

## 6 Oversight of payment and settlement systems

### 6.1 Introduction

Payment and settlement systems largely satisfactory

The payment and settlement systems relevant for the Netherlands largely meet the set international standards. This is evident from the supervision exercised in 2006. Supervision of payment and settlement systems, known as oversight, is among a central bank's normal responsibilities. Each central bank has to publish the oversight objectives and working methods in order to promote transparency. This was agreed by the G-10 in 2005 (see report 'Central bank oversight of payment and settlement systems by the BIS'). The central banks of France, the United Kingdom, Sweden and the Netherlands plus the ECB opted for even greater transparency by also publishing the oversight findings. DNB publishes individual assessment results in its Quarterly Bulletin. For the first time, these results are included in the Annual Report in overall form.

### 6.2 Function of oversight

Oversight is a form of supervision aimed at promoting the security and efficiency of payment and securities clearing and settlement systems. DNB considers that this includes all payment systems, payment products and securities settlement systems of relevance for the Netherlands. The supervision consists in monitoring these systems and products, assessing them in the light of international standards and – where necessary – insisting on changes.

#### 6.2.1 Oversight objectives

Oversight has dual objectives. The first objective is to help prevent systemic risks in what are called systemically important payment systems. If such systemically important payment systems are not well-designed, do not operate efficiently or are not carefully managed, a systemic risk arises which may endanger financial stability. For example, a systemic risk may result if a crucial payment system breaks down, or if a payments participant is unable to meet its obligations, thus triggering a chain reaction causing problems for other participants. This domino effect may have adverse consequences for a country's financial markets and broader economic development of a country. To assess systemically important payment systems, use is therefore made of standards which are intended to prevent one party's liquidity problems from spreading to the other payment system participants and beyond.

The second objective of oversight is to control risks which may affect the smooth operation of the payment system. One example is fraud via electronic means of payment, such as the skimming of bank cards. These risks may endanger the smooth operation of payment systems, even if there is no systemic

risk. However, the poor functioning of one or more payment products may have significant economic and social implications, and may ultimately damage public confidence in the payment and currency system.

6.2.2 *Current and future legal basis*

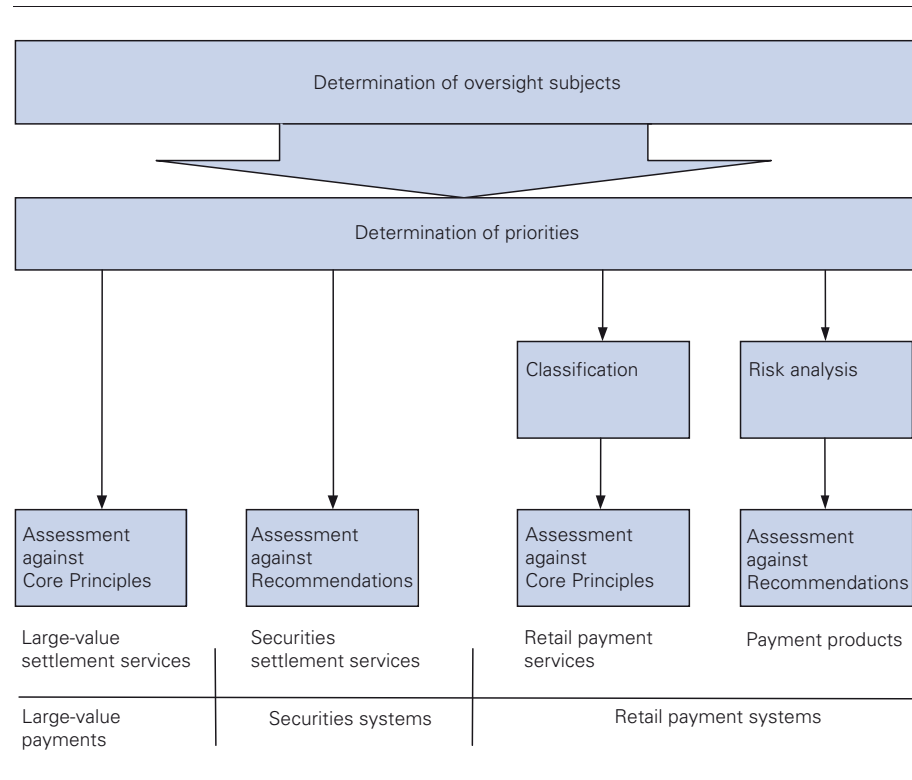
Impending new oversight law

The legal basis for oversight lies in the Banking Act 1998 and in the EU Treaty. In addition, the Netherlands Authority for the Financial Markets (AFM) and DNB jointly supervise the clearing and settlement of transactions on Euronext Amsterdam. In 2006, progress was made on a new law which regulates supervision of the financial infrastructure. In January 2007 this law was submitted to the market for consultation. It offers supervision instruments for part of DNB's oversight and is expected to take effect in 2008 as Volume 6 of the Financial Supervision Act. DNB will act as the licensing authority and will work with the AFM in taking responsibility for the oversight.

6.2.3 *Oversight methods*

Oversight follows a cycle of periodic assessments (see Figure 6.1). The cycle begins with the choice of subjects from the broad range of systems and products relevant for the Dutch payment and securities settlement system. Next, priorities are set. Although each system and product undergoes an assessment within a specified period, certain systems and products are selected in each cycle for periodic extensive assessment. In doing so, priorities are decided on the basis of the possible risks for the Dutch payment and securities settlement systems. Next, the requirements to be met are determined. Systemically important payment systems handling large-value payments must satisfy the Core Principles for Systemically Important Payment Systems. Systems for clearing securities,

**Figure 6.1 - Oversight cycle**



including central counterparties, are subject to the Recommendations for Central Counterparties (RCCP). Securities settlement systems are subject to the Recommendations for Securities Settlement Systems (RSSS). These standards are internationally agreed and developed by the Committee on Payment and Settlement Systems (CPSS) and the International Organization for Securities Commissions (IOSCO).

#### Recommendations for Payment Products drawn up

As yet there are no general international standards and methods for the oversight of payment products. In 2006, DNB therefore drew up its own Recommendations for Payment Products (see [www.dnb.nl](http://www.dnb.nl) under 'Payments' and 'Oversight').

The actual assessment begins once the standards have been set. Specific points are selected during the assessment and the potential risks are estimated. The assessment gives rise to an opinion on the degree to which the set standards are met. For the possible scores, see Table 6.1. The assessment results are then discussed with the responsible management of the institutions concerned, and recommendations are made to improve the degree of compliance with one or more standards. The progress made in complying with the recommendations is monitored during regular oversight.

### 6.3 International cooperation with other regulators

The internationalisation of payment and securities settlement systems is creating a need for closer international cooperation in their oversight. DNB is therefore constantly stepping up its links with authorities in other countries (see Table 6.2). For the oversight of these payment systems, periodic meetings are held with other central banks via the international consultation bodies of the ESCB and the G-10.

Recent years have also brought considerable changes in the oversight of securities systems, on account of the high degree of integration and concentration in stock market trading, clearing and settlement in the Euronext countries. The potential risks which may arise in cross-border systems and their possible implications for the Dutch economy are the focus of ever-increasing attention. One example is the cooperation with the AFM and foreign regulators in the oversight of the two securities systems: LCH.Clearnet Group Ltd and Euroclear SA.

**Table 6.1 - Scores based on oversight standards**

Score	Abbreviation	Meaning of the score
Observed	O	meets all requirements
Broadly observed	BO	minor deficiencies with limited impact on the system's security and efficiency
Partly observed	PO	serious deficiencies on which action is to be taken in the near future
Not observed	NO	serious deficiencies with no plans for action in the near future
Not applicable	Na	the standard in question does not apply

**Table 6.2 - Principal oversight subjects for the Netherlands in 2006**

Name of subject	Regulator
<b>Large-value payments</b>	
TOP/TARGET	DNB/ESCB
CLS	G-10 central banks and other central banks of issue with a currency in CLS with the Federal Reserve as lead overseer
SWIFT	G-10 central banks with the National Bank of Belgium as lead overseer
<b>Securities clearing and settlement</b>	
LCH.Clearnet SA / LCH.Clearnet Group Ltd.	AFM, DNB and regulators from Belgium, France, Portugal and the United Kingdom
Euroclear Nederland / Euroclear SA	AFM, DNB and regulators from Belgium, France, Ireland and the United Kingdom
<b>Retail payments</b>	
Equens	DNB
Currence, Acceptgiro, Chipknip, iDEAL, Incasso, PIN	DNB

## 6.4 Results of oversight conducted in 2006

### 6.4.1 TOP payment system for interbank payments

All large interbank payments are handled by DNB's TOP payment system. TOP is also used by banks to process their customers' payments. Every week, TOP processes payments worth an average of EUR 470 billion. On a busy day, a bank's payments can easily amount to twice its own capital. Systems in which payments are processed must therefore satisfy stringent requirements in terms of security, efficiency and reliability.

TOP is part of TARGET, the network of payment systems of the European national central banks and the ECB. TOP is a real-time gross settlement system (RTGS). In such a system, payments are processed immediately, individually and irreversibly, so that both payer and payee enjoy certainty in regard to each sum transferred. This contrasts with a multilateral netting system in which payments are submitted during the day and the net positions of payers and payees are calculated only once or a few times each day, after which these net positions are paid.

TOP observes virtually all standards

It is normal international practice for central bank oversight to include the systems which the central bank itself operates. Since TOP is a systemically important payment system, it has to observe all the Core Principles (see Table 6.3). The oversight indicates that TOP observes all the standards with the exception of CP V (multilateral netting systems) and CP VII (operational reliability). CP V does not apply, since TOP is a real-time gross settlement system. Owing to the terrorist attacks of the past few years, the international community – including the ESCB and the Joint Forum Business Continuity Working Group – is imposing more stringent business continuity requirements. Additional work is being done to satisfy them. Once that work is completed, TOP will fully observe Core Principle VII.

**Table 6.3 - Summary of TOP and CSS oversight**

No.	Core Principle	Oversight Status		
		Observed	Broadly observed	Partly observed
		Observed	Broadly observed	Partly observed
		Not observed	Not applicable	
		TOP	CSS	
I	Legal basis	Observed	Broadly observed	
II	Transparency of financial risks	Observed	Observed	
III	Control of financial risks	Observed	Observed	
IV	Prompt final settlement	Observed	Observed	
V	Multilateral netting systems	Not observed	Not applicable	
VI	Settlement assets	Observed	Observed	
VII	Operational reliability	Broadly observed	Observed	
VIII	Efficiency	Observed	Observed	
IX	Access	Observed	Observed	
X	Governance	Observed	Observed	

#### 6.4.2 Equens Clearing and Settlement System (css)

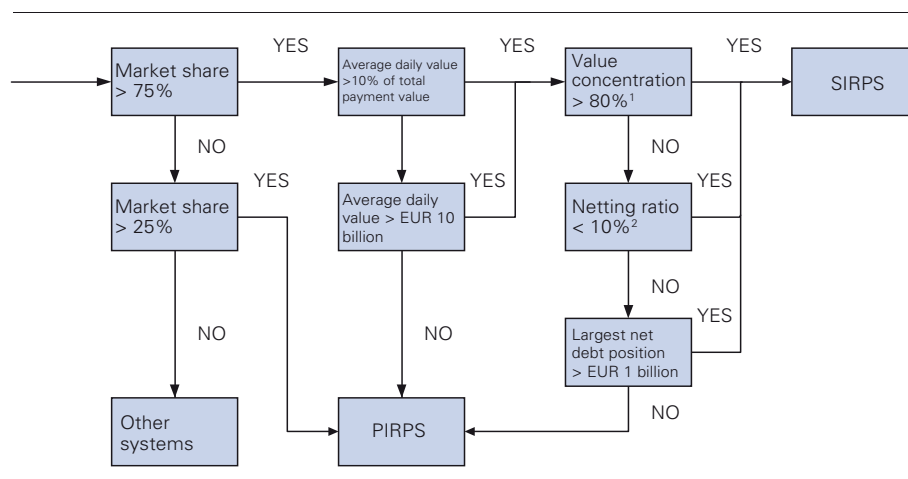
The Equens Clearing and Settlement System (css) handles the financial transactions arising from interbank retail payments. Equens is the new name of Interpay, following the merger with the German Transaktionsinstitut für Zahlungsverkehrsdienstleistungen. The css periodically determines the amounts which the banks owe one another on behalf of the account holders (clearing). The clearing positions are sent to DNB, as all banks established in the Netherlands hold an account in its TOP payment system. DNB debits and credits these accounts, thus settling the payments (settlement). Following settlement, the banks inform their own account holders of their bank balance on the basis of the processing data received from Equens.

The css features the lot settlement method. Under this method, payment orders submitted by participants are collected at very frequent intervals, netted if possible, and forwarded to DNB's TOP for settlement in lots. The more frequent settlement of payment orders reduces the system's credit risks.

The Eurosystem has developed a framework for the oversight of retail payments. It comprises a standardised risk analysis (see Figure 6.2) involving a classification. There are three different categories. In the case of a Systemically Important Retail Payment System (SIRPS), the highest category, all standards apply. A Prominently Important Retail Payment System (PIRPS) is subject to only six standards. For the other systems, the central bank determines the relevant standards separately at national level.

CSS observes virtually all standards

The css is classified as a systemically important retail payment system (SIRPS) and must therefore satisfy all the standards. In 2005 the css was assessed, along with all other important retail systems in the euro area (see Table 6.3). The assessment showed that the css fully observes eight of the ten set standards. CP V (multilateral netting) does not apply, since the css is a hybrid system owing to the high frequency of settlement. This means that css has characteristics of both a real-time gross settlement system and a multilateral netting system. The css broadly observes CP I (legal basis), but not entirely since it does not have a 'country opinion' on a number of relatively small foreign participants. A country opinion describes whether – and if so, to what extent – the law in the participant's country of establishment conflicts with Dutch law and the rules of the system.

**Figure 6.2 - Oversight subject classification process**

1 Value concentration is % of transactions of the five largest participants.

2 Netting ratio is the % of the value of the individual transactions remaining after netting.

#### 6.4.3 LCH.Clearnet SA

A central counterparty (CCP) guarantees the settlement of a securities transaction for both the buyer and the seller. That role is performed by LCH.Clearnet SA in the Euronext countries: Belgium, France, the Netherlands and Portugal. A central counterparty reduces the credit risk on the capital market, but – precisely because of its central position – it may increase the systemic risk.

The financial regulators of the four Euronext countries are in charge of the oversight of LCH.Clearnet SA.

The assessment against the standards for CCPs shows that LCH.Clearnet SA fully observes 13 of the 15 recommendations (see Table 6.4). LCH.Clearnet SA is working to ensure that it can also calculate the exposures of derivative positions (of its clearing members) on an ‘intraday’ basis, and call for additional margin if necessary. Until that work is completed, LCH.Clearnet SA broadly observes standard 3 (control of credit risks). With regard to RCCP 8 (operational reliability) there was still room for improvement on several points at the time of the assessment. Until such time as LCH.Clearnet SA has complied with the recommendations, it partly observes RCCP 8. LCH.Clearnet SA has now taken significant steps to improve operational reliability, in response to the regulators’ objections.

LCH.Clearnet observes many standards

#### 6.4.4 Euroclear Nederland

The central securities depository in the Netherlands is Euroclear Nederland. This institution offers settlement, custody and securities administration services for its members (banks and investment firms). In 2006, Euroclear Nederland did not undergo a full assessment against the relevant international recommendations (rsss). However, three major changes to the Euroclear Nederland system were assessed.

The first change concerns extension of the settlement window and simultaneous introduction of partial settlements, on the proposal of Euroclear Nederland and LCH.Clearnet SA. They proposed that the last of the three settlement cycles should be postponed and transactions split into partial deliveries so that those stock exchange trades – which could not previously be settled due to the lack of securities – can be settled by using securities which have already been processed in the over the counter circuit. In October 2006 an evaluation was carried out and this change became permanent.

**Table 6.4 - Summary of oversight of LCH.Clearnet SA**

	Observed	Broadly observed	Partly observed	Not observed	Not applicable
No.	CCP Recommendation				
1	Legal basis				
2	Participation requirements				
3	Calculation of credit risks				
4	Margin requirements				
5	Financial resources				
6	Default procedures				
7	Custody and investments risks				
8	Operational risk				
9	Settlement assets				
10	Physical deliveries				
11	Risks in links between CCPs				
12	Efficiency				
13	Governance				
14	Transparency				
15	Regulation and oversight				

The second major change is the Euroclear SA (ESA) Data Centre Strategy project, to improve the business continuity and disaster recovery capacity of the systems. Apart from the two existing duplicate centres, a third data centre is being located out of the region. The project has no influence on system functionality, and does not entail any functional changes for customers. However, this project does affect the operational reliability of Euroclear Nederland. It was therefore subjected to assessment, showing that Euroclear observes the RSSS II (operational reliability).

Three major system changes at Euroclear

The core of the Euroclear ESES settlement system – the Single Settlement Engine (SSE) – was assessed in broad terms. The SSE/ESES will become operational in the Netherlands in May 2008. DNB and AFM conclude from the assessment that there are no objections to the principles of the SSE provided certain conditions are met.

#### 6.4.5 Currence

Currence owns and manages the collective Dutch payment products Acceptgiro (accept giro), Chipknip (e-purse), iDEAL (Internet payments), Incasso (direct debit) and PIN (debit card). After Currence indicated in 2005 that it wished to be subject to DNB oversight, arrangements were agreed and an oversight framework was laid down. The Recommendations for Payment Products drawn up by DNB form a key element of this. At the end of 2006 it was agreed with Currence that these recommendations would be used from 2007 onwards in the oversight of Currence.

Oversight framework agreed with Currence

Debit cards and direct debits are both sufficiently secure. That is the conclusion of two status reports produced following a survey in 2003. The reports indicate the current security status on the basis of the fraud figures and the assessment of the measures taken by banks. Recommendations were also given to further improve the security of these products.

