	Not observed
Management of financial risks	Not assessed	Not assessed
Prompt final settlement	Not assessed	Not assessed
Multilateral netting systems	Not applicable	Not applicable
Settlement assets	Not assessed	Not assessed
Operational reliability	Observed	Not observed
Efficiency	Observed	Not observed
Access	Observed	Not observed
Governance	Broadly observed	Not observed

## iDEAL

iDEAL is a national payment product for online purchases in which the originator of the payment uses an online banking application from a Dutch bank. The online retailer and the bank must support the iDEAL payment standard. The legal owner of iDEAL is Currence. iDEAL has been operational since 2005 and the number of transactions has grown to almost 94 million in the past year. In December 2011, the 250 millionth transaction was processed since the product's launch.

Six Dutch banks currently accept payment instructions via iDEAL and customers of nine Dutch banks can use iDEAL to make payments. At the end of 2011, the payment standard was adjusted to allow mobile use of iDEAL. Several banks are expected to offer this variant in 2012.

In view of the importance of iDEAL as an interbank payment product in the Dutch retail payments system, DNB conducts active oversight of the product. DNB has concluded that iDEAL satisfies all relevant standards (see Table 6.4).

A SEPA ePayment Framework has been established by the European Payment Council (EPC) for payments by means of online banking. In 2011, EBA Clearing announced the MyBank initiative, which involves a European implementation of the EPC framework. At present, a study of the competition aspects is being carried out by the Directorate General for Competition of the European Commission. As a result, the activities of banks have been suspended for the time being.

In 2011, a study demonstrated the possibility of interoperability between iDEAL, the German giro pay and the Austrian eps. This was based on the draft of the e-Payments Framework of the European Payment Council (EPC). In view of the uncertainty about the finalisation of the Framework the follow-up activities in this field have been suspended.

**Table 6.3 Oversight assessment of Switch Equens**

Core Principles for Systemically Important Retail Payment Systems	2009	2010	2011
	Legal basis	Not assessed	Not assessed
Transparency of financial risks	Not assessed	Not assessed	Not assessed
Management of financial risks	Not applicable	Not applicable	Not applicable
Prompt final settlement	Not applicable	Not applicable	Not applicable
Multilateral netting systems	Not assessed	Not assessed	Not assessed
Settlement assets	Not applicable	Not applicable	Not applicable
Operational reliability	Observed	Observed	Observed
Efficiency	Not assessed	Not assessed	Not assessed
Access	Observed	Observed	Observed
Governance	Broadly observed	Broadly observed	Observed

Table 6.4 Oversight assessment of iDEAL

Recommendations for Payment Products	2009	2010	2011
Legal structure	Observed	Observed	Observed
Solid financial position	Observed	Observed	Observed
Outsourcing	Observed	Observed	Observed
Legislation and regulations	Observed	Observed	Observed
Product conditions	Observed	Observed	Observed
Risk spreading	Observed	Observed	Observed
Risk analysis	Observed	Observed	Observed
Periodic review of risk analysis	Observed	Observed	Observed
Security and continuity	Observed	Observed	Observed
Integrity and governance	Observed	Observed	Observed

## PIN

The year 2011 was the last full year that PIN was operational as a cashless payment product for over-the-counter payments using a debit card and PIN code. PIN is owned by Currence. The national payment product, which uses a magnetic stripe, is to be replaced in the course of 2011 by international payment products based on chip technology (EMV), such as Maestro from MasterCard and V Pay from Visa. The PIN brand will cease to exist in 2012.

In view of PIN's importance in the Dutch retail payments system, it was assessed against the European Oversight Framework for Card Payment Schemes in 2009 and found to still satisfy all five standards of the framework (see Table 6.5). As a result of various disruptions in the PIN payment system in 2011, payments by debit card were not possible at some locations or possible only after some considerable delay.

Table 6.5 Oversight assessment of PIN

Oversight framework for Card Payment Schemes	2009	2010	2011
Legal structure	Observed	Observed	Observed
Product conditions	Observed	Observed	Observed
Security and continuity	Observed	Observed	Observed
Governance	Observed	Observed	Observed
Financial risks	Observed	Observed	Observed

These disruptions were mainly caused by problems in the infrastructure (see section on Equens).

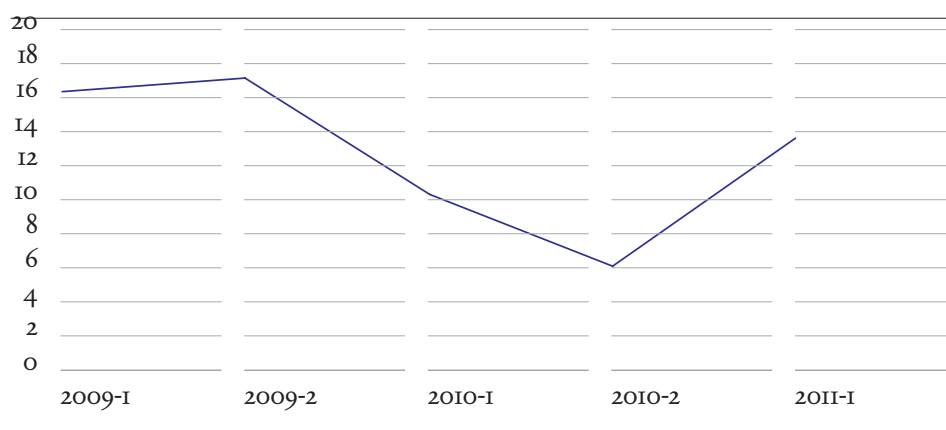
As the migration of the magnetic stripe to the EMV chip has consequences for the financial infrastructure, the Oversight Department monitored the progress of this migration in 2011. Important aspects of the migration to EMV are the renewal of the PIN contracts between retailers and banks and the modification of the POS terminals. As some banks did not start converting contracts until relatively late, the EMV programme suffered some delay in the course of 2011.

In addition, not all POS terminals are yet ready to use EMV. In December 2011, 97% of terminals had been modified. The EMV project office, working with various banks, will identify what payment terminals require extra attention. This operation is expected to be completed in the first quarter of 2012.

In 2011, the Oversight Department monitored skimming fraud to assess the extent of the losses suffered by NVB member banks. The graph (Figure 6.6) shows that in the first half of 2011 the losses suffered by banks as a result of skimming were higher than in the same period in 2010 (total loss of EUR 11.8 million in the first half of 2010 compared with EUR 15 million in the first half of 2011). If this trend continues, the loss in the second half of 2011 will also be higher than in the corresponding period of 2010. As losses are increasing in 2011, the Oversight Department will continue to closely monitor developments in relation to skimming fraud in 2012

**Figure 6.6 Bank losses from skimming fraud**

In EUR million



Source: NVB

## Appendix – abbreviations used

<b>AFM</b>	Netherlands Authority for the Financial Markets ( <i>Autoriteit Financiële Markten</i> )
<b>BCM</b>	Business Continuity Management
<b>BIS</b>	Bank for International Settlements
<b>CCP</b>	Central Counterparty
<b>CDS</b>	Credit Default Swaps
<b>CESR</b>	Committee of European Securities Regulators
<b>CLS</b>	Continuous Linked Settlement
<b>CP</b>	Core Principle
<b>CPS</b>	Card Payment Scheme
<b>CPSS</b>	Committee on Payment and Settlement Systems (of the BIS)
<b>CSD</b>	Central Securities Depository
<b>CSM</b>	Clearing and Settlement Mechanism
<b>CSS</b>	Clearing and Settlement System
<b>DTCC</b>	Depository Trust & Clearing Corporation
<b>EBA</b>	European Banking Authority
<b>EC</b>	European Commission
<b>ECB</b>	European Central Bank
<b>ECOFIN</b>	European and Financial Affairs Council (composed of the economics ministers and finance ministers of the members states of the European Union)
<b>EMCF</b>	European Multilateral Clearing Facility
<b>EMIR</b>	European Markets Infrastructure Regulation
<b>EMV</b>	Cooperative arrangement between Europay, MasterCard and Visa
<b>ENDEX</b>	European Energy Derivatives Exchange
<b>EPC</b>	European Payments Council
<b>ESES</b>	Euroclear Settlement of Euronext-zone Securities
<b>ESCB</b>	European System of Central Banks
<b>ESMA</b>	European Securities and Market Authority
<b>FINMA</b>	Swiss Financial Market Supervisory Authority
<b>FMI</b>	Financial Market Infrastructures
<b>FSA</b>	Financial Services Authority
<b>FX</b>	Foreign Exchange
<b>HCH</b>	Holland Clearing House
<b>IAN</b>	Interbank Authorisation Network
<b>IOSCO</b>	International Organization of Securities Commissions
<b>LSE</b>	London Stock Exchange
<b>MoU</b>	Memorandum of Understanding
<b>MTF</b>	Multilateral Trading Facility
<b>NBB</b>	National Bank of Belgium ( <i>Nationale Bank van België</i> )
<b>NCB</b>	National Central Bank
<b>NVB</b>	Dutch Banking Association ( <i>Nederlandse Vereniging van Banken</i> )
<b>OTC</b>	Over the Counter
<b>RCCP</b>	Recommendations for Central Counterparties
<b>RSSS</b>	Recommendations for Securities Settlement Systems
<b>SEPA</b>	Single Euro Payments Area

<b>SNB</b>	Swiss National Bank ( <i>Schweizerische Nationalbank</i> )
<b>SSS</b>	Securities Settlement Systems
<b>TARGET2</b>	Trans-European Automated Real-time Gross settlement Express Transfer system
<b>T2S</b>	TARGET2 Securities
<b>TOM</b>	The Order Machine
<b>TR</b>	Trade Repository
<b>Wft</b>	Dutch Financial Supervision Act ( <i>Wet op het financieel toezicht</i> )
<b>UCS</b>	Universal Clearing System