



EUROPEAN CENTRAL BANK

EUROSYSTEM

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PREFACE

Payment, clearing and settlement systems play a key role in financial markets, channelling the flow of payments for goods, services and financial assets. They are exposed to a wide range of credit, liquidity, operational and legal risks and their smooth operation is therefore a crucial prerequisite for the proper functioning of the financial system and the overall economy. In particular, given their extensive role and the large values and volumes of financial transactions they handle, any malfunctioning of these infrastructures can have negative repercussions for the implementation of monetary policy, the stability of the financial system, and the currency, as well as for economic growth and efficiency.

Against this background and considering its responsibility for monetary policy, financial stability and the smooth functioning of payment systems, as well as its interest in preserving public confidence in the currency and the payment instruments used, the Eurosystem conducts oversight as one of its basic functions to promote the safety and efficiency of payment, clearing and settlement systems. At the same time, system owners and operators remain primarily responsible for ensuring the safety and efficiency of their infrastructures and the payment and settlement services provided.

Transparency and accountability are important guiding principles for the Eurosystem in the conduct of oversight. In particular, in line with agreed international principles and best practice of overseers, central banks should set out publicly their oversight policies to enable system owners and operators to understand and observe applicable requirements and standards.

The Eurosystem describes its oversight function in the “Eurosystem oversight policy framework”,¹ issued in July 2011. Since 2009, the Eurosystem has been regularly publishing the “Eurosystem Oversight Report”. The main objective of this report is to inform the public about the activities of the Eurosystem’s oversight function and in particular the Eurosystem’s assessment of the safety and soundness of euro area securities settlement systems, central counterparties and trade repositories, payment systems/instruments/schemes, correspondent banking and critical service providers. This report enables the Eurosystem to raise awareness regarding relevant developments in respective infrastructures and activities, and its role in monitoring such developments and addressing potential risks and inefficiencies. Enhanced awareness among all stakeholders is beneficial not only for transparency and accountability reasons, but also for the effectiveness of the Eurosystem’s oversight policies.

1 <http://www.ecb.europa.eu/pub/pdf/other/eurosystemoversightpolicyframework2011en.pdf>

EXECUTIVE SUMMARY

Payment systems, securities and derivatives clearing and settlement systems and trade repositories (TRs) are financial market infrastructures (FMIs) which are essential for the proper functioning of market economies. They serve the efficient flow of payments for goods, services and financial assets and address the management of financial risks. Moreover, the smooth functioning of these systems is crucial for both the practical implementation of the Eurosystem's monetary policy and in order to maintain the stability of the euro, the financial system in the euro area and the economy in general. Through its oversight function, the Eurosystem aims to ensure the safety and efficiency of these systems operating in euro by applying relevant legal provisions as well as its own oversight principles and standards.

This third Eurosystem Oversight Report reviews the oversight activities that the Eurosystem (i.e. the European Central Bank (ECB) and the national central banks (NCBs) of Member States that have adopted the euro) performed in the period from 2011 (the completion of the previous Eurosystem oversight report) to mid-2014. This period was marked by significant changes to the regulatory environment made in response to the financial crises.

Financial market infrastructures are of substantial importance to the economy. TARGET2 is the most important payment system in the euro area. It processes not only the transactions necessary to the implementation of monetary policy, but also the highest values by far. With a daily average of €1.9 trillion, TARGET2 processes in a single business day transactions equal in value to about 20% of euro area annual GDP. Central counterparties (CCPs) play a key role in financial system stability by ensuring mitigation of the risks inherent in financial transactions. Over the year 2013, CCPs located in the euro area cleared a total of €14.3 trillion in cash securities transactions, €121 trillion in repo transactions, and €193 trillion in derivatives transactions. Ensuring the safety and robustness of these FMIs is therefore of crucial importance.

Changes in regulatory environment

At the global level in April 2012, the Principles for Financial Market Infrastructures (PFMIs) were published by the Committee on Payments and Settlement Systems Market Infrastructures (CPSS²) and the International Organisation of Securities Commissions (IOSCO) as global standards for the safety and efficiency of FMIs. The PFMIs were adopted by the Governing Council of the European Central Bank (Governing Council) as Eurosystem oversight standards for all types of FMIs in the euro area in June 2013.

At the EU level, the European Market Infrastructure Regulation (EMI Regulation – EMIR) entered into force in August 2012. It set the supervisory standards in the EU for CCPs and TRs, and the CSD Regulation (CSDR) that became effective in September 2014 did the same for central securities depositories (CSDs). EMIR, the CSDR and the decision of the Governing Council to adopt the PFMIs as its oversight standards ensure observance of CCPs, TRs, CSDs and securities settlement systems (SSSs) with the PFMIs in the euro area.

In August 2014, the ECB Governing Council adopted an ECB Regulation on oversight requirements for systemically important payment systems (SIPS Regulation). In the same month, the Eurosystem

² As of 1 September 2014, the Committee on Payment and Settlement Systems has changed its name to Committee on Payments and Market Infrastructures (CPMI).

also adapted its oversight framework for retail payment systems to take account of the PFMI and to complement the SIPS Regulation with standards for retail payment systems that are not of systemic importance, and thus not addressed in the Regulation. In the field of retail payments, the Eurosystem continued and further formalised the cooperation in the European Forum on the Security of Retail Payments on security-related issues with all members of the European System of Central Banks (ESCB) and the European Banking Authority (EBA). This led to a number of recommendations that serve as a basis for both oversight standards for payment instruments and for retail payment systems, as well as EBA guidelines or regulatory technical standards. The Forum also provided input to the review of the Payments Services Directive, which is currently ongoing.

Eurosystem oversight activities

In the light of the new regulatory framework, the Eurosystem has conducted significant oversight activities.

In the field of CCPs, the Eurosystem contributed significantly to the activities of the supervisory colleges established under EMIR, in particular to support the national competent authorities in the authorisation of CCPs under EMIR, in its capacity as central bank of issue for the euro, and in the oversight capacity of its members.

In the field of SSSs, the Eurosystem conducted assessments against the ESCB/CESR³ standards or the PFMI respectively. Furthermore, it monitored and assessed changes to functionalities that altered the risk profile of the respective systems and continued, in cooperation with other authorities, its assessment of the TARGET2-Securities (T2S) design ahead of the T2S go-live date.

In the field of payment systems, the Eurosystem conducted a gap analysis of TARGET2 against the PFMI in order to ensure its compliance with international standards and to avoid the emergence of risks for the most important euro payment system, which is used for the implementation of monetary policy operations. This assessment showed that TARGET2 observes 12 out of the 17 applicable standards in full and identified a number of improvements to increase observance of the remaining five standards (governance, comprehensive risk management framework, general business risk, tiering and transparency). The Eurosystem also conducted its oversight activities geared towards other payment systems processing euro (e.g. CLS, EURO1, STEP2-T).

The Eurosystem also has concerns about the smooth functioning of trade repositories. Since 2011, the ECB has participated in the cooperative oversight arrangement for Warehouse Trust after the transfer of its credit and derivatives record keeping to DTCC Derivatives Repository Ltd (DDRL) as part of the cooperative oversight arrangement for DDRL until its authorisation as an EU TR under EMIR. Furthermore, it has been involved in the cooperative oversight of critical service providers such as SWIFT. In 2014 it also finalised its assessment of 23 international and major domestic card payment schemes operating in the euro area, and concluded that compliance levels were high overall, with most card payment schemes observing or broadly observing Eurosystem oversight standards.

3 The Committee of European Securities Regulators (CESR) was the predecessor of the European Securities and Markets Authority (ESMA).

Future work priorities

The oversight priorities of the Eurosystem in the near future will still be driven by the implementation measures of the regulatory reform process and the objective of avoiding the emergence of systemic risks in the euro area. The Eurosystem will continue to contribute to legislative initiatives to complete the regulatory framework.

The Eurosystem will conduct oversight assessments of the four systemically important payment systems of the euro area against the SIPS Regulation and will help usher the respective operators towards full compliance.

It will also conduct assessments of the design and operation of T2S, the securities settlement platform operated by the Eurosystem that is set to go live in June 2015.

It will continue to conduct regular analysis of correspondent banking activities and is currently reviewing its assessment guides for cards, direct debits and credit transfers, taking into account the SecuRe Pay recommendations. It will assess Single Euro Payments Area (SEPA) direct debit schemes accordingly, once these guides will have been finalised. All these activities will be driven by a risk-based approach in order to devote the strongest attention to those market infrastructures that pose the highest systemic risk to the euro area.

INTRODUCTION

The Third Eurosystem Oversight Report 2014 describes the performance of the Eurosystem's oversight function in the period from 2011 to June 2014. It provides, *inter alia*, an update on the strengthened oversight role stemming from the ECB SIPS Regulation.

The report also describes the role of the Eurosystem (i.e. the ECB and the NCBs of the Member States whose currency is the euro) as overseer and central bank of issue with regards to CCPs, with a focus on CCPs' authorisation. (The oversight is "a central bank function whereby the objectives of safety and efficiency are promoted by monitoring existing and planned systems, assessing them against these objectives and, where necessary, inducing change".⁴ The purpose is to ensure the safe and efficient operation of the FMI by also considering the interdependencies between the FMI and other actors in the financial system (e.g. other FMIs, participants) through which risks are potentially transmitted, and which therefore may pose a serious threat not only to the proper functioning of the FMI itself, but also to the wider financial sector and, subsequently, the economy as a whole.

Chapter 1 of this report provides an overview of the Eurosystem's oversight function: the institutional and legal framework as well as the respective oversight standards. Chapter 2 provides information about the oversight activities the Eurosystem carries out in its various areas of responsibility, and chapter 3 gives an overview of future work priorities. Lastly, chapter 4 contains special articles on topics relevant to oversight.

I THE EUROSISTEM'S OVERSIGHT FUNCTION

I.1 INSTITUTIONAL FRAMEWORK

I.1.1 LEGAL BASIS

The legal basis for the Eurosystem's oversight function is enshrined in the Treaty establishing the European Community and in the Protocol on the Statute of the European System of Central Banks and of the European Central Bank. According to Article 127(2) of the Treaty on the Functioning of the European Union⁵ and Article 3(1) of the Statute of the ESCB,⁶ one of the main tasks of the ESCB is to promote the smooth operation of payment systems. The oversight role is one way in which the Eurosystem fulfils this mandate, complementary to its roles as a catalyst for market-led change and operator of payment and settlement facilities.

Article 22 of the Statute (clearing and payment systems) provides, *inter alia*, that "the ECB may make regulations, to ensure efficient and sound clearing and payment systems". This gives the ECB statutory powers to pursue the Eurosystem's oversight objectives. On 3 July 2014 the ECB used its regulatory powers in the field of payment systems oversight to endorse a SIPS Regulation that covers systemically important large-value and retail payment systems in the euro area operated by both central banks and private entities. The SIPS Regulation implements the CPMI-IOSCO Principles for financial market infrastructures (PFMIs) published in April 2012. In case of non-compliance,

⁴ See CPMI publication on "Central bank oversight of payment and settlement systems", May 2005.

⁵ Treaty on European Union and the Treaty on the Functioning of the European Union (consolidated versions), OJ C 326, 26 October 2012, p. 1 et seq.

⁶ Protocol (No 4) on the Statute of the European System of Central Banks and the European Central Bank, OJ C 326, 26 October 2012, p. 230 et seq.

it provides the Eurosystem with the right to request corrective measures from the system operators and/or to apply financial sanctions. The ECB Regulation for SIPS is covered in more detail in the following sections.

1.1.2 IMPLEMENTATION OF THE OVERSIGHT FUNCTION

In accordance with the principle of transparency, the Eurosystem publishes several documents explaining how it interprets and implements its oversight function. The most detailed description of the Eurosystem's oversight role can be found in the policy statement entitled "Eurosystem oversight policy framework", released in July 2011. The policy framework describes, among other things, the rationale for the Eurosystem's oversight function and the scope of its oversight. The scope includes FMIs including SSSs, TRs and CCPs, payment systems/instruments/schemes, correspondent banking and critical service providers.

The policy framework explains how the oversight activities are conducted, the allocation of roles within the Eurosystem and the cooperation between relevant authorities. Furthermore, it gives examples of oversight cooperation with central banks outside the euro area.

Box 1

EUROSYSTEM OVERSIGHT POLICY FRAMEWORK

The Eurosystem performs its oversight tasks on the basis of requirements, standards and recommendations that are often based on global standards or have been developed by the Eurosystem itself, sometimes in cooperation with other central banks and authorities. The reliance on these standards and recommendations allows a harmonised and systematic oversight of payment, clearing and securities settlement and facilitates the comparison of assessments of different systems. The Eurosystem's transparency on its policies helps system operators to better understand and observe the applicable requirements and standards.

Oversight activities

The Eurosystem's oversight of individual systems and schemes follows a three-step process in which it:

1. Collects information,
2. Assesses the information, and
3. Uses measures to induce change

When planning its oversight activities, the Eurosystem follows a risk-based approach that facilitates prioritisation with respect to overseen systems and/or instruments as well as the different sources of risks. On the basis of the assessment results, the Eurosystem takes action and induces change when it finds that a particular system within the overall payment, clearing and settlement infrastructure does not have a sufficient degree of safety and efficiency.

Oversight roles within the Eurosystem

The Eurosystem assigns a leading role to the Eurosystem central bank that is best placed to oversee individual systems and schemes. This role may be attributed in respect of proximity to the overseen entity, or because the system is legally incorporated within the jurisdiction of a particular central bank, or national laws may attribute specific oversight responsibilities to a specific central bank subject to any Treaty-based requirements.

This is typically the case for systems with a clear national anchor. For systems that have no domestic anchor, the body entrusted with oversight responsibility is the NCB of the country where the system is legally incorporated, unless the Governing Council of the ECB decides otherwise and assigns the primary oversight responsibilities to the ECB.

	Lead oversight role	
	ECB	National overseer
TARGET2/EURO1	✓	
STEP2-T	✓	
CORE(FR)		✓ ¹⁾
CLS	✓ ²⁾	
Retail payment systems		✓
Securities Settlement Systems		✓ ³⁾
Central Counterparties		✓
National card payment schemes		✓
Visa Europe	✓	
American Express	✓	
MasterCard Europe		✓
SEPA CT and DD	✓	
SWIFT		✓
SIA		✓

1) National competent authority

2) Within the Eurosystem, the ECB has primary responsibility for the settlement of the euro by the Continuous Linked Settlement (CLS) system in close cooperation with the Group of Ten (G10) euro area NCBs. The Federal Reserve System has primary responsibility for the cooperative oversight arrangement of CLS in general. The arrangement consists of the G10 central banks as well as the central banks whose currencies are settled in CLS and is subject to a "Protocol".

3) In some cases in cooperation with the national competent authority/regulator

Cooperative oversight & cooperation with other authorities

Cooperation with overseers and other authorities at the international level is an instrument used to address the rising importance of interdependencies and complements the Eurosystem's location policy. Notwithstanding the clear preference for euro payment and settlement systems of systemic importance to be located in the euro area, the Eurosystem recognises that offshore systems and interdependencies with systems and critical providers create the need for efficient and effective cooperation between the central banks responsible for the oversight of such systems.

Cooperation with other authorities is also an important tool to foster effective and efficient oversight, as the oversight responsibilities of central banks are closely related to the responsibilities of other prudential and securities regulators. The principles for cooperative oversight between central banks also provide a useful framework for cooperation between central banks and other authorities at both the international and the domestic level. In particular,



it is recognised that each regulator needs to fulfil its own regulatory responsibilities and that cooperation takes place without prejudice to these responsibilities. In addition to arrangements that NCBs have in place for the cooperation with other national authorities, the Eurosystem has also adopted Memoranda of Understanding with prudential supervisors and regulators that lay down procedures and principles for regulatory cooperation.¹

¹ Memorandum of Understanding on cooperation between payments systems overseers and banking supervisors in Stage Three of Economic and Monetary Union, April 2001. Memorandum of Understanding on high-level principles of cooperation between the banking supervisors and central banks of the European Union in crisis management situations, March 2003. Memorandum of Understanding on cooperation between the financial supervisory authorities, central banks and finance ministries of the European Union on cross-border financial stability, June 2008.

1.2 LEGAL ENVIRONMENT AND REGULATORY DEVELOPMENTS

The Eurosystem's oversight function is influenced by international standards as well as relevant laws and regulations at the European level. In its field of competence, the Eurosystem is consulted on draft legislation as part of the legislative procedure and has provided its opinion in the past, including from an oversight perspective. The following principles, regulations and proposed legislative texts published between 2012 and mid-2014 are of interest to the Eurosystem.

1.2.1 CPMI-IOSCO PRINCIPLES FOR FINANCIAL MARKET INFRASTRUCTURES

The PFMI, published by CPMI-IOSCO in April 2012, replace, in the field of the Eurosystem's oversight of payment systems, the CPMI Core Principles for Systemically Important Payment Systems (BIS, January 2001) and the Business continuity oversight expectations for systemically important payment systems (ECB, June 2006); they replace the CPMI-IOSCO Recommendations for Securities Settlement Systems (BIS, 2001), as well as the CPMI-IOSCO Recommendations for Central Counterparties (BIS, 2004). They are designed to make FMIs more resilient to defaults by system participants and to financial crisis, since they contain new and more demanding international standards for payment, clearing and settlement systems, as well as for trade repositories. The principles implement improvements made necessary by the recent global financial crisis, such as enhanced credit and liquidity resilience. Furthermore, the PFMI also introduce five explicit responsibilities set for central banks and relevant authorities in regulating, supervising and overseeing financial market infrastructures. Responsibility E requires them to cooperate both domestically and internationally to support each other in fulfilling their respective mandates. To facilitate the consistent application of the principles, the CPMI-IOSCO also published in December 2012 a disclosure framework and an assessment methodology that describes the form and content of disclosure expected from FMIs and how the framework for assessing FMIs should be used by assessors when evaluating the observance of the principles.

In June 2013, the Governing Council of the ECB adopted the PFMI for the conduct of Eurosystem oversight in relation to all types of financial market infrastructures. In addition, the PFMI have been implemented in the EU by means of specific legal acts: the SIPS Regulation, the European Market Infrastructure Regulation for CCPs/TRs and the Central Securities Depositories Regulation for SSSs/CSDs. All three Regulations are covered in more depth in the following sections.

The Eurosystem considers it important that major economies implement in a timely and consistent manner the new principles in order to strengthen global financial stability, enhance the ability of financial market infrastructures to manage various risks and avoid the risk of regulatory arbitrage, thus ensuring a level playing field, especially in the case of businesses with global reach.

1.2.2 ECB REGULATION ON OVERSIGHT REQUIREMENTS FOR SYSTEMICALLY IMPORTANT PAYMENT SYSTEMS

The ECB SIPS Regulation,⁷ which entered into force on 12 August 2014, implements the PFMI in a legally binding way and covers both large-value and retail payment systems of systemic importance, whether operated by Eurosystem NCBs or private entities. The requirements defined in the regulation aim at ensuring efficient management of legal, credit, liquidity, operational, general business, custody, investment and other risks as well as sound governance arrangements. These requirements are proportionate to the specific risks to which such systems are exposed and are stricter than previous oversight standards. The regulation provides for sanctions and corrective measures for system operators in case of non-adherence.

On 21 August 2014 the ECB made public a list of four systems identified as systemically important: TARGET2 (operated by the Eurosystem), EURO1 and STEP2-T (operated by EBA Clearing) and CORE(FR) (operated by STET). The reasoning for the decision to identify these systems as SIPS is available on the ECB website. The systems were identified as fulfilling at least two of four main criteria, i.e. the value of payments settled, market share, cross-border relevance and provision of services to other infrastructures. The Eurosystem will review this list annually using updated statistical data. SIPS operators have one year from the date they are notified to implement and comply with the requirements.

1.2.3 EUROPEAN MARKET INFRASTRUCTURE REGULATION

EMIR⁸ entered into force in August 2012 and for the first time introduces a common EU regulatory and supervisory framework for CCPs and TRs. The regulation implements the PFMI and in some instances is more stringent. It required ESMA and the EBA to draft, in close cooperation with the members of the ESCB, regulatory and implementing technical standards (RTS and ITS) to further clarify and implement the provisions of EMIR. The technical standards specifying the general requirements and prudential requirements for CCPs entered into force on 15 March 2013. Inter alia the central bank of issue (CBI) and the central banks acting as overseers of the concerned CCP and of interoperable CCPs are members of the colleges that exercise tasks such as the authorisation, review of models, approval of interoperability arrangements, etc. of EU CCPs.

As CBI, the Eurosystem participates in colleges of authorities for EU CCPs with significant euro-denominated business and performs its assessments according to a harmonised assessment framework. For euro area CCPs the Eurosystem is generally represented by the respective NCBs, which also perform the oversight function. For EU CCPs established outside the euro area, the Eurosystem CBI function is exercised by the ECB and is particularly important, since in such cases, the oversight and CBI responsibilities are not performed by the same entities. The oversight and CBI concerns are closely related, pursuing similar objectives by focusing on the safety and efficiency of CCPs with a view to ensuring systemic stability. At the same time, the Eurosystem's function, as CBI, obviously has a special focus on the possible risks posed by a CCP for the control over the currency and on the Eurosystem's monetary policy stance.

In addition, in their respective roles as overseer and CBI, the Eurosystem and respective NCBs will be consulted by ESMA on the recognition of third-country CCPs (i.e. CCPs outside the EU that intend to provide services in the EU or have EU-based financial institutions as clearing members) under EMIR. Third-country CCPs established in non-EU countries have already applied

⁷ Regulation of the European Central Bank (EU) No 795/2014 of 3 July 2014 on oversight requirements for systemically important payment systems (ECB/2014/28), OJ L 217, 23 July 2014, p. 16 et seq.

⁸ Regulation (EU) No 648/2012 of the European Parliament and of the Council of 4 July 2012 on OTC derivatives, central counterparties and trade repositories, OJ L 201, 27 July 2012, p. 1 et seq.

for recognition under EMIR. The recognition process will be initiated by ESMA once a decision is reached on EMIR equivalence with third-country regulatory and enforcement frameworks. In addition, cooperation arrangements between ESMA and the relevant third-country authorities shall be put in place.

Furthermore, ESMA is preparing draft RTS on the classes of over-the-counter (OTC) derivatives that should be subject to the clearing obligation.

1.2.4 CENTRAL SECURITIES DEPOSITORY REGULATION

In the area of CSDs and SSSs, the European Commission published a legislative proposal on improving the safety and efficiency of securities settlement in the EU and on central securities depositories in March 2012. The CSDR⁹ entered into force on 17 September 2014. It is supplemented by implementing regulatory technical standards developed by ESMA in close cooperation with the ESCB. These standards will enter into force in the second half of 2015. The CSDR introduces, inter alia, an obligation of dematerialisation for most securities, harmonised settlement periods for most transactions in such securities, settlement discipline measures and common rules for CSDs. It establishes a common EU framework for the authorisation and supervision of CSDs. The CSDR will enhance the legal and operational conditions for cross-border settlement in the EU.

1.2.5 THE PROPOSED PAYMENT SERVICES DIRECTIVE 2

The proposed text of the revised Payment Services Directive (PSD2)¹⁰ incorporates and repeals the PSD; it aims to increase the harmonisation of the payment market legal framework, to take account of technological and service innovations, and to enhance payment user protection with new provisions regarding rights, obligations and security issues. According to the proposal of the European Commission, most significantly, PSD2 will cover new services and their providers, i.e. “third-party payment service providers” whose business activity is to provide services based on access to payment accounts, such as payment initiation or account information, but who do not usually hold client funds. It also contains several provisions requiring the EBA to contribute to the consistent and coherent functioning of supervision. Furthermore, on issues of common interest such as new requirements on operational reliability and the security aspects of payment services, the PSD2 calls for a close cooperation between the EBA and the ECB. In this respect, cooperation between supervisors and overseers has recently been reorganised and strengthened.

The ECB issued an opinion on the proposed revision of the PSD2¹¹ and expressed strong support for the objectives and general content of the proposed directive, in particular for expanding the list of payment services to include payment initiation services.

1.3 OVERSIGHT STANDARDS

On 3 June 2013 the ECB’s Governing Council adopted the CPMI-IOSCO “Principles for financial market infrastructures” (PFMIs) for the conduct of Eurosystem oversight in relation to all types of FMIs.

9 Regulation (EU) No 909/2014 of the European Parliament and of the Council of 23 July 2014 on improving securities settlement in the European Union and on central securities depositories and amending Directives 98/26/EC and 2014/65/EU and Regulation (EU) No 236/2012, OJ L 257, 28 August 2014, p. 1 et seq.

10 Directive 2007/64/EC of the European Parliament and of the Council of 13 November 2007 on payment services in the internal market amending Directives 97/7/EC, 2002/65/EC, 2005/60/EC and 2006/48/EC and repealing Directive 97/5/EC, OJ L 319, 5 December 2007, p. 1 et seq.

11 http://www.ecb.europa.eu/ecb/legal/pdf/oj_joc_2014_224_r_0001_en_txt.pdf

1.3.1 PAYMENT SYSTEMS

For payment systems, the PFMI have been implemented through the SIPS Regulation referred to in Section 1.2.2 and the “Revised oversight framework for retail payment systems (RPS)” published on 21 August 2013. The latter includes the “Oversight expectations for links between retail payment systems” already established in 2012.¹² These expectations¹³ apply to both systemically and non-systemically important retail payment systems.

This means that the primary distinction in the oversight of payment systems by the Eurosystem remains the systemic importance of the system as defined in Article 1(3) of the SIPS Regulation. This distinction is based on objective, quantitative criteria and determines both the applicable oversight requirements (principle of proportionality) and the way in which they are enforced.

All SIPS in the euro area, including large-value payment systems (LVPS) and retail payment systems (RPS), operated by both central banks and private operators, are subject to the SIPS Regulation.

For non-SIPS, the PFMI, or a sub-set thereof, apply. More specifically, non-systemically important LVPS,¹⁴ which normally process a considerable number of high-value payments related to financial market transactions, are subject to all PFMI addressed to payment systems. Non-systemically important RPS are subject to a selection of PFMI and related key considerations in order to ensure proportionality between the lower risks inherent in such systems and the level of requirements. Finally, all systemically and non-systemically important RPS are subject to the Oversight Expectations for Links between Retail Payment Systems.

The Eurosystem has developed an assessment methodology for payment systems which aims at ensuring a consistent and harmonised application of the SIPS Regulation, and the PFMI, in the conduct of oversight assessments by the Eurosystem. The new methodology takes the CPMI-IOSCO assessment methodology as a basis and complements it with questions from the previously used “Terms of Reference for the oversight assessment of euro systemically and prominently important payment systems against the Core Principles”, thereby establishing one single framework for SIPS and non-SIPS. This methodology also covers the Oversight Expectations for Links between Retail Payment Systems.

Table 1 Regulations and standards applicable to FMIs

	SIPS		Payments			Post trade			Critical service providers	
	SIPS	SIRPS	PIRPS	ORPS	CLS	CCPs	SSSs	TRs	T2S	SWIFT
SIPS Regulation	✓	✓								
OELRPS		✓	✓	✓						
CPMI-IOSCO PFMI			✓ ¹⁾	✓ ¹⁾	✓	✓	✓	✓ & Annex F	✓	HLE (Annex F)
EMIR						✓		✓		
CSDR							✓		✓	

1) Subset of principles: see table 1 of the Revised oversight framework for retail payment systems <https://www.ecb.europa.eu/press/pr/date/2014/html/Revisedoversightframeworkretailpaymentsystems-ECBRegulationonoversightrequirements.pdf?7b0d76e028ec69c80e15ebe41078bbfb>

12 Oversight expectations for links between retail payment systems, 29 November 2012: <http://www.ecb.europa.eu/press/pr/date/2012/html/pr121129.en.html>

13 Oversight expectations for links between retail payment systems, 29 November 2012: <http://www.ecb.europa.eu/press/pr/date/2012/html/pr121129.en.html>

14 The qualification of a non-systemically important payment system as LVPS or RPS is performed by the respective overseeing central bank, which informs the ECB and the other Eurosystem central banks of its decision and any subsequent change thereof. The ECB will maintain a list of RPS and their classifications, and of non-systemically important LVPS on its website.

1.3.2 SECURITIES CLEARING AND SETTLEMENT

The PFMI for SSSs and CSDs are largely being implemented via the CSD Regulation, as referred to in section 1.2.4; for clearing systems and TRs, they are being implemented via EMIR, which is discussed in section 1.2.3. The PFMI continue to constitute the relevant Eurosystem oversight standards for areas that are not fully covered by CSDR or EMIR. Both regulations are, or will be, supplemented by delegated and regulatory technical standards developed by ESMA in close cooperation with the ESCB.

To facilitate cooperation amongst authorities, EMIR establishes CCP colleges that perform a number of tasks, including the initial authorisation of CCPs as well as the authorisation of the extension of services or any material change affecting the risk management of the infrastructure, such as a change of margining model for example. The college membership criteria are detailed in EMIR article 18.2. The establishment of CCP colleges across the EU is an ongoing process which started in the first half of 2013 and was completed in 2014.

1.3.3 PAYMENT INSTRUMENTS

1.3.3.1 Cards, SCT, SDD

The oversight frameworks for payment instruments aim at ensuring the soundness and efficiency of means of payment in order to maintain public confidence in these payment instruments and, ultimately, in the currency, thereby promoting an efficient economy. The first such oversight framework published by the Eurosystem in January 2008 covered card payment schemes. It was completed in October 2010 with the publication of the oversight frameworks for credit transfers and direct debits developed on the basis of the “Harmonised oversight approach and oversight standards for payment instruments” of February 2009.

Triggered by the changes in retail payments linked to the implementation of SEPA and the development of new types of payment services, the Eurosystem is revising the existing assessment guides, taking into account also the recommendations developed by the Secure Pay Forum on the security of internet payments. The oversight standards as such remain unchanged.

1.3.3.2 Internet, mobile payments and account payment services

The SecuRe Pay Forum was established in 2011 as a voluntary cooperation between supervisors of payment service providers and overseers of payment systems and payment schemes/instruments within the EU/European Economic Area (EEA). It aims to facilitate common knowledge and understanding of issues related to the security of electronic payment services and instruments and, where appropriate, to make recommendations. The Forum strives at ensuring effective and consistent implementation across jurisdictions and may cooperate with other competent authorities for this purpose.

To improve the security of payment account access services, the Forum analysed the security aspects of payment initiation services offered by non-account-servicing third-party providers and developed a set of recommendations for “payment account access” services which complement the recommendations for the security of internet payments.

The specific nature and risks of payment account access services arise from the involvement of at least one additional entity, the third-party provider, in the payment chain. This normally implies greater complexity in the operations and in the allocation of liabilities among all actors involved. Furthermore, depending on their design, payment account access services might make the traceability of payment- or payment account-related processes more difficult for account-servicing

payment service providers (PSPs) and/or account owners, or might affect account-servicing PSPs' security measures and customer education efforts.

The European Commission proposal for a revised PSD2, published in July 2013, assigns to the EBA the task of developing, in close cooperation with the ECB, guidelines on the security aspects of payment services. Therefore, the ECB and EBA have agreed to use the SecuRe Pay Forum as a common platform for the development of both, the Eurosystem's security-related standards for the oversight of payment systems and retail payment instruments and the EBA's regulatory and supervisory requirements for payment services.

As a first step, the EBA adopted in December 2014 the SecuRe Pay recommendations on the security of internet payments into its own Guidelines under Articles 9(2) and 16 of the EBA Regulation. This strengthens the legal basis for implementation of the harmonised oversight and supervisory policies on retail payments across the EU and EEA. Also, more stringent security requirements may follow at a later stage as a result of the PSD2.

EBA and ECB remain equally committed to the objective of the Forum and the recommendations made until now. The revised SecuRe Pay mandate is available on the ECB's website.

Box 2

ACTIVITIES OF THE EUROPEAN FORUM ON THE SECURITY OF RETAIL PAYMENTS

Since its inception, the work of the Forum has focussed on those retail payments areas where no harmonised regulatory policies on risk mitigation were available so far, such as internet and mobile payments, as well as services based on third-party access to payment accounts. In the last few years, technological innovation and new market entrants have fostered a rapid evolution of new services and products that need to be reviewed from an oversight and/or supervisory perspective, and where necessary reflected in European regulations.

After consulting market players, the European Forum on the Security of Retail Payments published several recommendations:

- *In January 2013 the ECB, after consulting market participants in April 2012, released the Forum's final "Recommendations for the security of internet payment". In February 2014, the ECB published an assessment guide for implementing these recommendations. The most important aspects relate to the criteria for evaluating strong authentication procedures adopted by banks in internet payment initiation, and to the protection of "sensitive payment information".*
- *In November 2013, the Forum launched a public consultation on the "Recommendations for the security of mobile payments". These were necessary because technological advances in this field and increased use of this type of payment may result in additional security issues. The recommendations aim at providing a minimum level of security while maintaining a technology-neutral approach in order to allow for innovation.*

- *In March 2014, the ECB, after public consultation in January 2013, finalised its “Recommendations on payment account access services”, which aim at contributing to the security of customers making use of these services. The recommendations serve as input to the upcoming EBA work on this topic under the Payment services Directive 2.*

Based on its new mandate agreed in September 2014, the SecuRe Pay Forum will continue to monitor security-relevant developments in the field of retail payments and provide input to the payment security-related work of both the EBA and the Eurosystem

1.3.4 CRITICAL SERVICE PROVIDERS

The operational reliability of FMIs may be dependent on the continuous and adequate functioning of critical service providers, such as information technology and messaging providers. This is true of SWIFT, for example, which provides messaging services and interface software to the financial industry worldwide. The Eurosystem therefore has an interest in the smooth functioning of these providers, in particular those serving critical infrastructures.

For the Eurosystem, it is a key principle that the individual systems retain full responsibility for any activity that is material to the relevant system’s operation. This also includes responsibility for ensuring that the service provider complies with applicable oversight policies.

Annex F of the PFMI outlines five oversight expectations that help ensure that the operations of a critical service provider are held to the same standards as the FMI would be if it had not outsourced the function. These expectations, addressed to all critical service providers to ensure a level playing field, are the evolution of the oversight principles previously applied to SWIFT only; they are specifically targeted at ensuring strong risk identification and management, robust information security management, system reliability and resilience, effective technology planning, and strong communications with users.

In December 2013, the CPMI-IOSCO published a consultative report on the assessment methodology for Annex F for public comments. The consultative document provides guidance for authorities in assessing an FMI’s critical service providers against the oversight expectations.¹⁵ It is expected that CPMI-IOSCO will publish the final version of the Annex F assessment methodology by the end of 2014.

1.4 COOPERATIVE OVERSIGHT ARRANGEMENTS

Where more than one central bank or authority has an interest in certain infrastructures, cooperation in the oversight of such infrastructures is useful and sometimes necessary in order for the central bank or authority to fulfil its statutory responsibilities.

A framework for such cooperation at both the international and the domestic level is provided by the principles for cooperative oversight, as reiterated by the Eurosystem Oversight Policy Framework and outlined in Responsibility E, “Cooperation with other authorities”, of the CPMI-IOSCO PFMI. In particular, it is recognised that each regulator needs to fulfil its own regulatory responsibilities and that cooperation takes place without prejudice to these responsibilities. Moreover, to ensure effective and efficient oversight, a central bank is generally entrusted with primary responsibility on

¹⁵ The assessment methodology relies on key questions – which are neither intended to serve purely as a checklist nor to be exhaustive – for each oversight expectation which address the critical service provider’s approach or framework for managing risks.

the basis of its powers and capacity, and the relevance of the system to its oversight responsibilities, with a presumption that this central bank will be the one where the system is located.

Based on the principles for cooperative oversight, the central banks of the Eurosystem have participated in cooperative arrangements in a number of cases. In addition to arrangements that NCBs have in place for cooperation with other national authorities, the Eurosystem has also adopted Memoranda of Understanding with prudential supervisors and regulators that lay down procedures and principles for regulatory cooperation.

A brief description of cooperative oversight arrangements for CLS, Euroclear, TARGET2-Securities and SWIFT is provided in section 2, where oversight activities regarding these systems are described.

2 THE EUROSISTEM'S OVERSIGHT ACTIVITIES

2.1 MONITORING AND ASSESSMENT

2.1.1 SYSTEMICALLY IMPORTANT PAYMENT SYSTEMS

There are four payment systems located in the euro area which are classified as SIPS, namely TARGET2, EURO1, STEP2-T and CORE(FR).

TARGET2

TARGET2 is the most important payment system in the euro area. It processes not only the transactions necessary to the implementation of monetary policy, but also the highest values by far. With a daily average of €1.9 trillion, TARGET2 processes in a single business day transactions equivalent in value to about 20% of euro area annual GDP.

Ensuring compliance with oversight standards

Since the last Eurosystem oversight report, the main focus of TARGET2 oversight has been on ensuring compliance with the CPMI-IOSCO PFMI. A gap analysis against the PFMI was carried out and finalised on 30 January 2014 with the approval of the Governing Council.

The aim of the work was to get an early overview and ensure TARGET2's compliance with the new oversight standards, and thus to facilitate TARGET2's future compliance with the SIPS Regulation.

Table 2 Volume of transactions (SIPS)
(Millions of transactions; total for the period)

	STEP2-T	SIT/ CORE	EURO1/ STEP1	TARGET2
2004	26.24	11,614.86	44.32	69.01
2005	45.55	11,860.71	46.41	76.31
2006	65.98	12,181.53	47.73	83.36
2007	311.82	12,303.25	54.35	99.08
2008	383.45	12,491.28	64.19	89.02
2009	430.16	12,737.70	58.29	87.84
2010	525.02	12,816.57	59.37	87.18
2011	786.20	13,177.62	62.32	88.98
2012	1,016.87	13,432.05	66.59	89.62
2013	1,807.05	13,635.44	64.14	91.34

Source: ECB.

Table 3 Value of transactions (SIPS)
(Billions of EURO; total for the period)

	STEP2-T	SIT/ CORE	EURO1/ STEP1	TARGET2
2004	60.41	4,567.18	44,170.24	449,243.28
2005	104.40	4,755.36	42,938.98	494,092.43
2006	267.57	5,030.49	48,240.93	539,528.49
2007	1,356.00	5,176.63	58,251.14	674,996.78
2008	1,915.06	5,261.92	73,426.18	611,134.45
2009	1,935.60	5,004.90	65,204.24	536,027.13
2010	2,385.06	5,119.77	62,207.65	631,439.95
2011	2,983.99	5,373.14	64,020.31	651,274.94
2012	3,511.83	5,405.64	57,907.27	711,025.77
2013	4,748.83	5,376.66	48,677.70	559,695.98

Source: ECB.

The TARGET2 oversight function concluded that TARGET2 fully observes 12 of the applicable 17 PFMI and broadly observes the other five. For the latter, overseers suggested that the TARGET2 operator establish a comprehensive risk management framework (PFMI 2 – governance) and assess the system against all types of risks contained in this framework (PFMI 3 – framework for the comprehensive management of risks). With respect to PFMI 15 – general business risk, it was suggested to identify elements and scenarios of general business risks to which TARGET2 is exposed and to address and mitigate them, including the elaboration of a recovery plan. For PFMI 19, the operator was encouraged to identify, monitor and manage risks resulting from tiered participation, and with respect to PFMI 23, to ensure transparency by publishing the TARGET2 Disclosure Framework.

It should be noted that the shortcomings identified in the Principles mentioned above are not severe. Furthermore, it is also pointed out that PFMI 3, 15, 19, and 23 are newly introduced requirements, and that while PFMI 2 existed before, it has been strengthened. At the writing of this report, the TARGET2 operator had already undertaken significant efforts to address the recommendations.

Assessing changes to the system

As part of its regular oversight activities the TARGET2 oversight function assesses the new releases of TARGET2. Since 2010, the releases 5.0 to 7.0 have been implemented, the oversight assessment of which did not reveal any concerns. Release 7.0 already contained the first technical preparations for the connection between TARGET2 and T2S. Moreover, the TARGET2 oversight function assessed a newly introduced contingency channel for TARGET which ensures that very critical payments can be processed between central banks in case of a failure of SWIFT, thus making the system more resilient.

Phasing out of Proprietary Home Accounts

In 2005 the Governing Council agreed on a transition period for the migration of transactions between market participants, transactions stemming from ancillary system settlement, and transactions related to open market operations from the central banks' local proprietary home accounts (PHAs) to the Single Shared Platform (SSP) of TARGET2. The Deutsche Bundesbank and Bank of Greece were the last two central banks to successfully complete their migration process.

Assessment of TARGET2 against the BCOE

In 2013, the TARGET2 operator implemented the pending open recommendation stemming from the assessment of the SIPS operating in the euro area against the Business Continuity Oversight Expectations (BCOE) completed in 2010. As soon as the amended documentation is approved by the Governing Council, the open recommendation could be closed. The approval is expected to take place by the end of 2014.

EURO1

In 2011 the comprehensive assessment of the system against the CPMI Core Principles was finalised, as it was described in the previous Eurosystem oversight report. Since then, EBA Clearing has taken several actions to fulfil the recommendations issued, in particular implementing a comprehensive Risk Management Framework. It is expected that all pending recommendations will be implemented by the end of 2014.

In 2013 EBA Clearing carried out a review of the risk management tools in EURO1, including the loss sharing allocation mechanism. The rules for the loss sharing were modified towards a procedure based only on the bilateral limits allocated by the surviving participants, regardless

of the number of defaulting ones. This change simplified the procedure by applying the same calculation approach irrespective of the number of the defaulting participants and encouraged participants to apply tighter risk management controls in setting bilateral limits with regard to the other participants. After an analysis by the oversight function, it was concluded that there was no adverse impact on the system.

Since 2011 EBA Clearing has also implemented some changes related to the limit system. The cut-off time for the discretionary limit setting was modified and the mandatory limit was reduced to €1 million. The oversight assessment of the changes showed that they would enable EURO1 participants to better assess the risk situation of the other participants and respond to market developments in a timely and effective manner, and therefore improve the risk situation in the system.

STEP2-T

During the reporting period, the ECB, as lead overseer of the STEP2-T cooperative arrangement, monitored the operation of STEP2-T. The system was able to smoothly accommodate the increase in transactions resulting from the migration to SEPA.

On 30 September 2013 an additional settlement cycle in the SEPA Credit Transfer (SCT) service was introduced. The Eurosystem assessment showed that this new cycle did not negatively impact STEP2-T's compliance with the applicable standards (e.g. on liquidity management).

To increase STEP2-T's overall resilience, EBA Clearing decided to establish a third data centre to ensure that the processing of STEP2-T transactions can be resumed and continued in the event of a regional disaster. The Eurosystem concluded that EBA Clearing has indeed increased its resilience. Some recommendations, e.g. regarding the testing of the third site, were made and are being followed up by the Eurosystem.

As part of the data centre assessment, the Eurosystem also assessed the implementation of the Electronic Banking Internet Communication Standard (EBICS), which is a relevant internationally accepted communication standard, as a third channel. It was concluded that EBA Clearing has responded to the needs of its users and has reduced dependencies on the other channels.

CORE(FR)

CORE(FR) (COmpensation REtail France) was launched in January 2008 and is operated by the private company STET. CORE(FR) is an essential component of the European retail payment market. It is designed to cover all interbank retail payment transactions in France.

In 2011 the Banque de France assessed CORE(FR) against the applicable Core Principles for systemically important payment systems (SIPS). It was concluded that CORE(FR) fully observed all of the relevant Core Principles except for two – CP V on Settlement in multilateral netting systems and CP X on Governance – which were broadly observed. Adequate corrective measures were implemented by the operator and the participants, and full compliance has now been reached.

As it fulfils the criteria set by the ECB regulation on oversight requirements for SIPS, CORE(FR) has been recognised as a systemically important retail payment system under this new Regulation. The CORE(FR) operator is working with the Banque de France on improving its system in order to comply with the SIPS Regulation by August 2015, the end of the transition period.

2.1.2 NON-SYSTEMICALLY IMPORTANT PAYMENT SYSTEMS

The Eurosystem differentiates between SIPS and non-systemically important payment systems (non-SIPS). This distinction is based on quantitative criteria and determines both the applicable oversight requirements and how they are enforced. Non-systemically important payment systems consist of both LVPS and RPS. LVPS, which normally process a considerable number of high-value payments related to financial market transactions, are subject to all PFMI addressed to payment systems.

This holds also for those LVPS that are not systemically important. The ECB maintains a list on its website of non-systemically important LVPS as well as RPS and their classifications. Within the group of non-systemically important RPS there is a further distinction between “prominently important RPS” (PIRPS) and “Other RPS” (ORPS); a differentiation that is similar to the one introduced in 2003. Further details can be found in the Revised Eurosystem RPS Framework. Table 4 gives an overview of the non-systemically important payment systems in the Euro area.

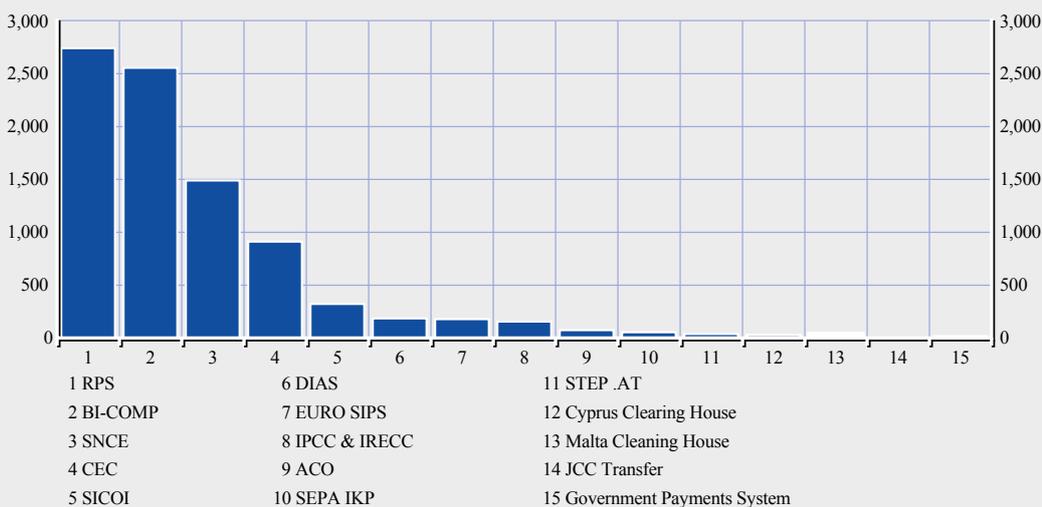
All the systems listed in Table 4 are subject to oversight, with the local NCB being the responsible overseer. NCBs’ oversight activities include continuous monitoring and regular assessments,

Table 4 List of non-systemically important payment systems by country

Non-systemically important large-value payment systems	
Finland	POPS
Prominently Important Retail Payment Systems (PIRPS)	
Belgium	CEC
Cyprus	JCC ¹⁾
Greece	DIAS
Italy	SIA-BICOMP
Netherlands	CSS
Portugal	SICOI
Slovakia	SIPS
Slovenia	SEPA IKP
Spain	SNCE
Other Retail Payment Systems (ORPS)	
Germany	RPS (EMZ)
Ireland	IPCC
Greece	ACO
Italy	ICBPI-BICOMP
	ICCREA-BICOMP
	CSM Banca d’Italia
Cyprus	Cyprus Clearing House
	JCC Retail Transfer System ²⁾
	Government Payments System ²⁾
	LVCTS ³⁾
Malta	Malta Clearing House
Netherlands	CSM
Austria	Clearingservice Austria
Slovenia	SEPA IDD CORE
	SEPA IDD B2B
	Poravnava kartic
	Poravnava bankomatov
	Multilateralni kliring Activa
	Moneta
1) Payment Card Scheme.	
2) Ceased operations in 2013.	
3) Ceased operations in 2012.	

Chart 1 Value of transactions (non-SIPS)

(billions of EUR; total for the period)



Source: ECB.

including the issuance of recommendations if necessary. Specific highlights per country are summarised below. For more descriptive information on the systems and oversight activities, readers should refer to the NCB websites.

AUSTRIA

The Oesterreichische Nationalbank (OeNB) is the authority responsible for payment systems oversight and oversees Clearingservice Austria (CS.A), which started its operations in 2011. CS.A was assessed by the oversight function of the OeNB in 2013 against the CPMI-IOSCO Principles. The findings of the overseers were generally satisfactory; however, the assessment revealed the need to better address specific operational risks. Full agreement has been reached with CS.A's operator on all topics raised by the overseer. The OeNB is currently monitoring and evaluating the implementation of the remaining open oversight recommendations.

BELGIUM

The Centre for Exchange and Clearing (CEC) is the Belgian automated clearing house which processes and settles retail payments between banks active in Belgium. In March 2013 the system migrated to the French technical platform, CORE, but remains a separate, independent Belgian legal entity. CEC improved its financial risk management, which addresses the recommendations of the overseer in this regard. A cooperative oversight arrangement between Nationale Bank van België/Banque Nationale de Belgique and the Banque de France concerning the oversight on CORE(BE) is imminent.

CYPRUS

The Central Bank of Cyprus carried out the assessment of the JCC Payment Cards system against the "Oversight Framework for Card Payment Schemes – Standards". The Central Bank of Cyprus shall launch a new oversight engagement for the JCC Cards Payment System and the Cyprus Clearing House for Cheques against the applicable PFMI. The central bank has placed the clearing and settlement systems of FBMECS under its oversight in accordance with the provisions of the Central Bank of Cyprus Law.

ESTONIA

Eesti Pank conducted the oversight of the ESTA domestic retail payment system pursuant to its national oversight framework. During the Oversight Report's reference period, there were no incidents in the operation of the ESTA that could have threatened financial stability or significantly hindered the performance of settlements. ESTA ceased operations with the start of the establishment of SEPA.

FINLAND

The PMJ domestic retail payment system was closed down at the end of January 2014. All credit transfers between banks are now transferred via STEP2-T. Therefore, the domestic features of STEP2-T have been a special focus of the oversight. Suomen Pankki – Finlands Bank also cooperates closely with the ECB, which is the lead overseer of STEP2-T. POPS – banks' online system for express transfers – has been monitored and functions have been by and large reliable. However, banks are planning to replace POPS and have already published requirements for the new system.

GERMANY

The Deutsche Bundesbank is responsible for the oversight of RPS, the German retail payment system operated by the central bank itself. As part of its oversight activities, the Deutsche Bundesbank regularly analyses the performance of RPS and monitors the impact of planned changes, follow-up measures concerning incidents, and the implementation of new releases. In the reporting period, changes included new processing cycles, the alignment with specific SEPA Scheme requirements, and the establishment of a bilateral link to the Equens clearing and settlement mechanism (CSM). No further issues relevant to the safety and efficiency of the system have been identified.

GREECE

The Bank of Greece, as part of its ongoing oversight activities, monitors the functioning of the DIAS and Athens Clearing Office (ACO) retail payment systems, as well as any changes to the systems. In 2011 the oversight function assessed DIAS compliance with the open issues identified in the second full assessment of the system against the applicable CPMI Core Principles for SIPS, performed in 2009. The outcome of the compliance assessment verified that all open issues had been adequately addressed by the system operator through necessary revisions to the system's Operating Rules and Functional Specifications.

IRELAND

During the period under review, the Central Bank of Ireland oversaw the implementation of an enhanced methodology for payments risk assessment covering the payment infrastructures and operational risk management procedures of the banks participating directly in IRECC and IPCC – the domestic retail electronic and paper clearing systems, respectively. This exercise led to a significant reduction in domestic payment incidents. The Central Bank of Ireland also oversaw the migration of domestic direct debits and credit transfer payments to SEPA standards, leading to their clearing and settlement directly through STEP2-T.

ITALY

In September 2012 Banca d'Italia issued a new Regulation containing "Provisions concerning the oversight of retail payment systems"¹⁶ in line with the PFMI and with the Eurosystem oversight standards for non-SIPS RPSs.¹⁷ Since then, Banca d'Italia has started a bi-annual assessment exercise of all four Italian clearing and settlement mechanisms using the assessment methodology of the

16 http://www.bancaditalia.it/sispaga/sms/normativa/sispag/bi/provv_art_146;internal&action=_setlanguage.action?LANGUAGE=en
17 In addition to the Eurosystem oversight standards, Banca d'Italia may impose sanctions on the RPS it oversees.

above-mentioned regulation.¹⁸ To this purpose, the Italian overseer analysed the documentation provided by, and had meetings with, the CSM operators covering the following areas of interest: organisation, effectiveness of controls, outsourcing, business risk, legal risk, operational risk, access and linkages. The assessment exercise for all Italian CSMs is expected to be complete by autumn 2014.

LATVIA

Latvijas Banka is responsible for oversight of the EKS (a “prominently important retail payment system” operated by Latvijas Banka, which before the introduction of the euro processed lat payments, but since 1 January 2014 has been a full-fledged euro RPS). As part of its oversight activities, Latvijas Banka regularly analyses system performance and developments. During the process of introducing the euro in 2013, a re-assessment of EKS compliance with the Core Principles was carried out. It concluded that the EKS was fully compliant with applicable principles, ensuring a smooth switch of the retail payment infrastructure to a SEPA-compliant payment environment.

MALTA

The Malta Clearing House provides cheque and money order clearing arrangements between participating institutions. The Central Bank of Malta, under the provisions of the Central Bank of Malta Act, has the authority to promote the establishment of a bank clearing system and to provide facilities for that system. The Malta Clearing House is classified as an ORPS, and its operations are monitored on a regular basis. There are plans to carry out an oversight assessment against the PFMI in 2015.

NETHERLANDS

The migration to SEPA implies that the clearing and settlement system (CSS) for clearing of domestic payments will be phased out and that the CSM will become the dominant system for Dutch retail payments in 2014. In 2013 the CSM’s business continuity management (BCM) was assessed against the BCM standards, which are based on best practices. This was part of the market-wide financial sector BCM assessment in the Netherlands conducted by De Nederlandsche Bank (DNB) every two years. Based on the assessment results, some recommendations were made to enhance operational reliability.

PORTUGAL

SICOI (Sistema de Compensação Interbancária) is a deferred net settlement interbank clearing system for retail payments which is classified as a PIRPS. Although Banco de Portugal is the manager, regulator and settlement agent, the system’s operation has been delegated to an interbank services company. The regular monitoring of the system’s performance covers issues such as incident analysis, test of contingency procedures and evaluation of technical and regulatory changes. At the end of 2013, Banco de Portugal also initiated an oversight assessment of SICOI against the PFMI (expected to be completed in the first quarter of 2015) and an appraisal (which may eventually result in the revision) of the mechanisms used for the mitigation of liquidity and credit risks.

SLOVENIA

Based on the national Law on payment services and payment systems, Banka Slovenije has carried out numerous licensing procedures and oversight/supervisory activities with regard to national retail payment systems. Banka Slovenije has carried out on-site inspections of a PIRPS processing credit transfers under the SEPA scheme, and of payment systems for direct debit payments under the SEPA Core and B2B schemes. The abovementioned on-site activities resulted in several supervisory

¹⁸ The methodology ensures comparability of analysis and results and a level playing field for the overseen entities.

measures being issued to the operators, mainly related to operational risk. In the meantime, the relevant operator managed to fulfil, on time, all the requirements laid down in Banka Slovenije's measures.

SLOVAKIA

The oversight function for the sole retail payment system in Slovakia, SIPS (Slovak Interbank Payment System), is carried out on the basis of Act No 492/2009 Coll. on payment services. During the reporting period, the system was migrated over to SEPA standards, and the overseers were actively involved in this process via monitoring of preparation and implementation of operational rules. The Slovak Interbank Payment System is fully compliant with SEPA standards in line with the Regulation No 260/2012 from 1 February 2014.

SPAIN

The Banco de España's oversight of the SNCE has focused mainly on assessing the removal of the bilateral limit on netting transactions for credit transfers (evaluated in 2013) against the RPS oversight standards and the Core Principles related to financial risks. The overseer has also emphasised the evaluation of a new architectonic design for the system to better address operational risk in line with Principle 17. The new design includes a new facility acting as contingency solution for participants' communications with the operator. The conclusions drawn from the two exercises showed that the changes have a positive impact on the general performance of the system and improve system compliance with standards from an oversight perspective.

2.1.3 CORRESPONDENT BANKING

Results of the eighth correspondent banking report 2013

Correspondent banking represents both an alternative channel to payment systems like TARGET2 for the settlement of transactions, in cases where payments are settled in-house by the service provider, as well as an access channel to such payment systems (i.e. tiering). Correspondent banking is often used to process "non-standardised" transactions (e.g. letters of credit) and to supply a number of interbank-related services (third-party services, trade financing, interbank fees, intraday liquidity management, etc.). The Eurosystem has conducted surveys on correspondent banking business since 1999 in order to monitor its importance, size and development. The most recent one (the eighth) was conducted in March 2012 and covered banks with a daily turnover on loro accounts of at least €1 billion (24 banks located in nine euro countries).

As in previous surveys, all participating banks were asked to provide answers to the general questionnaire of the survey, and very large banks with an average daily turnover of more than €10 billion on their loro accounts were also requested to provide additional information.

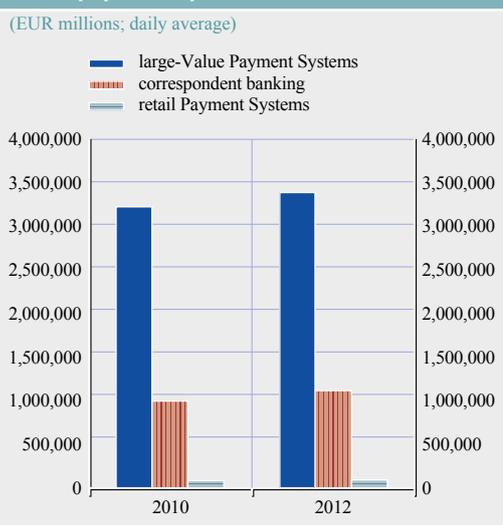
While reports on previous surveys were only distributed to the banks taking part, in April 2013 the Eurosystem published the report of the eighth survey in order to increase the transparency of its oversight activities with regard to correspondent banking and to share its results with other stakeholders.

The survey confirmed that correspondent banking remains an important channel for effecting payments in euro. For instance, the total daily turnover of euro transactions settled through correspondent banking arrangements averaged more than €1.1 trillion (loro transactions of the surveyed banks). However, most payments that originated through correspondent banking arrangements were ultimately settled through TARGET2 and EURO1, while payments processed solely through correspondent banking arrangements represented around 11% of the

total value (and about 1% of the total volume) of payments processed by the surveyed banks. The survey also confirmed the growing concentration of the correspondent banking business, with the largest four correspondent banks representing more than 80% of the total value turnover. From an oversight perspective this is relevant, since a default of one of these correspondent banks might quickly trigger a domino effect among their respective customer banks and/or service-providing banks, and risks of spillover into interdependent payment systems.

The report also included some risks and policy considerations involving the regulatory framework that applies to correspondent banking. While the Eurosystem has not introduced specific oversight requirements for correspondent banks so as to avoid any double regulation of banks, it has relied on banking supervision, working together with banking supervisors at different levels. Furthermore, it stressed that it is worthwhile to continue such cooperation with the aim of ensuring that risks in correspondent banking are consistently and uniformly covered by banking supervision in the euro area. The prospective transfer of supervision of euro area credit institutions to the ECB may further facilitate such close cooperation. The ninth survey started in March 2014 and results are expected to be published in early 2015.

Chart 2 Comparison between correspondent banking and large-value payment systems/ retail payment systems in the euro area



Source: ECB.

2.1.4 CARD PAYMENT SCHEMES

Card payment schemes' assessment

In 2014, the Eurosystem finalised the assessment against the harmonised Eurosystem oversight framework¹⁹ of 23 international and major domestic card payment schemes operating in the euro area.²⁰ The assessments covered the legal, financial, operational, reputational and overall management risks faced by card payment schemes. While there were some findings for all of the card payment schemes, compliance levels were high overall, and most card payment schemes observed or broadly observed the oversight standards.

Aspects covering the schemes' legal basis, participants' access to relevant information, and the clearing and settlement process were generally well observed, and there were only limited findings in these areas. Governance arrangements were found to have more room for improvement, e.g. in the area of risk management and the involvement of all relevant actors in the decision-making process as regards major changes.

The observance levels were lowest for security, operational reliability and business continuity issues. The question that was most often assessed negatively was whether the card payment scheme conducts a comprehensive risk analysis, taking into account all the different risk profiles of the various actors

¹⁹ ECB (2008), *Oversight framework for card payment schemes – standards*, January.

²⁰ Some schemes were waived because they had fewer than 1 million cards in issue or annual transaction of less than €1 billion within the euro area.

Table 5 Assessment results for card payment schemes

	1. Legal basis	2. Comprehensive information	3. Security, operational reliability and business continuity	4. Governance arrangements	5. Clearing and settlement process
Observed	19	20	16	13	15
Broadly observed	1	0	4	7	4
Partly observed	0	0	0	0	0
Not observed	0	0	0	0	0
Not applicable	0	0	0	0	1

Source: ECB.

Note: Assessment results for card payment schemes that are still active.

within the scheme. Similarly, six card payment schemes had negative findings on the risk management process used to identify and mitigate risks. Furthermore, a number of card payment schemes lacked an appropriate analysis of the financial risks associated with clearing and settlement arrangements or the associated mitigation measures and their monitoring. Shortcomings in the risk analysis were also identified in the context of outsourcing. Other findings related to encryption standards, the contingency plans put in place in the event of secrets being compromised, and the security of procedures for the management of secrets, cardholder data, cards and accepting devices.

Following the initial assessments, overseers entered into a continuous dialogue with the overseen card payment scheme to address any outstanding issues and to assess major changes going forward. Where negative assessments were made, overseers made recommendations and agreed with the card payment scheme on concrete follow-up actions. In some cases, improvements have already been put in place and have been assessed by the overseer. As a result, all card payment schemes are now at broad or full observance levels.

Third Card fraud report 2014

As part of the harmonised implementation of the oversight framework for card payment schemes, the Eurosystem collects and processes statistical information on card payments. Each scheme is asked to supply general business data, and to state the number and value of fraudulent and total transactions for each EU Member State and other SEPA countries. The Eurosystem has published three reports on card fraud so far, covering the years 2007 to 2012. On February 2014, the Eurosystem published its third fraud report.²¹

The total value of fraudulent transactions conducted using cards issued within SEPA and acquired worldwide amounted to €1.33 billion in 2012, which represented an increase of 11% from 2007. However, the corresponding value of non-fraudulent transactions increased by 30% during the same period. Therefore, fraud in relative terms, i.e. as a share of the total value of transactions, decreased to 0.038% in 2012, down from 0.045% in 2007.

Developments differed depending upon the payment channel through which the fraud was acquired: fraud resulting from card-not-present (CNP) payments – i.e. payments via post, telephone or the internet – increased from 47% of the total value of fraud in 2007 to 60% in 2012, while the share

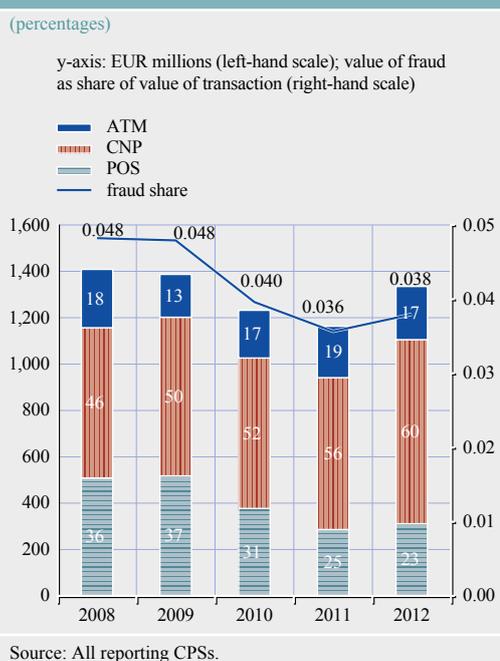
²¹ The third Eurosystem card fraud report is available at the ECB's website and can be accessed using the following link: <http://www.ecb.europa.eu/pub/pdf/other/cardfraudreport201402en.pdf>

decreased from 33% to 23% for fraud at point-of-sale terminals, and from 20% to 17% for fraud at automated teller machines.

While the growing relevance of CNP fraud was accompanied by fast growth in non-fraudulent CNP transactions, there is a strong case for the swift adoption of more effective security measures to protect CNP transactions, such as measures made in the recommendations for the security of internet payments by the European Forum for the Security of Retail Payments.

Lower fraud losses at point-of-sale terminals and automated teller machines were the result of increased usage of EMV, a security standard. This was reflected in decreasing counterfeit losses and the fact that counterfeit fraud shifted increasingly to countries outside SEPA, which typically have lower EMV levels: while in 2007, 51% of all counterfeit losses using cards issued inside SEPA were acquired outside SEPA, this measure had increased to 81% by 2012.

Chart 3 Evolution of the total value of card fraud using cards issued within SEPA



The report further shows lower levels of fraud in the euro area than in SEPA as a whole and includes information on fraud at the level of each participating EU country. The main conclusion is that card payments have become safer overall, whilst particular attention should be paid to CNP transactions, and that keeping technology up to date is key in combating fraud.

2.1.5 CENTRAL COUNTERPARTIES

Pursuant to EMIR Article 18, CCP colleges have been established for all CCPs operating in the EU. During the authorisation phase, the CCP colleges have focused on assessing CCP compliance with EMIR. In doing so, the national competent authorities for each CCP have conducted a risk assessment covering all the requirements set in EMIR and the accompanying regulatory technical standards, and the extent to which the CCP complies with them. Based on this assessment, Eurosystem college members (in their roles as, inter alia, overseer and CBI) have been conducting their own assessments, focusing on areas such as the CCP clearing and settlement process, liquidity risk management, interoperability arrangements with other CCPs, etc. During its elaborations in the college and when forming its opinion regarding the authorisation of the CCP, the Eurosystem college members provided recommendations and induced changes in these key areas, and thus achieved improvements in the ultimate CCP risk management design.

EMIR colleges

Pursuant to EMIR Article 18.2 (g) and (h), relevant members of the Eurosystem participate in EMIR colleges in their oversight capacity and as CBI for CCPs where the euro is one of the most relevant currencies for the financial instruments cleared, notably – besides euro area CCPs – offshore CCPs which clear a significant part of financial instruments in euros. For the CBI function, the Governing

Table 6 Eurosystem CBI representation in colleges of EU CCPs

Country	System
Euro area CCPs	
Austria	Central Counterparty Austria
France	LCH.Clearnet SA
Germany	Eurex Clearing AG
	European Commodity Clearing AG
Greece	ATHEXClear
Italy	Cassa di Compensazione e Garanzia S.p.A.
Netherlands	European Central Counterparty N.V.
	Holland Clearing House N.V.
Portugal	OMIClear
Spain	BME Clearing
EU CCPs outside the euro area	
Sweden	Nasdaq OMX Clearing AB
United Kingdom	CME Clearing Europe
	ICE Clear Europe
	LCH.Clearnet Limited
	LME Clear Limited (observer status)

Council decided in December 2012 that, as a general rule, the Eurosystem is represented by the relevant euro area NCBS when the CCP is established within the euro area, and by the ECB for CCPs established outside of the euro area.

AUSTRIA

Central Counterparty Austria (CCP.A), a subsidiary of Oesterreichische Kontrollbank AG and the Vienna Stock Exchange, is the sole central counterparty in Austria. CCP.A acts as a CCP for CCP-eligible products traded on the cash market of the Vienna Stock Exchange. The cash market comprises the equity market, bond market, structured products and other securities segments. CCP.A's EMIR-licensing procedure was led by the Financial Market Authority and the Oesterreichische Nationalbank as national competent authorities. CCP.A's EMIR application was deemed complete on 14 March 2014, and the risk assessment report was shared on 3 July 2014 with the college composed of members from Austria, Germany, the United Kingdom and the ECB. The college voted on 1 August 2014 in favour of licensing CCP.A under EMIR. As a consequence, the FMA granted CCP.A its authorisation under EMIR on 14 August 2014.

FRANCE

LCH.Clearnet SA is a French credit institution which acts as the central counterparty for transactions executed on the Euronext cash and derivatives exchanges on the Euronext markets, including Paris, Amsterdam, Brussels and Lisbon. It also clears fixed income bonds and repo transactions involving French, Italian and Spanish debt, as well as credit default swap (CDS) indexes and single names. It recently introduced €GC Plus, a clearing service for the tri-party repo market.

The oversight framework for LCH.Clearnet SA has recently been modified to also take account of the provisions set in the EMIR. The LCH.Clearnet SA EMIR college of authorities was established in January 2014 and comprises 18 members. The French national competent authorities for LCH.

Clearnet SA²² have conducted a risk assessment, in accordance with the provisions set in EMIR Article 19, which was shared with the college in March 2014. Based on this assessment, the college voted in April 2014 to give its opinion on the authorisation of the CCP, and on the authorisation of the interoperability link with CC&G, an Italian based CCP. Both votes resulted in favourable opinions for the authorisations. As a consequence, the ACPR granted LCH.Clearnet SA its authorisation under EMIR on 22 May 2014.

NETHERLANDS

In the course of 2013, EMCF entered into discussions with the British cash equity CCP EuroCCP Ltd. Approvals from the DNB, the Netherlands Authority for the Financial Markets (AFM) and the UK authorities led to the creation of current entity EuroCCP N.V., in which the clients, transactions and markets of EuroCCP Ltd and EMCF have been combined. Consequently, EMCF changed its name to EuroCCP N.V. as of 6 January 2014. EuroCCP N.V. is based in Amsterdam, but also has a branch in London and a representative office in Stockholm. The lead supervisory authorities for EuroCCP N.V. are the DNB and the AFM.

On 11 September 2013 EuroCCP submitted an application for authorisation as a CCP under EMIR. The EMIR college of regulators for EuroCCP consists of 19 authorities plus ESMA as an observer. On 13 March 2014 the college voted on the joint opinion to grant an EMIR authorisation to EuroCCP. On the basis of this outcome, DNB as competent authority decided to grant the EMIR authorisation as of 1 April 2014. As of that date, all supervision of EuroCCP is based on the requirements for CCPs under EMIR. The CPMI-IOSCO Principles for Financial Market Infrastructures will be used in the DNB oversight framework.

Holland Clearing House (HCH) provides clearing services for derivatives contracts traded on the Dutch Multilateral Trading Facility TOM. The HCH filed an application for an EMIR licence, which was deemed complete in August 2014. In September 2014 it was announced that ABN AMRO Clearing Bank entered into a deal with ICE to sell a majority of its shareholding in HCH subject to regulatory approval.

PORTUGAL

OMIClear, the Portuguese CCP providing clearing services to the power derivatives segment of the Iberian Electricity Market (MIBEL), started to operate in July 2006 as a joint initiative of the Governments of Portugal and Spain aimed at building a regional energy-based market. The Banco de Portugal participates in the EMIR college established for the authorisation of OMIClear on 18 June 2014. In addition to the Banco de Portugal, OMIClear EMIR college members include the Portuguese and Spanish Securities and Exchange Commissions (CMVM – the National Competent Authority – and CNMV), the Financial Conduct Authority (UK), the Prudential Regulatory Authority (UK) and ESMA. On 27 October 2014, the college reached a positive opinion and as a consequence, CMVM granted authorisation under EMIR on 31 October 2014.

GERMANY

The oversight function of the Deutsche Bundesbank has been monitoring the key milestones in the implementation of and compliance with the PFMI by Eurex Clearing AG, the globally active German CCP. Deutsche Bundesbank assessed several new services from an oversight perspective, including the clearing of deliverable foreign exchange (forex) options and futures, and the clearing

22 Namely the Autorité de contrôle prudentiel et de résolution (ACPR), Autorité des marchés financiers (AMF) and the Banque de France.

of new currencies, which were introduced in the general collateral (GC) pooling services of Eurex Repo.²³ The Bundesbank consulted the relevant central bank of issue on the new currencies for both products, and is still monitoring the further evolution of these services, in particular with respect to the management of liquidity risk. In addition, the Deutsche Bundesbank, in close cooperation with the Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin), induced changes concerning the standardised evaluation of IT services, which are outsourced to the Deutsche Börse Group as service provider.

The Deutsche Bundesbank extended its oversight monitoring to both German CCPs, hence including European Commodity Clearing AG in the oversight scope. In 2013 and 2014, as part of its oversight activities, and representing the Eurosystem in its CBI role, the Deutsche Bundesbank was closely involved in the EMIR reauthorisation process as a member of the CCP colleges of both German CCPs. Eurex Clearing AG and European Commodity Clearing AG were authorised to offer services and conduct activities in the EU in April 2014 and June 2014, respectively.

ITALY

On 13 September 2013, in accordance with EMIR, Cassa di Compensazione e Garanzia S.p.A (CC&G) submitted an application for authorisation to operate as a central counterparty and approval of the interoperability link with the French central counterparty, LCH.Clearnet SA. The EMIR college for CC&G was set up on 24 December 2013. It is chaired by Banca d'Italia and is composed of Consob (Italian Securities Commission) as well as authorities from the UK, France, Belgium and ESMA.

In accordance with EMIR, on 28 March 2014, the Banca d'Italia sent the Risk Assessment report on the CCP to the members of the college. The report highlighted that CC&G is fully compliant with EMIR and the accompanying regulatory technical standards. On 28 April 2014, on the basis of this risk assessment, the college issued a favourable joint opinion. According to the timeline determined by EMIR, the decision to authorise CC&G to provide clearing services as a CCP pursuant to article 14 was issued on 20 May 2014.

GREECE

The Bank of Greece participates in the EMIR college in the context of its CBI capacity. The college is currently being established. The CCP application for authorisation is not yet deemed complete.

SPAIN

BME Clearing is a company established in Madrid and belongs to the Bolsas y Mercados Españoles (BME) holding. It provides clearing services in euro-denominated financial instruments for the three following market segments: financial derivatives, public debt repos and electricity derivatives.

On 13 September 2013, BME Clearing applied for authorisation to operate as a central counterparty under EMIR. Banco de España participates in the EMIR college for BME Clearing, which was established on 8 April 2014. Based on the risk assessment conducted by the CNMV in July, on 5 August the college reached a majority opinion that BME Clearing complies with the requirements laid down in the EMIR. On 16 September 2014, the CNMV granted BME Clearing authorisation to operate as a CCP under EMIR.

²³ GC Pooling is an integrated trading, clearing and settlement service for exchange-traded money market transactions based on a basket of general collateral.

CCPS ESTABLISHED OUTSIDE THE EURO AREA

As the CBI for the euro, the Eurosystem is a member of the EMIR colleges of five CCPs established in the European Union but outside of the euro area (four CCPs established in the UK and one in Sweden). The ECB, on behalf of the Eurosystem, was closely involved in their authorisation processes under EMIR and assessed their applications from a CBI perspective, and submitted questions to the CCPs and their national competent authorities. Whenever it was deemed necessary, the ECB raised concerns and noted issues needing clarification. The EMIR authorisation processes have been completed for all but one of the CCPs, resulting in the national competent authorities (Bank of England and Finansinspektionen) granting authorisation to CMECE, LCH.Clearnet, LMEC and NOMX respectively.

SWEDEN

NOMX is a CCP established in Sweden clearing both financial and commodity derivatives. After thorough college discussions, voting on NOMX's EMIR application took place on 12 March 2014, and the CCP was authorised by the Finansinspektionen on 18 March. At the moment NOMX's EUR-denominated business is rather small overall and linked to the commodity derivatives cleared by the CCP.

UNITED KINGDOM

CME Clearing Europe (CMECE) is a London-based central counterparty clearing commodity and financial (interest rate swaps) OTC derivatives as well as exchange-traded derivatives (forex futures and commodities). CMECE's EMIR application was deemed complete by Bank of England on 4 February 2014, the college vote took place on 27 June, and the CCP was subsequently authorised on 4 August.

ICE Clear Europe (ICEU) is part of the IntercontinentalExchange Group Inc, which operates six CCPs and 17 exchanges. ICEU clears energy, equity, fixed income, interest rate, and commodity derivatives listed on ICE exchanges, and OTC credit default swaps on corporates and sovereigns; furthermore, it plans to introduce clearing of non-deliverable OTC forex forwards. ICEU's application for authorisation under EMIR was still under review at the time of writing this report.

LCH.Clearnet Ltd is London-based CCP and a wholly-owned subsidiary of LCH.Clearnet Group Limited, which also owns the French LCH.Clearnet SA. LCH.Clearnet Ltd operates nine separate clearing services offering a wide range of products, including energy derivatives, cash equities, equity derivatives, non-deliverable OTC forex forwards, listed and OTC interest-rate derivatives, and repos. LCH.Clearnet Ltd's application under EMIR was deemed complete by the Bank of England in December 2013. The ECB, together with the Banque de France as deputy, represented the Eurosystem as CBI in the college. The vote on the authorisation took place on 7 May, and the Bank of England notified the CCP of its authorisation under EMIR on 11 June 2014.

The ECB was invited by the Bank of England to observe the college of LME Clear (LMEC) as a non-voting member, as the euro is at present a minor currency within LMEC's clearing activity. LMEC is a London-based CCP offering clearing services for contracts traded on the London Metal Exchange, and also clearing certain OTC metals contracts. The LMEC college voted in favour of authorisation, and the CCP was authorised on 2 September 2014. At the time of authorisation, the CCP had not yet launched its clearing services. The CCP launched its clearing services on 22 September 2014.

2.1.6 SECURITIES SETTLEMENT SYSTEMS

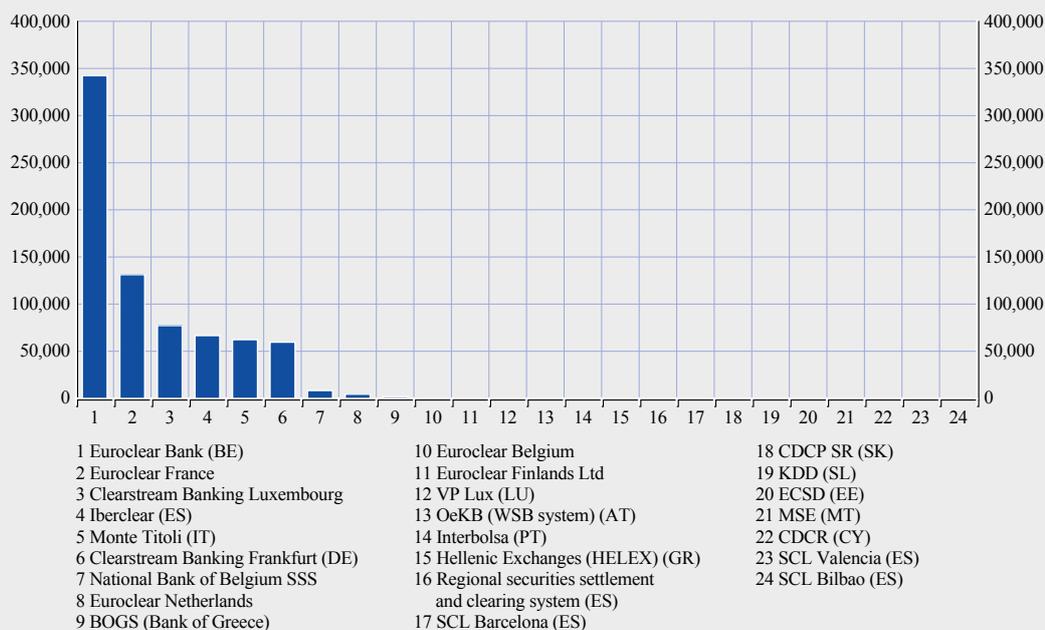
The Eurosystem currently oversees SSSs (Table 7) at the national level, as it does CCPs. In many cases, cooperative agreements have been set up between several authorities so as to make the oversight more effective. The CSD Regulation that entered into force in September 2014 should further promote cooperation among authorities, especially when a CSD, as operator of an SSS, has established branches or has become of substantial importance in other countries. When the CSD operating the local SSS has joined the T2S platform, ongoing oversight has focused in particular on the adaptation of IT infrastructures to T2S. Furthermore, oversight assessments were carried out against applicable standards (either the ESCB-CESR Recommendations for SSSs or the CPMI-IOSCO Principles for Financial Market Infrastructures). Depending upon the specifics of each case, recommendations were issued to infrastructures and relevant authorities to ensure that they are duly implemented.

Table 7 List of euro area SSSs

Country	SSS operated by
Austria	Central Securities Depository Austria (CSD.A)
Belgium	NBB-SSS Euroclear Bank Bank of New York Mellon CSD
Belgium / France / Netherlands	Euroclear Settlement of Euronext-zone Securities (ESES)
Cyprus	Central Depository Central Registry (CDCR)
Estonia	Estonian Central Securities Depository (Estonian CSD)
Finland	Euroclear Finland
Germany	Clearstream Banking AG, Frankfurt (CBF) – CASCADE & CREATION
Greece	ATHEX CSD - Dematerialized Securities System (DSS) System for Monitoring Transactions in Book-entry Securities (BOGS)
Italy	Monte Titoli
Latvia	Latvian Central Depository - DENOS
Luxembourg	LuxCSD S.A. (LuxCSD) VP LUX S.à r.l. (VPLUX) Clearstream Banking S.A. (CBL)
Malta	Malta Stock Exchange (MSE) - MaltaClear
Portugal	Interbolsa
Slovakia	Centrálny depozitár cenných papierov (CDCP)
Slovenia	Central Securities Clearing Corporation (KDD)
Spain	Iberclear – CADE & SCLV SCL Barcelona – SCL Bilbao – SCL Valencia

Chart 4 Value of instructions processed by euro area CSDs

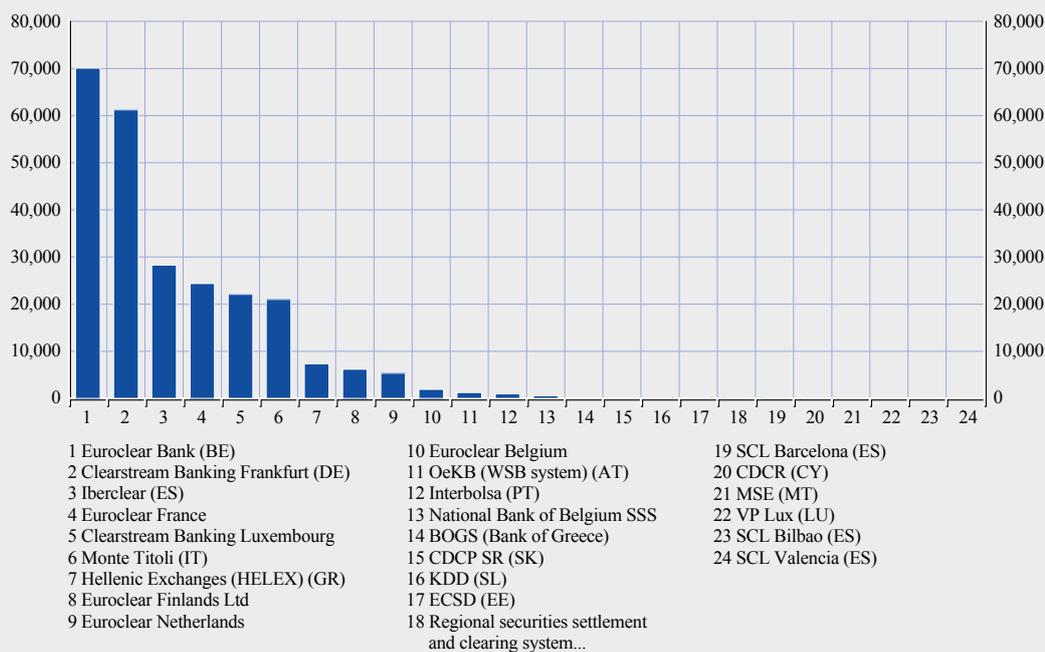
(EUR millions)



Source: ECB.

Chart 5 Volume of instructions processed by euro area CSDs

(thousands)



Source: ECB.

AUSTRIA

Central Securities Depository Austria (CSD.A) is the only Austrian CSD and maintains links with a number of European CSDs. It is operated by Oesterreichische Kontrollbank AG and is a designated system according to the Settlement Finality Directive. In addition to ongoing oversight activities, CSD.A was assessed for the last time in 2013, according to the ESCB-CESR Recommendations, by the oversight function of the OeNB. The findings of this assessment were satisfactory; CSD.A fully observed all applicable recommendations.

BELGIUM

The NBB-SSS is the CSD for dematerialised fixed income securities in Belgium. The system is operated by the Nationale Bank van België/Banque Nationale de Belgique (NBB) and provides mainly depository and securities settlement services. The system falls under the oversight of the NBB, and the division in charge of oversight is independent of the service in charge of operations. The outcome of the recent assessment against the CPMI-IOSCO PFMI is to be made public at the beginning of 2015. The NBB-SSS will migrate to the TARGET2-Securities platform and is currently involved in the testing phase of the project.

BNY Mellon CSD, a newly established Belgian CSD, intends to develop its activities gradually both in primary market (new issues) and settlement transactions in the course of 2015. Its client list is growing and a link has been established with Euroclear Bank. Its current operational model is based on a cash settlement relationship with BNY Mellon SA and will be reviewed in the light of the CSDR with regard to the provision of banking-type ancillary services for CSD participants. After the operational launch of BNY Mellon CSD, its SSS will be assessed under the Eurosystem user assessment framework to determine its eligibility for use in Eurosystem credit operations.

Euroclear SA/NV (ESA) is the Belgium-based parent company of the Euroclear group; it comprises the international CSD Euroclear Bank and the national CSDs in Belgium, France, the Netherlands, Sweden, Finland, the UK and Ireland. While each competent authority is responsible for oversight and supervision of the national CSDs under their national regulatory framework, the authorities have established cooperation arrangements with a view to coordinating oversight/supervision of the common services delivered by ESA to the CSDs of the group. The NBB is in charge of coordinating this multilateral cooperation process.

As an international central securities depository, Euroclear Bank provides settlement and custody services for international securities (Eurobonds), domestic bonds, equities and fund instruments. For the oversight of Euroclear Bank, the NBB had already developed several cooperation agreements with national and foreign authorities within and outside the EU, in accordance with CPMI IOSCO Responsibility E. In the context of the EU Financial Sector Assessment Program (FSAP) on pan-European critical market infrastructures, the IMF recommended formalising and extending the existing cooperation between Belgian and Luxembourg authorities regarding the link between Euroclear Bank and Clearstream Banking Luxembourg (the “Bridge”), and involving the ECB in the updated arrangements. Discussions on a formal oversight agreement will have to take into account the cooperation framework to be set up under the CSD Regulation.

The NBB, as lead overseer, also assessed Euroclear Bank against the full set of Principles for Financial Market Infrastructures issued in April 2012. Three Principles were assessed as “Broadly Observed”: Principle 4 (Credit risk) for asset servicing activities, Principle 11 (Central securities depositories) and Principle 19 (Tiered participation arrangements). Compliance

has now been achieved for Principle 4, but progress still has to be made with the upgrading of some reconciliation procedures (Principle 11) and the identification, monitoring and management of material risks arising from tiered participation arrangements (Principle 19). The NBB is monitoring the implementation of its recommendations in these fields.

BELGIUM – FRANCE – NETHERLANDS

The cooperative arrangements related to ESA described above are supplemented by cooperative arrangements between the Belgian, Dutch and French central banks and securities regulators on the oversight of the Euroclear Settlement of Euronext-zone Securities (ESES) platform, a single platform shared by the group's CSDs placed in the three countries. These include “working principles” for close cooperation in the oversight and supervision of ESES matters. In accordance with their national competencies, the decision as to the compliance of each ESES CSD/SSS with the applicable standards, i.e. the CPMI-IOSCO Principles for Financial Market Infrastructures, remains that of the respective domestic authority.

The ESES system settles both cash market transactions executed on the Paris, Amsterdam and Brussels Euronext stock exchanges, and bilaterally concluded OTC trades. The ESES CSD will join the Eurosystem T2S project in March 2016 and will – as an “investor CSD” – provide a single access point from the ESES platform to T2S eligible securities issued in the main T2S CSDs while continuing to directly offer all custody services. Over 2014, the central banks of the ESES countries – together with the securities regulators – monitored the ESES CSDs' implementation of the T2S project. Furthermore, the ESES authorities launched in April 2014 a joint comprehensive assessment of the ESES CSD against the CPMI-IOSCO PFMI. The results of this assessment will be available at the beginning of 2015.

CYPRUS

The Central Depository Central Registry (CDCR) is the sole CSD in Cyprus and is operated by the Cyprus Stock Exchange. The Exchange does not have any operational links with other CSDs-SSSs.

In late 2013, the Central Bank of Cyprus completed the oversight assessment of CDCR against the “ESCB-CESR Recommendations”. The Central Bank of Cyprus is responsible for conducting post-trading oversight, while the Cyprus Securities and Exchange Commission is responsible for the supervision of the capital market and the stock exchange market. The two authorities closely cooperate on aspects common to oversight and supervision of the CDCR and of the Cyprus Stock Exchange respectively. The CDCR “observes” most of the “ESCB-CESR Recommendations” and the Central Bank of Cyprus is closely monitoring the recommendations' implementation status.

ESTONIA

Eesti Pank is responsible for the oversight of the Securities Settlement System, which is managed by Estonian Central Securities Depository (ECSD). The main focus in overseeing the securities settlement system has been on the development of the pan-Baltic settlement platform, X-stream, by the depositories of Estonia, Latvia and Lithuania. The ECSD will introduce the platform in February 2017 at the same time that it joins TARGET2 Securities. An assessment of the Securities Settlement System against the PFMI was completed in June 2014. As a result of the assessment, ECSD was considered fully compliant with most of the PFMI. Recommendations were issued for three principles assessed as “partially observed” and for four principles assessed as “broadly observed”. Eesti Pank will be monitoring the recommendations' implementation status.

GERMANY

In early 2014, the Deutsche Bundesbank conducted, in cooperation with BaFin, an updated assessment of the German CSD Clearstream Banking AG, Frankfurt (CBF) against the ESCB/CESR Recommendations for Securities Settlement Systems in the European Union. CBF operates two systems: CBF-CASCADE, settling transactions in securities that are held in collective safe custody in central bank money, and CBF-CREATION, settling mainly transactions in international securities held in non-collective safe custody in commercial bank money. The operational and technical activities of CBF-CREATION are outsourced to the sister company Clearstream Banking S.A., Luxembourg. Both SSSs operated by CBF comply with the ESCB/CESR Recommendations for Securities Settlement Systems.

CBF will migrate onto the Eurosystem T2S platform in September 2016 (third wave). CBF then plans to provide access to all T2S markets via T2S internal links. The Deutsche Bundesbank will closely monitor all CBF activities with respect to T2S.

GREECE

The System for Monitoring Transactions in Book-entry Securities (BOGS) clears and settles mainly Greek Government securities and operates within the operational unit of the Bank of Greece. The Bank of Greece is the competent oversight authority for BOGS. In its oversight responsibility, in late 2013 the Bank of Greece performed an assessment using the CPMI-IOSCO principles. The assessment comprised the SSS itself and its links both as investor SSS and as issuer SSS.

ITALY

Monte Titoli is the Italian CSD and the operator of EXPRESS II, the Italian SSS. It also has links with other CSDs and SSSs, mostly located in the euro area. The Monte Titoli regulatory framework is governed by the relevant provisions of the so-called Consolidated Law on Financial Intermediation (CLFI) and the general regulations issued by competent authorities (Banca d'Italia and Consob), which also approved the relative operating rules.

In 2013 Banca d'Italia completed, in cooperation with Consob, the assessment of Monte Titoli against the ESCB-CESR Recommendations. In performing its regulatory and supervisory tasks, since 2014 Banca d'Italia has adhered to the CPMI-IOSCO Principles for financial market infrastructures.

FINLAND

Suomen Pankki – Finlands Bank oversees Euroclear Finland, which performs CSD and securities settlement activities in Finland. As Euroclear Finland is part of the Euroclear group, the central bank participates with other relevant authorities in the cooperative oversight of the Euroclear group.

Regarding Euroclear Finland oversight, the focus has been on the programme to migrate to T2S, which means a full overhaul of core CSD systems. Suomen Pankki – Finlands Bank has been assessing Euroclear Finland's new system against the CPMI-IOSCO principles for financial market infrastructures. Previously, in August 2013, a positive oversight assessment of Euroclear Finland against the ESCB-CESR standards was approved by the central bank Board.

LATVIA

Latvijas Banka performed oversight of the Latvian central depository's DENOS securities settlement system, analysing the system's technical and operational functions and compiling statistical data. DENOS underwent the compliance assessment against the Eurosystem User Standards in 2013, as a

result of which it was deemed to be eligible for use in Eurosystem monetary policy operations and intraday credit operations as of 1 January 2014.

LUXEMBOURG

Banque centrale du Luxembourg oversight of SSSs covers the systems operated by Clearstream Banking S.A., Luxembourg (CBL), LuxCSD S.A. (LuxCSD) and VP LUX S.à r.l. (VPLUX). In addition to monitoring the development of activities and assessing monthly information obtained from operators, the Banque centrale du Luxembourg performed a comprehensive assessment of the securities settlement systems operated by both LuxCSD and VP LUX against the ESCB-CESR recommendations. Overall, the respective assessments showed a high degree of compliance with the aforementioned recommendations. Nevertheless, a number of recommendations have been issued, and the respective operators have been notified of specific areas for improvement.

The Banque centrale du Luxembourg has also monitored the implementation of certain recommendations addressed to CBL that stemmed from the central bank's latest comprehensive assessment of the securities settlement system operated by CBL against the ESCB-CESR recommendations. In this regard, the Banque centrale du Luxembourg has paid particular attention to the development of a recovery plan for critical services by the operator. Furthermore, a specific examination looked into the various collateral management services offered by CBL to its participants and to other settlement infrastructures.

MALTA

The Malta Stock Exchange is the sole market provider in Malta for both CSD and securities settlement services. The Exchange is regulated and supervised by the Malta Financial Services Authority, while MaltaClear, the local SSS, is overseen by the Central Bank of Malta. In 2013, the Central Bank of Malta initiated an oversight assessment of MaltaClear against the PFMI. The assessment was finalised in the beginning of 2014 and its outcome showed that MaltaClear observed most of the Principles. A time-table has been agreed with the Malta Stock Exchange for full observance of those Principles that were only broadly or partly observed as of 2014. The Central Bank of Malta will be monitoring progress, especially considering that the Malta Stock Exchange will be joining T2S in the first wave, i.e. June 2015.

PORTUGAL

The Portuguese Market Securities Regulator (CMVM – Comissão do Mercado de Valores Mobiliários) is the regulator, supervisor and competent authority of the private Portuguese CSD, INTERBOLSA. INTERBOLSA operates three securities settlement systems, of which two are in euro and settle in TARGET2 via Ancillary Systems Interface (ASI). Considering the interdependencies between the clearing and securities settlement systems and payment systems, Banco de Portugal and CMVM signed a Memorandum of Understanding for sharing information and cooperation on relevant matters in November 2013. On 30 November 2012, SITEME, the CSD/SSS operated and managed by the central bank, ceased to exist.

SLOVAKIA

The Slovak CSD called CDCP (Centrálny depozitár cenných papierov) is a joint-stock company that operates on the basis of a licence granted by Národná banka Slovenska, which conducted the comprehensive assessment against applicable PFMI between June 2013 and January 2014. The principles deemed to be broadly observed (2, 3, 4, 7, 13, 15 and 17) will be regularly monitored, and there are plans to move to full observance in connection with the plans to join the T2S platform.

SLOVENIA

In March 2014, Banka Slovenije finalised its oversight assessment of the securities settlement system operated by KDD – Central Securities Clearing Corporation, as the only central securities depository in Slovenia. The oversight assessment was conducted against the CPMI-IOSCO Principles for financial market infrastructures, and the outcome showed that KDD observed most of the principles.

A time-table has been agreed with the KDD to achieve full observance of those principles that are only broadly or partly observed by the end of 2015. Banka Slovenije is monitoring the implementation of the related recommendations.

SPAIN

Iberclear is the Spanish CSD and the operator of CADE (Sistema de compensación y liquidación relativo a las operaciones realizadas en el Mercado de Deuda Pública en Anotaciones y en el Mercado de Renta Fija AIAF) and SCLV (Servicio de Compensación y Liquidación de Valores), the SSSs for fixed income securities and equities respectively. Iberclear is supervised by CNMV (National Securities Markets Commission). There are three additional SSSs (SCL Barcelona, SCL Bilbao and SCL Valencia) that offer registry, clearing and settlement services to the regional stock exchanges. Banco de España signed a Memorandum of Understanding with CNMV in 2009. In addition, Banco de España, as relevant authority according to CSDR, is involved in the supervision, authorisation, review and evaluation process of Spanish CSDs.

2.1.7 CLS

The Continuous Linked Settlement system provides a multi-currency service for the synchronous (payment-versus-payment) settlement of payment instructions relating to forex transactions, and the Federal Reserve System has primary responsibility for oversight under a cooperative oversight framework (the “Protocol”²⁴) between the Group of Ten (G10) central banks and other central banks of issue of CLS eligible currencies. Under the Protocol, the primary forum for the cooperating central banks is the CLS Oversight Committee (OC), chaired by the Federal Reserve as lead overseer. In this context, the relevant central banks can carry out their individual oversight responsibilities to fulfil their objective of safe and efficient payment and settlement systems and financial system stability. The Eurosystem is represented on the OC by the ECB, which has primary oversight responsibility for the settlement of the euro in CLS, as well as by other G10 euro area NCBS.

The CLS system settles payment instructions relating to forex transactions in 17 major currencies. On average, 800,000 transactions are settled daily through the system, totalling almost USD 5 trillion. Since 2011, CLS has advanced a number of strategic initiatives, which are being closely followed by the overseers. The same-day settlement (SDS) service between the United States and Canada was launched on 22 September 2013 to mitigate forex settlement risk for same-day forex transactions, and CLS is exploring the possibility of alternative settlement sessions in other geographic areas (including European currencies). CLS has also undertaken a currency program to consider the introduction of new currencies. Finally, CLS is analysing the potential impact on its system of the growing demand for CCP settlements, and notably, the various ways in which CLS could accommodate the settlement of CCP transactions. Overseers worked with CLS towards ensuring sound arrangements in the above-mentioned areas. Furthermore, CLS published information under the CPMI-IOSCO Disclosure Framework and consulted with the CLS Oversight

24 The Protocol for the Cooperative Oversight arrangement of CLS is available on the Federal Reserve Board’s website and can be accessed via the link: http://www.federalreserve.gov/paymentsystems/cls_protocol.htm.

Committee in the drafting of the Disclosure. The OC's oversight activities also included reviewing credit risk management, governance arrangements and the legal framework of CLS. Moreover, the overseers follow up CLS's work to enhance its liquidity risk management framework, notably to incorporate multiple settlement member failures, including nostro agents.

2.1.8 TARGET2-SECURITIES

TARGET2-Securities (T2S) is the Eurosystem infrastructure that aims to provide European CSDs with a single, pan-European platform for securities settlement in central bank money. It is scheduled to go live in June 2015. Migration of the CSDs participating in T2S will take place in four waves between June 2015 and February 2017. Two further CSDs have recently signed the T2S Framework Agreement, bringing the total number of CSDs participating in T2S to 24.

In order to facilitate oversight of the Eurosystem and the supervision of CSDs participating in T2S by their national securities regulators, a T2S cooperative framework between overseers and securities regulators was established in line with Responsibility E of the CPMI-IOSCO PFMI and the CSD Regulation. The T2S cooperative framework aims to promote the effective and consistent application of international oversight standards, thereby improving the effectiveness of the T2S Eurosystem oversight function and the performance of other authorities' statutory tasks with respect to their respective FMI using T2S (i.e. SSS of CSDs using T2S, TARGET2 and real-time gross settlement (RTGS) systems for non-euro currencies). The Eurosystem, in its capacity as overseer of T2S, the national central banks of currencies that are eligible for settlement in T2S, ESMA and the national competent authorities of CSDs participating in T2S are currently working on an assessment of the T2S design which will be completed before the go-live of T2S. Furthermore, the T2S cooperative framework works towards establishing an arrangement for the T2S operational phase, with the aim to facilitate information sharing and effective cooperation between the Eurosystem, as overseer of T2S, and the relevant authorities with a legitimate interest in the sound and efficient functioning of T2S.

2.1.9 TRADE REPOSITORIES

While TRs do not take financial risks themselves, their safety and soundness may be relevant to the smooth functioning of systemically relevant FMIs which rely on reliable and continuously available TR data, such as CCPs and payment systems. In the past, a number of Eurosystem central banks have helped establish cooperative oversight arrangements for TRs with a global reach.

In particular, from 2011 a number of Eurosystem central banks, including the ECB, participated in the cooperative oversight arrangements of the DTCC's Warehouse Trust under the lead of the Federal Reserve Bank and after the transfer of its credit and derivatives record keeping to the UK-based DTCC Derivatives Repository Ltd (DDRL) in the cooperative oversight arrangement of DDRL under the lead of the UK Financial Conduct Authority. With the authorisation of TRs under EMIR, the supervisory mandate of TRs moved to ESMA and, consequently, the Financial Conduct Authority discontinued its cooperative arrangement.

2.1.10 CRITICAL SERVICE PROVIDERS

SWIFT

In the case of SWIFT, a global messaging provider incorporated in Belgium and serving the financial community in more than 210 countries, the central banks of the G10, including the ECB, have established a cooperative oversight arrangement with the NBB as lead overseer.²⁵

The SWIFT Cooperative Oversight Group (OG) is the forum through which the central banks conduct their oversight of SWIFT and, in particular, discuss oversight strategy and policies. An Executive Group of the OG raises any issues of concern with SWIFT's board and management and discusses SWIFT's strategies for responding to these issues. At the technical level, the SWIFT Technical Oversight Group meets with SWIFT management, internal audit and staff to carry out the groundwork of the oversight process and reports its findings and recommendations to the OG.

In 2012 a SWIFT Oversight Forum was set up in order to expand information-sharing and dialogue in relation to SWIFT oversight to a larger group of central banks. The SWIFT Oversight Forum is composed of senior overseers from the G10 central banks (OG) and the central banks of Australia, China, Hong Kong, India, Korea, Russia, Saudi Arabia, Singapore, South Africa and Turkey.

Overseers have developed a specific set of oversight principles applicable to SWIFT, which describes in detail overseers' expectations in terms of operational risk management; these five High Level Expectations (HLEs) focus on security (confidentiality, integrity, availability) and system resilience. These Expectations vis-à-vis SWIFT have evolved into oversight requirements for all critical service providers to FMIs and were included as Annex F in the CPMI-IOSCO principles for FMIs.

SWIFT Oversight reviews and provides recommendations on SWIFT's major projects. These include the "Distributed Architecture" and "FIN Renewal". Both projects help increase the security, resilience and reliability of the services provided. With the Distributed Architecture project, SWIFT set up a multi-zonal messaging architecture, allocating countries to either the European or the Trans-Atlantic zone. It added a SWIFT operating centre for the European zone as well as additional command and control capability in Asia. This major multi-year project was successfully concluded in 2014. With the FIN renewal project, SWIFT addresses long-term technology needs for its core application for messaging. Aspects reviewed include risk management and project management, including the monitoring of project milestones, test strategies and transparency of communication in relation to vendors and customers. Finally, it is noted that SWIFT was awarded a value-added Network (VAN) Service Provider licence for T2S.

The overseers also followed up on other SWIFT oversight activities, such as the logical security features and the cyber defence of the SWIFT operations. Standing topics for review include IT audit reports, technology and information, security risk management, and the development of an integrated enterprise-wide risk management framework throughout SWIFT.

SIA/COLT

SIA is a provider of technology infrastructures and services for the banking and financial sectors and is registered in Italy. As the clearing component of one of Italy's critical retail payment systems and as a service provider to critical Italian infrastructures (e.g. the Italian Interbank Network RNI) and

²⁵ The common understanding of overseers and SWIFT as regards the oversight objectives and corresponding activities is laid down in a protocol arrangement between the NBB and SWIFT. The NBB has also concluded bilateral Memoranda of Understanding with each of the other central banks involved in the oversight of SWIFT.

STEP2-T, SIA is overseen by Banca d'Italia. COLT, a Luxembourg-domiciled company, provides connectivity to a number of stock exchanges across Europe and some of the fastest connections between key trading capitals such as London and Frankfurt.

In January 2012, a partnership between the two companies was awarded one of the two value-added Network (VAN) Service Providers licences for T2S, i.e. a licence to design, create and manage the network infrastructure used to connect CSDs, Eurosystem central banks and some large European banking groups to T2S. In particular, COLT will provide the network connectivity and SIA, the secure messaging data handling and associated security. In the framework of the Eurosystem oversight activities, Banca d'Italia analysed the contract between the two companies in order to ensure the respect of T2S's service level agreements and the security and integrity of data transmission, and to verify effective governance of the consortium/partnership, namely, the allocation of roles and responsibilities.

2.2 OTHER ACTIVITIES

INTERDEPENDENCIES

Financial market infrastructures are increasingly connected via complex interrelationships, either directly across systems (system-based interdependencies), via participation by financial institutions (institution-based interdependencies) or via external factors (environmental-based interdependencies). Interdependencies of FMIs have the potential to bring higher efficiency to the functioning of financial market infrastructures, but they can also transmit risks or amplify shocks that originate in an infrastructure. Therefore, interdependencies have been an ongoing subject of attention for overseers and they were addressed in 2008 in a CPMI report.²⁶ More recently, they have been tackled in the PFMIs, as well as in the ECB SIPS Regulation, EMIR and the CSDR.

The PSSC has conducted work on interdependencies over the last few years. Methodologies have been developed to identify and assess which banking groups are the most systemically important for the European network of FMIs, including CCPs, CSD/SSSs and SIPSs. To this aim, authorities have tried to analyse interconnectedness' share of business and the substitutability of the roles that banking institutions perform or the services they provide. This has made it possible to identify the top banking groups in terms of interconnectedness and value settled for CCPs, SSSs and SIPSs. This analysis supported overseers' crisis management preparations.

3 OUTLOOK

The Eurosystem's future oversight activities will be geared towards fulfilling its mandate to ensure that the FMIs processing the euro function smoothly and dislocations that might have an adverse effect on the wider financial system are avoided. In that respect, the Eurosystem will *contribute to the elaboration of the regulatory reform* (see special article in section 4.1) and the implementation thereof in the euro area. A special focus will be the transposition of international guidance on recovery and resolution into the European context.

As a follow-up to the ECB Regulation on oversight requirements for SIPS, the Eurosystem will conduct an *oversight assessment of TARGET2, EURO1, STEP2-T and CORE(FR)*, the four SIPS identified by the Regulation. These SIPS will have to comply with the Regulation, which is stricter

²⁶ CPMI, "The interdependencies of payment and settlement systems", June 2008, (<http://www.bis.org/publ/cpss84.htm>).

than the PFMI, by August 2015, the end of the transition period stipulated in the Regulation. This is to ensure that euro area SIPS comply with or exceed internationally agreed standards and do not introduce systemic risks.

The Eurosystem is currently reviewing its assessment guides for cards, direct debits and credit transfers, taking into account the SecuRe Pay recommendations on internet payments as well as the lessons learned from the card payment scheme assessments. In addition, the Eurosystem has started developing a proposal for data collections for direct debit, credit transfer and e-money fraud statistics. The latter will form part of a review of the oversight expectations for e-money. Once the assessment guides are completed, the Eurosystem envisages starting *to assess the EPC SEPA direct debit scheme*. At first, this process will only involve the European Payment Council as governance authority, but later it will be expanded to major actors at the national level.

As mentioned in the earlier part of the report, the Eurosystem, in the context of the *T2S cooperative framework*, is currently in the process of finalising the oversight assessment of the T2S design ahead of the T2S start of operations. After the start of T2S operations and after the renewal of the mandate of the T2S cooperative framework, it is expected that an assessment of T2S in operations will be performed against the PFMI.

The Eurosystem has been involved in the process of authorising existing *EU CCPs* under EMIR via its representation in EMIR colleges. It will continue to monitor and assess the EMIR compliance of CCPs on an ongoing basis, including an annual review of major developments within a CCP. Moreover, as part of the college work, the Eurosystem will analyse extensions of services and significant changes in the risk modelling of CCPs. The oversight function will also review CCP compliance with the CPMI-IOSCO PFMI.

Regarding the report on *correspondent banking in euro*, a ninth survey was launched in spring 2014. It involves banks with a daily turnover on loro accounts of at least €1 billion, and the final analysis is expected to be published in the first quarter of 2015.

4 SPECIAL ARTICLES

4.1 UPDATE ON INTERNATIONAL WORK STREAMS OF RELEVANCE FOR THE OVERSIGHT OF FMIS

A number of international work streams, especially in the fields of CCPs and TRs, have been carried out recently that may affect oversight activities by the Eurosystem:

- To provide guidance on what should be disclosed by CCPs and other financial market infrastructures, the CPMI and IOSCO published a **Disclosure framework** in December 2012, primarily covering qualitative data that need relatively infrequent updating. To complement that disclosure framework, CPMI-IOSCO have worked towards the development of a disclosure framework for CCPs that sets out guidance on the quantitative data that a CCP should disclose more frequently. Following a consultation in 2013, the final document is expected to be published by the end of 2014.
- The FSB published a feasibility study on aggregation of OTC derivatives trade repository data and announced next steps to be carried out by CPMI and IOSCO, including developing global guidance on harmonisation of data elements that are reported to trade repositories, developing

and implementing uniform global Unique Transaction Identifiers and Unique Product Identifiers, and addressing the legal and regulatory changes that would be needed to implement a global aggregation mechanism. The Eurosystem believes this work is essential in order to promote transparency in OTC derivatives markets in line with the G20 commitments.

- The CPMI and IOSCO have begun the process of monitoring implementation of the PFMI, including both the Principles and the Responsibilities. The implementation monitoring involves three phases: (1) Level 1 to assess whether jurisdictions have completed the process of adopting the legislation, regulations and other policies, including central bank oversight policies that will enable them to implement the Principles and Responsibilities; (2) Level 2 to assess whether the content of legislation, regulations and policies is complete and consistent with the Principles and the Responsibilities; and (3) Level 3 to assess whether there is consistency in the outcomes of implementation of the Principles and Responsibilities. The initial Level 1 assessments (covering 27 jurisdictions) were conducted in mid-2013. The results of the assessments were published in August 2013 and showed that most jurisdictions had begun the process of implementation, although few had completed the process for all categories of FMI. In May 2014, CPMI and IOSCO published the first update to the Level 1 assessment report. The update Report showed that significant progress has been made by jurisdictions since the initial Level 1 assessment report. It also revealed that progress in implementing the PFMI continues to vary according to the type of FMI, though implementation continues to be well advanced for CCPs, TRs and payment systems. The Level 2 assessments started in 2014. The first round covers CCPs and TRs in the EU, Japan and the United States. The aim is to publish the reports on these Level 2 assessments by early 2015. In November 2014, CPMI and IOSCO launched a combined Level 2/Level 3 assessment of the five responsibilities for central banks, market regulators, and other relevant authorities for FMIs (the Responsibilities) outlined in the PFMI. This primarily reflects the difficulty in separating the complete and consistent application of the Responsibilities (Level 2) and consistency in outcomes (Level 3). The aim is to publish the results of the assessments in 2015. Looking ahead, Level 3 assessments of Principles are planned for 2015 and will assess whether there is consistency in the outcomes of implementation. The Eurosystem attaches great importance to the implementation monitoring and has actively contributed to it.
- The Basel Committee on Banking Supervision (BCBS) and IOSCO established a monitoring group to assess the state of implementation, readiness, efficacy and appropriateness of the margin requirements, consistent with the goals set forth in the monitoring and evaluation section of the final margin framework. The work will focus on: assessing progress on the national implementation of margin requirements; reviewing industry implementation of margin requirements; reviewing the relation and consistency of margin requirements with other regulatory initiatives; assessing the liquidity impact of margin requirements, and evaluating the exemptions from margin requirements. The monitoring work began earlier in 2014 and work relating to the first items is expected to be completed around end-2014. The phase-in of margin requirements begins in December 2015. The Eurosystem endeavours to ensure that the margin framework for both centrally cleared and non-centrally cleared OTC derivatives transactions are consistent with each other so as to avoid distortions and potential disincentives for central clearing.
- Another important regulatory development is related to the recovery and resolution regimes for FMIs. Sound risk management in compliance with the PFMI and comparable regulatory

and supervisory regimes (e.g. EMIR) plays a crucial part in preventing any need for recovery and resolution. However, even if it is a very unlikely scenario, FMIs and relevant authorities have to be prepared for the failure of FMIs. Recovery regimes aim to ensure the ability of an FMI to recover from a threat to its viability and financial strength so that it can continue to provide its critical services without requiring the use of resolution powers by authorities. The CPMI-IOSCO and the FSB have launched work streams on recovery²⁷ and resolution,²⁸ respectively. The CPMI and IOSCO, as well as the FSB, finalised their work on recovery and resolution in October 2014. Once the CPMI-IOSCO guidance on recovery has been finalised and adopted, the Eurosystem will ensure that it is effectively implemented.

Cross-border oversight

In implementing rules and policies for FMIs, ensuring cross-border consistency is vital. Some FMIs operate across borders and in multiple currencies, and may thus face regulatory and supervisory requirements in several countries. In order to ensure a globally consistent regulatory approach, as well as to avoid regulatory arbitrage, it is crucial **to avoid gaps, inconsistencies and redundancies in requirements** for the risk management and use of such infrastructures. The PFMI provides a useful tool for the purpose of ensuring globally consistent requirements for FMIs. If regulatory regimes in different jurisdictions are able to defer to each other's regimes on the basis of the PFMI, this would constitute an effective way of overcoming cross-border frictions.

Related to resolving cross-border implementation issues, effective coordination and cooperation is necessary between relevant authorities (including central banks) for the ongoing oversight and potential crisis management of FMIs. To that end, effective cooperative arrangements between relevant authorities need to be established in line with Responsibility E of the PFMI. Establishing such international cooperative frameworks for the oversight of FMIs, in addition to any existing supervisory colleges under EMIR, is desirable for multiple reasons. *First*, EMIR only foresees colleges for CCPs domiciled in the Union. Consequently, there needs to be a global cooperative framework for third-country²⁹ CCPs. *Second*, even for CCPs domiciled in the Union, the compositions of the EMIR college and the cross-border cooperative arrangement could differ, as the latter is expected to involve relevant third-country authorities as well. *Third*, cooperation should be extended to the oversight of TRs. So far the ECB, on behalf of the Eurosystem, takes part in global colleges set up by the Bank of England for UK CCPs (ICE Clear Europe and LCH. Clearnet Ltd. in the case of SwapClear³⁰), but the Eurosystem urges other competent authorities to establish such cooperative arrangements as it is expected under Responsibility E. At a minimum, the Eurosystem expects to be involved in the cooperative arrangements for those FMIs that are considered systemically important for the euro area.

4.2 MONITORING INTRADAY LIQUIDITY RISK IN TARGET2

The management of intraday liquidity is particularly important in real-time gross settlement systems since the ability of banks to fulfil their payment obligations in a timely fashion is essential. Because settled payments are one of the liquidity sources receiving banks use to fund payment obligations, settlement delays can have domino effects on counterparties with potentially systemic impact.

27 <http://www.bis.org/publ/cpss109.htm>

28 http://www.financialstabilityboard.org/publications/r_130812a.htm

29 Non-EU.

30 <http://www.bankofengland.co.uk/publications/Documents/fmi/fmiap1403.pdf>

Accordingly, the risk of banks lacking liquidity to fund their payments on an intraday basis – which is commonly referred to as intraday liquidity risk – is routinely monitored by the payment system overseers. Overseers use a wide range of tools, including specific indicators such as those developed by the BCBS³¹.

The Banca d'Italia has been regularly assessing the intraday liquidity risk borne by the Italian participants in TARGET2; a central role in the monitoring activity is played by the ratio, hereafter called the “intraday liquidity usage ratio”, between the daily maximum intraday liquidity usage³² and the available intraday liquidity at the start of the business day (measured by central bank money and available margin on credit lines).

The meaning of daily maximum intraday liquidity usage is rather intuitive: when – at a given point in time for a given bank on a certain operational day – the cumulative sum of its outgoing payments exceeds that of the incoming payments, the bank is running a net debit cumulative position and needs to rely on the liquidity available on its settlement account; otherwise, it is compelled to delay a share of its outgoing payments.

For each operational day, a bank could in principle hold a minimum amount of liquidity equal to the maximum net debit cumulative position recorded in the same day. Such behaviour implies a trade-off, since in doing so the bank will be able to fulfil its payments on time but at the (opportunity) cost of holding liquid assets. On the other hand, in not doing so, the bank is likely to risk being obliged to delay its outgoing payments if other counterparties should delay theirs in turn.

In this vein, the “intraday liquidity usage ratio” provides a proxy for the intraday liquidity risk, since it quantifies the liquidity buffer that a bank may rely on to settle its outgoing payments in case of a sudden, unforeseen liquidity shortage. The intraday liquidity usage ratio ranges from 0 to 1. A value of the ratio equal to 0 indicates that the bank is funding its outgoing payments with the incoming payments from its counterparties, without relying on the initial liquidity held at the central bank. A value of the ratio equal to 1 indicates that the bank is using all its initial liquidity to fund its intraday obligations, without maintaining any liquidity buffer for coping with liquidity shortage: in fact, it needs either to rely on additional sources of liquidity or to delay its obligation should its counterparties delay sending payments to the bank. Thus, it is apparent that the lower the intraday liquidity ratio the more limited, *ceteris paribus*, the intraday liquidity risk, since the liquidity held by the bank at the start of the day may be sufficient to fulfil the bank's payment obligations of the day in case of larger liquidity stress.

From Chart A, it emerges that the majority of Italian intermediaries bear an extremely limited intraday liquidity risk, as their intraday liquidity usage amounts to less than one-fifth of the available liquidity (i.e. corresponding to a ratio of 0.2), both in 2012 and in 2013 for half of the participants.

31 In April 2013 the BCBS published the report *Monitoring tools for intraday liquidity management*, illustrating new monitoring indicators for intraday liquidity, their rationale and scope of application. The monitoring tools complement the qualitative guidance provided in the BCBS's *Principles for Sound Liquidity Risk Management and Supervision*, published in September 2008 and which require, among other things, (Principle 8) that “a bank should actively manage its intraday liquidity positions and risks to meet payment and settlement obligations on a timely basis under both normal and stressed conditions and thus contribute to the smooth functioning of payment and settlement systems”.

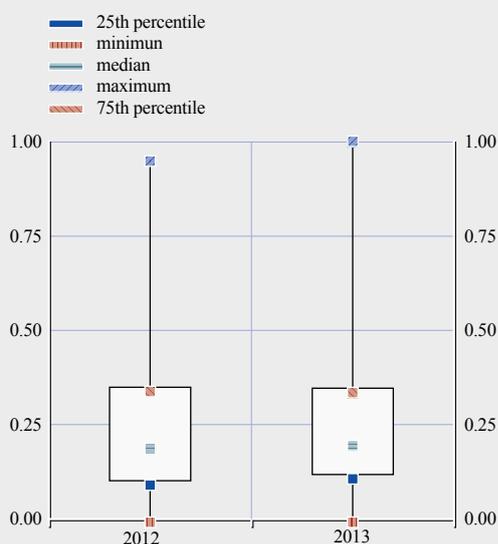
32 The daily maximum intraday liquidity usage is determined by the largest net negative position during the business day on the bank's account(s), (i.e. the largest net cumulative balance between payments made and received).

Box 3

INTRADAY LIQUIDITY USAGE OF TARGET2-BANCA D'ITALIA PARTICIPANTS

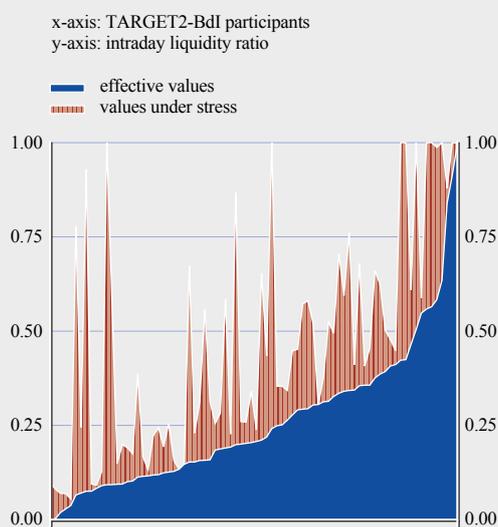
The figures show, for each Italian participant, the ratio between daily maximum intraday liquidity usage and the available intraday liquidity at the start of the business day (central bank money and available margin on credit lines) in TARGET2. In Chart A the box-plots show the minimum, the 25th percentile, the median, the 75th percentile and the maximum of the distribution of the “yearly” ratios at the participant level for 2012 and 2013 (showed as dark blue, light blue, green, orange and red squares, respectively).¹ Chart B shows the distribution of the same “yearly” measures of the actual ratios in the year 2013 in ascending order (light blue area), and the stress test ratios calculated in a situation of maximum stress, as explained in the body of the text (green area). For the sake of exposition, we set the stress test ratios to 1 when they are higher than 1. The simulation has been run for each working day in the reference period and at the group level, excluding Italian branches of foreign banks, to take into account the praxis of pooling the liquidity management at the parent company.

Chart A Distribution of intraday liquidity usage ratios across years



Source: Banca d'Italia.

Chart B Maximum counterparty stress scenario – year 2013



Source: Banca d'Italia.

¹ For each Italian participant, the ratio is calculated for each day of the year taken into account, thus obtaining a distribution of ratios. The 75th percentile of this ratio's distribution is then taken as “yearly” measure of the ratio.

Besides the monitoring of actual intraday liquidity usage, stress tests are regularly run to assess the participants' ability to cope with liquidity stress. In this vein, stress test exercises are conducted by reconstructing what the intraday liquidity position of each banking group would have been if that group had not received the incoming payments from its main TARGET2 counterparty. Two alternative scenarios are thus evaluated: i) a milder one, under which it is assumed that the recipient

participant is able to cancel all its outgoing payments due to the defaulting counterparty during the day; and ii) a worst-case scenario, of maximum stress, where it is assumed that the recipient bank cannot refrain from making these outgoing payments.

The “intraday liquidity usage ratio” is then calculated for each of the two scenarios and compared with the actual ratios. For 2013, Chart B shows these ratios for a maximum stress hypothesis (scenario ii), together with the value of the ratios actually recorded under a scenario of maximum stress. Again, from the stress test exercise it emerges that TARGET2 Italian participants hold more than enough liquidity in their TARGET account to cope with a liquidity stress materialising in a stop of inflows from their main counterparty, since most of the stress ratios are smaller than one, thus confirming the results of similar past exercises (see the Banca d’Italia Financial Stability Report, No 2, November 2011, and No 4, November 2012).³³

When evaluating the outcome of such exercises, two relevant caveats have to be kept in mind: i) the observed *daily maximum intraday liquidity usage* overestimates the need for liquidity, since banks can delay some payments during the day without significant operational and reputational consequences; and ii) the liquidity held in the settlement accounts represents the lower bound of the stock actually available, since banks can obtain liquidity outside the system (e.g. by pledging uncommitted eligible assets to the Eurosystem). Accordingly, the indicators must be considered as upper bounds to the actual intraday liquidity exposures of the participants.

4.3 OVERSIGHT OF THE LINK BETWEEN CC&G AND LCH.CLEARNET SA

LCH.Clearnet SA and Cassa di Compensazione e Garanzia S.p.A. (CC&G), central counterparties respectively established in France and in Italy, operate an interoperability link that covers the clearing of outright and repo transactions on Italian government bonds.

The main regulated financial market cleared through the link is the Italian wholesale market for government bonds (MTS Italy), authorised by the Italian Ministry for the Economy and Finance and supervised by Banca d’Italia and Consob.

Since the link was activated in 2004, the share of MTS transactions cleared through the link has been rising regularly.

From a risk management perspective, the margining procedures are harmonised so that the reciprocal exposures are calculated using the same algorithm. Margins are exchanged between the two linked CCPs on the basis of aggregated net position. In addition to the shared margin calculation algorithm, and following requests from both French and Italian authorities, the two CCPs decided in 2012 to develop and adopt also the so-called joint Sovereign Risk Framework, in order to evaluate the creditworthiness of euro area countries in such a way as to avoid pro-cyclical effects and other unwanted consequences in margin calculation.

The two CCPs are reciprocally exempted from contribution to the linked CCP’s default fund: in this way a default by one CCP’s participant will not affect in any way the other CCP, thus avoiding contagion effects between the two systems. The two CCPs also exchange an additional initial

³³ The evidence stemming from the previous analysis is then supplemented with additional pieces of information aimed at verifying e.g. the participant’s net position in the short-term money market and the related funding cost. These additional analyses confirm that the Italian participants in TARGET2 do not face significant intraday liquidity risk, even in the few cases when the ratio between the value of the maximum intraday usage and the available intraday liquidity is relatively high.

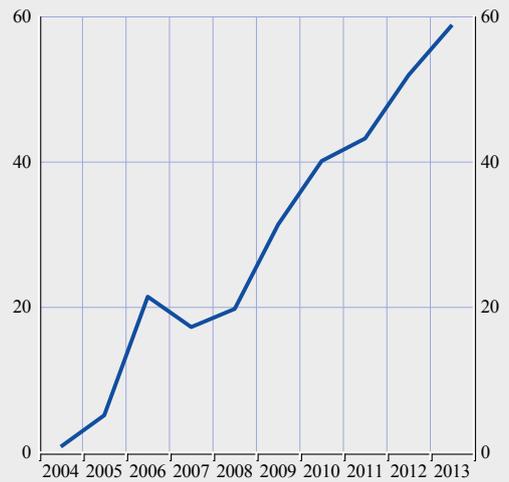
margin, which is calculated on the basis of stressed scenarios. This additional margin may be used only to cover losses arising in the very unlikely event of a CCP default, which would cause losses in excess of initial and variation margins.

All margin payments are executed in central bank money in euro.

The two CCPs run two completely independent clearing systems, thus avoiding exposure to operational risks in the event of a failure of the other CCP. In such an event, in fact, each CCP maintains its own ability to calculate both (a) the margins due by the other CCP and (b) the margins due to the other CCP. In fact, each CCP is able to replicate the margin calculations executed by the other CCP, as the margining methodology is shared.

Chart 6 Transactions cleared through the link

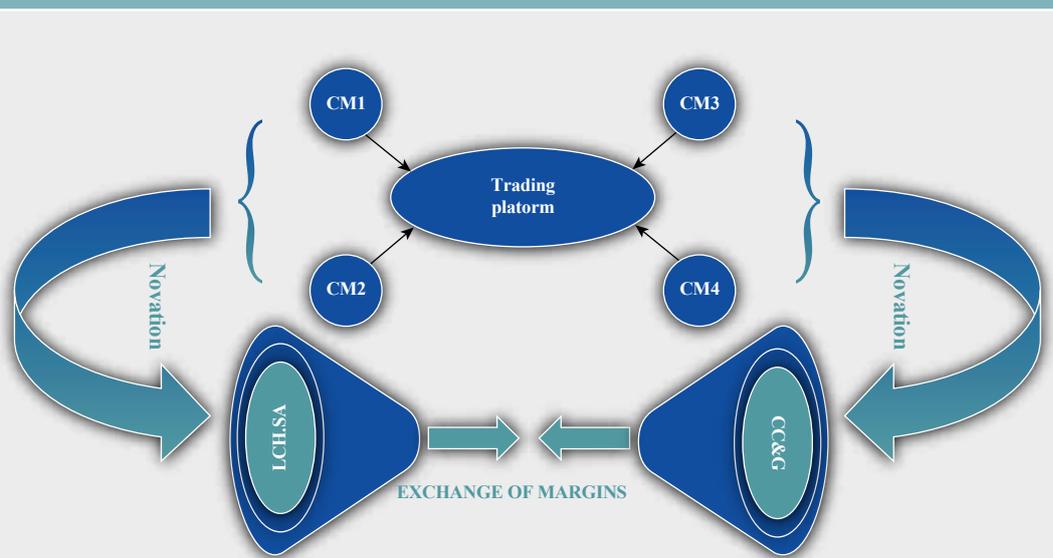
(percentage of total MTS transactions)



Source: Banca d'Italia.

The following diagram illustrates the basic functioning of the link:

Chart 7 Functioning of the link between CC&G and LCH.Clearnet SA



Source: Banca d'Italia.

Following a complete risk assessment for each CCP, CC&G and LCH.Clearnet SA were both authorised by their respective national competent authorities to provide clearing services as CCPs pursuant to Article 14 of EMIR.

Furthermore, pursuant to EMIR Article 54, the interoperable link has also been assessed and approved by the respective national competent authorities after having acquired the favourable opinion of the two colleges of supervisors established for CC&G and LCH.Clearnet SA. Besides the approval, the national competent authorities, supported by the college, are also responsible for ongoing supervision of the interoperability link, especially from a risk management perspective.

In addition to the oversight framework, the link between LCH.Clearnet SA and CC&G is also subject to cooperative supervision by French and Italian authorities. To this purpose, a Memorandum of Understanding was signed between them in December 2002, and was revised in February 2013. This MoU is without prejudice to the college's tasks and responsibilities.

ANNEXES

ANNEX I: EUROSISTEM OVERSIGHT POLICY DOCUMENTS

GENERAL FRAMEWORK

European Central Bank (2000), *Role of the Eurosystem in the field of payment systems oversight*, June.

European Central Bank (2011), *Eurosystem oversight policy framework*, July.

European Central Bank (2014), *ECB Regulation on oversight requirements for systemically important payment systems*, August.

PAYMENT SYSTEMS AND PAYMENT INSTRUMENTS

European Central Bank (1998), *Report on electronic money*, August.

European Central Bank (1998), *Policy statement on euro payment and settlement systems located outside the euro area*, November.

Committee on Payments and Market Infrastructures & IOSCO (2012), *Principles for market infrastructures*, Bank for International Settlements, April (adopted by the ECB's Governing Council in June 2013).

European Central Bank (2003), *Electronic money system security objectives*, May.

European Central Bank (2003), *Oversight standards for euro retail payment systems*, June.

European Central Bank (2007), *The Eurosystem policy principles on the location and operation of infrastructures settling euro-denominated payment transactions*, July.

European Central Bank (2007), *Terms of reference for the oversight assessment of euro systemically and prominently important payment systems against the Core Principles*, November.

European Central Bank (2008), *Oversight framework for card payment schemes – standards*, January.

European Central Bank (2008), *The Eurosystem policy principles on the location and operation of infrastructures settling euro-denominated payment transactions: specification of “legally and operationally located in the euro area”*, November.

European Central Bank (2009), *Harmonised oversight approach and oversight standards for payment instruments*, February.

European Central Bank (2010), *Oversight framework for direct debit schemes*, October.

European Central Bank (2010), *Oversight framework for credit transfer schemes*, October.

European Central Bank (2012), *The Oversight expectations for links between retail payment systems (OELRPS)*, November.

European Central Bank (2013), *Final recommendations for the security of internet payments*, January.

European Central Bank (2014), *Assessment guide for the security of internet payments*, February.

European Central Bank (2014), *Final recommendations for the security of payment account access services*, May.

European Central Bank (2014), *Revised oversight framework for retail payment systems*, August.

European Central Bank (2014), *Assessment methodology for payment systems*, August.

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European Central Bank (2001), *The Eurosystem's policy line with regard to consolidation in central counterparty clearing*, September.

European Central Bank (2008), *Eurosystem statement on central counterparties and interoperability, terms of reference*, March.

European Central Bank (2008), *Central counterparty clearing (CCP) for OTC credit derivatives, decision taken by the Governing Council*, December.

European System of Central Banks and the Committee of European Securities Regulators (2009), *Recommendations for securities settlement systems and recommendations for central counterparties in the European Union*, May.

ANNEX 2: LINKS TO EUROSISTEM CENTRAL BANK WEBSITES

In addition to the information provided in this report regarding the Eurosystem's oversight function, more details on oversight can be found on the internet. The table below lists pertinent links to Eurosystem central bank websites.

Table 8 Pertinent links to Eurosystem central bank websites

Central bank	Link to oversight information available on the internet
Austria	http://www.oenb.at/en/Financial-Stability/Payment-Systems-Oversight.html
Belgium	http://www.nbb.be/pub/01_00_00_00/01_01_00_00_00/01_01_05_00_00/oversight.htm?l=en
Cyprus	http://www.centralbank.gov.cy/nqcontent.cfm?a_id=11788&tt=article&lang=en
Estonia	http://www.eestipank.ee/en/payment-and-settlement-systems
France	https://www.banque-france.fr/en/financial-stability/payment-systems-and-market-infrastructure/systemes-de-paiement.html
Finland	http://www.suomenpankki.fi/en/rahoitusjarjestelman_vakaus/infrastruktuuri_valvonta/Pages/default.aspx
Greece	http://www.bankofgreece.gr/Pages/en/PaymentsSystems/oversight.aspx
Germany	http://www.bundesbank.de/Navigation/EN/Tasks/Payment_systems/payment_systems.html
Ireland	http://www.centralbank.ie/paycurr/Pages/introduction.aspx
Italy	http://www.bancaditalia.it/compiti/sispaga-mercato/index.html
Luxembourg	http://www.bcl.lu/en/payment_systems/large_value_payments/lips_gross/index.html
Latvia	http://www.bank.lv/en/payment-and-settlement-systems/payment-system-oversight
Malta	http://www.centralbankmalta.org/oversight
Netherlands	http://www.dnb.nl/en/payments/oversight/index.jsp
Portugal	http://www.bportugal.pt/en-US/pagamentos/Superintendencia/Pages/inicio.aspx
Slovenia	http://www.bsi.si/en/payment-systems.asp?MapaId=1486
Slovakia	http://www.nbs.sk/en/payment-systems/oversight
Spain	http://www.bde.es/bde/en/areas/sispago/Vigilancia_de_lo/Vigilancia_de_1_931ea69f5eb1921.html
ECB	http://www.ecb.europa.eu/paym/pol/html/index.en.html

ANNEX 3: GLOSSARY OF TERMS

This glossary contains selected terms that are used in the Eurosystem Oversight Report. A more comprehensive and detailed glossary can be found on the ECB's website.

Table 9 Selected terms

Central counterparty (CCP):	An entity that interposes itself, in one or more markets, between the counterparties to the contracts traded, becoming the buyer to every seller and the seller to every buyer, and thereby guaranteeing the performance of open contracts.
Central securities depository (CSD):	An entity that: (i) enables securities transactions to be processed and settled by book entry, (ii) provides custodial services (e.g. the administration of corporate actions and redemptions), and (iii) plays an active role in ensuring the integrity of securities issues. Securities can be held in a physical (but immobilised) form or in a dematerialised form (whereby they exist only as electronic records).
Payment account access services	They are i) account information services providing information on several accounts in a consolidated and user-friendly way, and/or ii) payment initiation services initiating payment transactions via a person's internet-enabled payment account.
TARGET2-Securities (T2S):	The Eurosystem's single technical platform enabling central securities depositories and NCBs to provide core, borderless and neutral securities settlement services in central bank money in Europe.
Trade repositories (TRs)	An entity that maintains centralised electronic records (database) of transaction data.