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The smooth functioning of financial market infrastructures and payment instruments is vital for the entire economy. It enables monetary policy to be implemented and contributes both to financial stability and to users’ confidence in the currency. In this respect, the Banque de France has broad powers to oversee financial market infrastructures (payment systems, clearing systems, and financial instrument settlement systems) as well as non-cash means of payment. This report covers the period 2009-2011. It describes how the Banque de France performed the three tasks assigned to it by French law and the Treaty on the Functioning of the European Union, i.e. to ensure:

- the security of non-cash means of payment and the relevance of the standards applicable to them;
- the smooth operation and security of payment systems;
- the security of clearing systems,¹ and of settlement and delivery of financial instruments systems.

The first chapter analyses the main developments affecting the Banque de France’s exercise of its oversight powers and the oversight framework during the period under review. The second and third chapters deal with assessing and monitoring the security and efficiency of financial market infrastructures and payment instruments during the period.

¹ Financial instrument clearing systems are managed by central counterparties (CCPs).
The economic and financial crisis exposed financial market infrastructures (FMIs) to a series of shocks during the period 2009-2011, especially the default of various participants. During that time, the FMIs serving the Paris markets demonstrated not only their robustness but also their ability to continue operating normally during periods of severe tension and to mitigate the risks of shocks reverberating through the financial system. Moreover, the fact that the infrastructures comply to the fullest extent with the relevant oversight standards, as reflected by the assessments made by the Banque de France during the period under review, shows they are both secure and efficient.

Since FMIs contribute to financial stability, the G20 leaders committed to requiring mandatory central clearing of standardised over-the-counter (OTC) derivatives contracts before the end of 2012. And because FMIs will play a greater role going forward, they will be subject to more stringent requirements of robustness and efficiency. The legal and regulatory framework for FMIs has been thoroughly overhauled for that purpose. Implementing the revised framework in France from end 2012 onwards will involve adjustments to the Banque de France’s oversight and cooperation framework; and the infrastructures it oversees will also have to make changes.

Regarding payment instruments, the period under review has seen the adoption of Regulation EU No. 260/212 of 14 March 2012, which sets a final deadline for migration to Single Euro Payment Area (SEPA) credit transfers and direct debits. This will be a milestone in the ongoing development of an integrated European market in retail payments. It will also see the arrival of new, non-bank market participants entitled to offer payment services and/or to issue and manage electronic money. At the same time, technological innovations will facilitate e-commerce (e-wallet, etc.) and face-to-face payments (contactless payment by mobile phone, etc.). In this new and evolving context, the security of non-cash means of payment in France remains high. This underpins user confidence in these instruments, which is vital to a well functioning economy.

However, in light of the current boom in online transactions and the medium-term possibility of greater use of means of payment involving a range of instruments renewed at European level, rigorous risk management and appropriate protective measures will be necessary. With this in mind, it is important that enhanced payment authentication methods come into mainstream practice.

The development of an integrated European retail payments market also requires a harmonised security approach. Eurosystem central banks have devised and undertaken joint assessments of payments by card, credit transfer, direct debit and e-money. In addition, a European forum on the security of retail payments, comprising EU central banks and prudential supervisors, has been set up with the main aim of issuing harmonised recommendations for dealing with the principal risks involved in payment instruments. The forum’s initial work, launched in 2011, focused on the security of online banking transactions and online remote card payments.

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1 At the Pittsburgh Summit, September 2009.
Main developments affecting Banque de France oversight between 2009 and 2011

The Banque de France’s oversight role was heavily influenced during the period under review by the financial crisis, closer integration of the European payments market and widespread innovations affecting online and face-to-face payments.

1| The financial crisis has underscored the importance of Financial Market Infrastructures

The smooth functioning of financial market infrastructures (FMIs) is key to financial stability. These infrastructures, which handle a substantial portion of business between financial system participants,1 ensure that credit transfer orders are executed with optimum security and efficiency (payment systems), that transactions in financial instruments are properly unwound (settlement systems) and that counterparty risk is centralised and managed more effectively (clearing systems).

The crisis has highlighted FMIs’ importance in maintaining financial stability. It has been marked by irregular but steep rises in trading volumes, severe strains on liquidity and the failure of financial institutions such as Lehman Brothers and MF Global that were participants in numerous FMIs worldwide.

But despite the difficult context, FMIs have continued to function smoothly.

They have shown that they are not only robust but also useful in stabilising and containing the spread of turbulence during crisis periods. This positive assessment prompted the G20 to recommend, as one of its responses to the financial crisis, that FMIs should play a greater role in transaction clearance and settlement processes.

Further to the conclusions of the G20 Pittsburgh Summit in September 2009, standardised derivatives contracts traded OTC are to be cleared through a central counterparty by the end of 2012 to ensure better management of the risks involved in this type of transaction. Moreover, all derivatives transactions must be reported to a trade repository in order to make these markets more transparent.

2| Further integration of the European payments market

As described in the 2009 edition of this report,2 the European retail payments market will change radically with the introduction of the Single Euro Payments Area (SEPA). The aim of SEPA is to achieve deeper financial integration in Europe by creating a non-cash adjunct to euro notes and coins.

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1 The average value of transactions processed daily by TARGET2-Banque de France (T2BF), the French large-value payment system, amounts to some EUR 400 billion, which explains why these infrastructures need to be sold.

The period under review saw the launch of the SEPA direct debit in November 2009 and a move towards migration which, however, is still inadequate, both in France and Europe-wide (see Box 1).

European Regulation No 260/2012 of 14 March 2012 set a deadline of 1 February 2014 for ceasing national credit transfers and direct debits, which will be replaced by their SEPA equivalents.

Box 1

**SEPA migration in France**

In France the migration to SEPA is uneven. Notwithstanding a substantial increase in the volume of SEPA-format credit transfers, which rose 20.8 percentage points between November 2010 and April 2012, and a major contribution to the European effort (France accounted for around one-third of total SEPA transfers in the third quarter of 2011), the migration process here is being driven mainly by the migration of public administrations. The private sector is insufficiently involved, suggesting that an enhanced communication campaign is needed to raise stakeholder awareness. In April 2012, only 26% of credit transfers in France were processed in SEPA format through the retail payment system CORE.

The volume of SEPA direct debits is still insignificant, both in France and at European level, accounting for less than 0.5% of all direct debits in April 2012.

Under these circumstances, the Banque de France is playing a major role as a catalyst, both through the Eurosystem and in the National SEPA Committee, which it cochairs, to encourage initiatives that will get SEPA well and truly off the ground.

**Chart**

**Progress of SEPA credit transfers in France**

<table>
<thead>
<tr>
<th>(millions)</th>
<th>(%)</th>
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<tbody>
<tr>
<td>Number of transactions</td>
<td>Percentage of transactions</td>
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</table>

Source: Banque de France – CORE data.

1 The National SEPA Committee coordinates implementation of European payment instruments in France. Chaired jointly by the Banque de France and the French Banking Federation, it comprises representatives from all stakeholders, i.e. banks, government departments, corporates, merchants and consumers, as well as members of Parliament and representatives of the Conseil économique, social et environnemental, the Association of the French Mayors and the press.

3 France postponed the launch of the SEPA direct debit until November 2010 further to a decision by the national SEPA Committee, owing to the extent of the preparatory work.

The regulation also includes provisions for phasing out “niche products” such as interbank payment orders (TIP) and electronic payment orders (télérèglement) by 1 February 2016. In addition, it eliminates multilateral interchange fees on direct debits, introduces consumer protection measures and extends the principle of equal charges for national and cross-border euro-denominated payments, which now applies regardless of the amount involved.

In parallel with SEPA implementation, the European Parliament began taking measures in 2001 to harmonise the regulatory framework for payment legislation so as to facilitate the formation of a single European payments market and foster competition by authorising two new categories of non-bank institutions to offer payment services.

The Payment Services Directive of 13 November 2007 (Directive 2007/64/EC) created the status of payment institution. The directive was implemented in France in 2009, notably through Government Order 2009-866 of 15 July 2009, which was codified in the Monetary and Financial Code and supplemented by regulatory measures. Likewise, the second Electronic Money Directive of 16 September 2009 (Directive 2009/110/EC, 2EMD) allows entities authorised as electronic money institutions (EMIs) to issue and manage e-money and to provide payment services. 2EMD is still in the implementation phase in France.

The Banque de France’s powers in this area have been strengthened and it now issues an opinion on the security of the payment services.

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Box 2

**Flow chart of the activities of different payment services providers (after 2EMD implementation)**

Credit institution
- Receipts of funds from the public
- Credit transactions
- Banking payment services: cheque drawing, drawing of paper traveller’s cheques; by default, any new product that is neither electronic money nor a payment service.

Electronic money institution
Supply and management of electronic money

Payment institution
Payment services

Sources: STET, Banque de France.

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5 These are legacy payment services that are credit transfers or direct debits but have specific functionalities, often due to historical or legal reasons, and that account for less than 10% of the total number of credit transfers or direct debit transactions respectively in the Member State (Recital 23 and art. 16(3) of Regulation 260/2012).
7 At this writing, and pending transposition, only credit institutions are entitled to issue and manage e-money.
proposed by applicants for payment institution status as part of the authorisation procedure put in place by the Autorité de contrôle prudentiel (see Chapter 3, 1). Going forward, the Bank will also issue a similar opinion in connection with the EMI authorisation procedure as soon as 2EMD has been implemented.

3) Innovation in payment instruments has become more prominent

Opening up payment services to competition from new participants has encouraged technological innovation, which in turn has created new payment habits, original services and new initiation channels.

With the growth of online commerce, multiple e-payment solutions have emerged as alternatives to traditional card-based payments. These include payment by credit transfer or direct debit and the use of e-wallet, in which several means of payment share a single user ID.

Innovation in payment instruments requires continual adjustments to the security devices and their oversight. For instance, e-banking and e-commerce sites need to introduce security measures to tackle extensive online payment fraud, as recommended by the Banque de France (see Chapter 3) and, more recently by the European forum on the security of retail payments, SecuRe Pay (see 4|2).

The main developments in terms of face-to-face transactions concern payments involving no contact between the customer’s payment instrument (card or mobile phone) and the merchant’s payment terminal. Various experiments in contactless payments have been carried out since 2010, particularly under the auspices of the AEPM, for payments with contactless-enabled mobile phones. Since data from contactless payments are sent by radio frequency, specific security devices are needed. The Banque de France is therefore promoting the use of devices that can activate and deactivate a payment instrument’s contactless mode in order to avoid fraudulent use. Contactless payments are confined to small amounts – whether individual or combined payments – in order to limit the financial impact for the legitimate owner of a stolen payment instrument. The Banque de France also makes sure that the components used in these new instruments (chips in smartcards, secure elements in mobile phones) reach the appropriate level of security certification before being made widely available.

Box 3

Experiments in France on contactless and mobile phone payments

The first experiments with contactless mobile phone payments took place in Caen and Strasbourg in 2008. Given their success with participating merchants and members of the public, it was decided to carry out a larger-scale test covering contactless payments both by card and by mobile phone. The ensuing project, “Nice Territoire d’Innovation”, was launched in 2009 but was hindered until the end of 2010 by a lack of compatible mobile phones on the market. Only contactless card payments could be carried out in sufficient volumes, since the necessary technology had been embedded into the cards used on the city’s public transport system. A greater number of latest-generation mobile phones featuring contactless technology are now available, and the Nice experiment will be extended to eight other French cities in 2012 (Caen and Strasbourg again, and also Bordeaux, Paris, Lille, Marseille, Rennes and Toulouse).

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8 Payments made by mobile phone on a website are not considered as mobile payments (m-payments) but as electronic payments (e-payments).
9 Association européenne Payez Mobile, a consortium of banks and mobile phone operators.
10 For example, a SIM card or an external module on which the payment application is stored.
The financial crisis, combined with ongoing European integration and the spread of innovation, has prompted closer international and European cooperation in the area of oversight.

## Closer harmonisation of the oversight framework at European and international levels

The financial crisis and the G20 commitments to financial market transparency and security prompted the Financial Stability Board\(^\text{11}\) to give a mandate to the Committee on Payment and Settlement Systems (CPSS) and the International Organization of Securities Commissions (IOSCO) to review the principles applicable to FMIs.\(^\text{12}\) The aim was to strengthen the framework of standards and make it more uniform.

Published on 16 April 2012,\(^\text{13}\) the CPSS-IOSCO principles tighten the applicable requirements, especially for management of credit and liquidity risks.

FMIs will be required to have sufficient financial resources to cover their entire credit risk exposure with a high degree of confidence, including in extreme but plausible market conditions. In particular, they will have to maintain adequate resources to cover credit risk in the event of a default of a participant (and its affiliates) to which they have the largest exposure. Special arrangements have been made for central counterparties (CCPs) that are involved in activities with a more complex risk profile\(^\text{14}\) or that are systemically important in multiple jurisdictions.\(^\text{15}\) These infrastructures will have to maintain sufficient resources to cover their credit risk in the event of the default of the two participants (and their affiliates) to which they have the largest exposure.

FMIs will also have to be able to cover their liquidity risk in the event of the default of the participant (and its affiliates) that would generate the largest aggregate payment obligation. CCPs that are required to be able to cope with their credit risk following the default of their two largest participants (and their affiliates) must also foresee measures for coping with the default of the two participants (and their affiliates) that would generate the largest aggregate payment obligation.

Concerning operational risk, FMIs must be able to resume operations within two hours of a disruptive event. For this, they have to establish a secondary, or backup, site with different risk profile than those of the main site,\(^\text{16}\) and possibly a third site depending on their importance and level of interconnectedness.

The CPSS/IOSCO Principles\(^\text{17}\) also deal with risks and concerns that have become particularly acute because of the financial crisis. For example, CCPs must also be able to segregate the assets of their participants’ clients in order to protect the clients if the participants default. FMIs must have sufficient resources at all times to fund six months of current operations in order to guarantee business continuity even if a general business risk materialises.

The principles are accompanied by five “responsibilities” for public authorities in charge of supervising and overseeing FMIs. In particular, Responsibility E advocates principles and practices to facilitate close

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\(^9\) The FSB was established at the G20 London Summit of 2 April 2009 to coordinate at international level the work of national financial authorities and international standard-setters to develop effective regulatory and supervisory policies for the financial sector.

\(^\text{10}\) The principles were previously divided into three sets of standards, Core Principles for Systemically Important Payment Systems (2001), Core Principles for Securitites Settlement Systems (2001) and Core Principles for Central Counterparties (2004). See Oversight of Means of Payment and Transfer Systems, Banque de France, 2009, section 1.3.2.

\(^\text{11}\) http://www.bis.org/publ/cpss101.htm.

\(^\text{12}\) For example, CCPs offering a clearing service for credit default swaps.

\(^\text{13}\) Defined on the basis of a non-restrictive list of six criteria.

\(^\text{14}\) For example, minimum geographical distance, different environment...

\(^\text{15}\) See annex for further details.
cooperation among the authorities responsible for oversight and supervision of an FMI, especially one that operates across national borders. Cooperation will make it possible to apply the principles uniformly at international level, a vital consideration given the very strong interdependencies between FMIs, including through the participation of the same large internationally active banks to several FMIs.

The G20 authorities have committed to incorporate the CPSS/IOSCO principles for FMIs into their national legislation and implement them by end-2012. In the European Union, that commitment has been reflected in the preparation of binding legal instruments that are consistent with these principles.

As a result, the European legal framework for FMIs will be broadly strengthened and harmonised: European regulations will replace the existing recommendations, which were drawn up by the European System of Central Banks (ESCB) and the Committee of European Securities Regulators (CESR) primarily for the authorities themselves.18

The European Market Infrastructure Regulation (EMIR), which governs CCPs and trade repositories (TRs), is especially important because it introduces a clearing requirement for all OTC standardised derivatives contracts and a requirement to report all derivatives trades (whether on organised or OTC markets) to a trade repository; it also establishes operating and oversight methods for CCPs and TRs. EMIR organises the supervision of CCPs by stressing cooperation among the various competent authorities. This is reflected in particular in the formation of colleges made up of all the authorities concerned by a CCP’s activity. The colleges will adopt joint opinions on the CCP’s compliance with EMIR, coordinate supervisory examination programmes based on a risk assessment of the CCP, and make arrangements for the different authorities to exchange the information they need.19

Cooperation among public authorities has been strengthened both by the CPSS/IOSCO principles and by EMIR. These international and European cooperation principles consolidate the Banque de France’s long-standing practice of overseeing infrastructures on a cooperative basis with the other competent authorities. This is reflected in particular in the system established to oversee the CCP LCH.Clearnet SA.20

In addition to EMIR, which strengthens European rules for CCPs and TRs, the Commission also published a proposal for a Central Securities Depositories Regulation (CSDR). The purpose of the CSDR is to strengthen the standards applicable to CSDs and securities settlement systems.

The amended versions of the Markets in Financial Instruments Directive (MiFID II) and the Capital Requirements Directive (CRD IV) also contain provisions intended to enhance FMIs’ robustness and security. In particular, the recast MiFID provides for CCPs to have transparent, non-discriminatory access to trading venues (and vice versa) for all products except OTC derivatives, which are covered by EMIR. The draft CRD IV provides for special treatment of credit institutions’ exposure to CCPs in order to encourage credit institutions to use clearing, by CCPs that fulfil international principles and EMIR.

Furthermore, European standards need to be consistent with CPSS/IOSCO international principles to avoid the risk of regulation shopping. At European level, this consistency is likely to be achieved through the technical standards that will clarify both EMIR and the CSDR.

18 Available at: http://www.ecb.europa.eu/pub/pdf/other/pr090623_escb-cesr_recommendationsen.pdf?77f51c0d169603a3e1b26dac75d42a2c
19 EMIR, Article 18.
20 See Chapter 2, 1].
4.2 Payment instruments

With the impending completion of SEPA, the Banque de France had to renew its oversight framework for payment instruments, which was part of a European approach. The Bank’s oversight activity now relies on the Eurosystem Harmonised Oversight Approach\(^{21}\) applicable to card payments, credit transfer and direct debit.\(^{22}\) These principles cover the full transaction cycle of SEPA instruments (SCT, SDD\(^{23}\)) and card payment schemes, and can also be applied to all credit transfer and direct debit schemes. Principles for the oversight of e-money payments are currently being drafted. For the oversight of cheque payments, the Bank will rely on its own set of security standards.\(^{24}\)

Given the Europe-wide dimension of the new payment instruments and the participants in this market, it is particularly important to establish a common European approach to security between the various public authorities involved.

This necessity led to the formation of the Forum on SECurity of REthail PAYments (SecuRe Pay), which comprises the central banks and prudential authorities of the European Union. SecuRe Pay’s remit is to issue recommendations for addressing the main risks connected to payment instruments. Harmonised at European level where appropriate, these recommendations are intended to be implemented in the national frameworks of the various competent authorities. In 2011, SecuRe Pay’s work focused on protecting online banking transactions and card payments on the internet.\(^{25}\)

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\(^{21}\) In light of the importance of cashless payments across Europe, national central banks part of the Eurosystem have decided to define common oversight frameworks for each payment instruments, pursuant to the Harmonised oversight approach and oversight standards for payment instruments, published in February 2009; available on the ECB site: http://www.ecb.int/pub/pdf/other/hamnover/ps2009en.pdf?


\(^{23}\) SEPA Credit Transfer and SEPA Direct Debit.

\(^{24}\) Banque de France cheque security framework of February 2005:

\(^{25}\) SecuRe Pay’s report (http://www.ecb.int/press/pr/date/2012/html/pr120420.en.html) has been put out to public consultation.
Oversight of financial market infrastructures

The Banque de France is responsible for overseeing the three FMIs based in France: the clearing system operated by the CCP LCH.Clearnet SA, the ESES France settlement system managed by the CSD Euroclear France, and the CORE retail payment system run by STET.

The Bank also takes part in the cooperative oversight of other infrastructures active in France that also operate throughout the euro area, such as the large-value payment systems TARGET2 and EURO1, or that have international reach, including the communication infrastructure SWIFT, the forex settlement system CLS and the trade repository managed by Warehouse Trust Company LLC (WTC), a subsidiary of DTCC.¹

The Banque de France’s FMI oversight duties entail regular assessments, discussed in this chapter, of each infrastructure against applicable international standards.

1| LCH.Clearnet SA

LCH.Clearnet SA acts as the central counterparty (CCP) for equity, fixed income and equity derivative trading on Euronext securities markets in Paris, Brussels, Amsterdam and Lisbon. Since December 2010 it has also cleared over-the-counter (OTC) outright trades and repos on French, Italian and Spanish government bonds. It has an interoperability link with the Italian CCP, Cassa di Compensazione e Garanzia (CC&G), so that participants of one CCP can clear their Italian debt trades directly without having to be a member of the other.

1|1 Ongoing projects

In addition to clearing Spanish government debt, LCH.Clearnet SA recently developed a clearing service for credit default swaps (CDS); it has also cleared iTraxx index contracts on European CDS since March 2010. LCH.Clearnet SA is ramping up this new service gradually with a view to rolling it out fully by autumn 2012 and opening it to its members’ clients later in the year when mandatory central clearing of OTC derivatives trades comes into force in many jurisdictions pursuant to the G20 commitments. The service was launched in March 2010 for French banks and was made available to

¹ The Depositary Trust and Clearing Corporation.
UK banks in March 2012 following a positive assessment by that country’s regulator, the Financial Services Authority, which granted LCH.Clearnet SA the status of Recognised Overseas Clearing House. To complete the final stage of the roll-out, i.e. opening the service to US banks, LCH.Clearnet SA has first to be recognised as a Derivatives Clearing Organization (DCO) by the Commodity Futures Trading Commission (CFTC), in accordance with the Dodd-Frank Act. The CFTC is currently processing LCH.Clearnet SA’s application for DCO status.

In 2011, as part of the Cassiopée project, LCH.Clearnet SA developed a clearing solution for new platforms trading European corporate bonds, such as NYSE’s BondMatch and TradingScreen’s Galaxy.2

Another key development was the December 2010 launch of the Universal Clearing System (UCS), a new IT platform for clearing listed equities, bonds and derivatives. With UCS, LCH.Clearnet SA can handle up to 6 million transactions daily compared with 3 million on the previous platform.

These projects have been assessed on an ad hoc basis by the competent authorities in France, working with their Belgian, Dutch and Portuguese counterparts belonging to the Coordination Committee on Clearing.

LCH.Clearnet SA demonstrated the robustness of its risk management framework by weathering the default of one of its clearing members, the broker MF Global, on 31 October 2011. LCH.Clearnet SA was able to close out MF Global’s positions without relying on the mutual default fund and to transfer its clients’ positions.

In 2011 LCH.Clearnet SA upgraded its risk management framework in response to financial market tensions. The new framework improves the management of the risks involved in clearing government bonds, especially since they become less liquid and more volatile and since some participants concentrate their positions on a particular type of product.3

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2 The Cassiopée project was launched by the French financial community in 2010 and implemented in 2011 to set up one or more European-oriented platforms for trading euro-denominated corporate bonds, particularly those issued by small and midsize companies. Creating an organised market in these bonds will make the secondary market more liquid and transparent. As part of the project, NYSE Euronext and TradingScreen launched platforms (BondMatch for the former, Galaxy for the latter) specialising in European corporate bonds.

3 A CCP is exposed to concentration risk if one of its members has a position that is substantial relative to the size of the market and that, should the need arise, cannot be liquidated within the appropriate timeframe at an acceptable price. For example, a CCP member has a bond position equivalent to 50% of all the securities in the same issue and with the same maturity. If the CCP needs to liquidate that position, it may have problems finding buyers or sellers for such a large quantity of securities.
LCH.Clearnet SA’s medium-term policy choices are being influenced by various factors that will shape its future. These include the bid from the London Stock Exchange, its evolving relationship with NYSE Euronext as regards the clearing of trades executed on Euronext’s securities markets, the launch of CDS clearing service and the development of a triparty collateral management service that includes a clearing solution (see Box 5).

The Banque de France will keep close watch on LCH.Clearnet SA’s choices to ensure they preserve the security, efficiency and continuity of clearing on Euronext securities markets. This is all the more vital since clearing will become mandatory once EMIR comes into force. The Banque de France will also pay attention to the issues that could arise, especially as regards oversight and supervision, if clearing of listed derivatives operations were to migrate outside the euro area.

1|2 Assessment

An overall assessment of LCH.Clearnet SA was conducted in 2011 against relevant European standards, i.e. ESCB/CESR recommendations for CCPs in the European Union. Coordinated by the Banque de France, the exercise was carried out in close collaboration with the members of LCH.Clearnet SA’s cooperative oversight committee. This second overall assessment – the first was conducted in 2005-2006 – showed a high degree of conformity: LCH.Clearnet SA complied with 13 of the 15 ESCB/CESR recommendations, and it broadly observed Recommendation 4 on margin requirements and Recommendation 13 on governance. This performance is consistent with the ongoing improvement evident from a comparison with the previous assessment. LCH.Clearnet SA has made progress in managing operational risk and in measuring and controlling credit risk, with the automation of intra-day margin calls in the government bond and listed derivative clearing segments. Regarding the two areas in which LCH.Clearnet SA is not fully ESCB/CESR-compliant, i.e. governance and margin requirements, recommendations have been made to reach the full compliance. Concerning margin requirements, the competent authorities have recommended in particular

<table>
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<tr>
<th>Recommendations</th>
<th>2005-2006</th>
<th>2011</th>
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<td>1 Legal risk</td>
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<td>2 Participation requirements</td>
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<tr>
<td>3 Measurement and management of credit exposures</td>
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<td>4 Margin requirements</td>
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<td>5 Other risk controls</td>
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<td>6 Default procedures</td>
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<td>7 Custody and investment risks</td>
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<td>8 Operational risk</td>
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<td>9 Money settlements</td>
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<td>11 Risks in links between CCPs</td>
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<tr>
<td>15 Regulation, supervision and oversight</td>
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Source: Banque de France.
that a backtesting methodology⁴ be developed and applied quickly. LCH.Clearnet SA is already implementing this recommendation and preparing to automate its backtests.

Concerning governance, the French and Portuguese competent authorities have recommended drawing up and implementing an internal policy for identifying and dealing with conflict-of-interest risks more effectively.

The LCH.Clearnet group, to which LCH.Clearnet SA belongs, is currently implementing a plan to reorganise and rationalise all its activities. The plan, which will affect the governance of LCH.Clearnet SA, is being assessed by the competent authorities and has to be formally approved by the Belgian and Dutch authorities before being put into effect.⁵

2) ESES France

The ESES⁶ France settlement system is managed by Euroclear France, the French central securities depository (CSD), and overseen by the Banque de France. It has been notified to the European Commission and accordingly benefits from the protective provisions under the Settlement Finality Directive.

ESES France is part of the ESES platform which handles settlement for the settlement systems of the Euroclear group in Belgium, France and the Netherlands. The settlement systems are managed by the countries’ respective CSDs, Euroclear Belgium, Euroclear France and Euroclear Nederland, which are subsidiaries of the Euroclear group’s holding company, Euroclear SA/NV (ESA). The ESES platform settles transactions executed on Euronext securities markets in Paris, Amsterdam and Brussels. The CSDs have outsourced the platform’s IT to ESA, which also supplies risk management, auditing, legal and personnel services.

2|1 Ongoing projects

Further integration into the group

Along with Euroclear Belgium and Euroclear Nederland, Euroclear France is pursuing efforts to integrate its activities and rationalise them at operational level. This resulted, among other things, in the late-2010 transition from a geographical organisation structure to a functionally-oriented structure in which similar activities performed on different markets are managed by a single cross-border manager. As a result, since November 2011 Euroclear France has been operationally responsible for the settlement activities of Euroclear Belgium and Euroclear Nederland. In view of this, the competent authorities in France⁷ and Belgium⁸ signed a memorandum of understanding (MoU) in July 2011 with a view to cooperating, coordinating and exchanging information useful for the oversight of ESES France’s settlement activities. The MoU expands on the existing mechanisms for cooperation between the authorities in charge of overseeing and regulating the CSDs and

<table>
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<th>Chart 4</th>
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<td>Activity of ESES France</td>
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(Thousands) (EUR billions)

<table>
<thead>
<tr>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>No of instructions processed</td>
<td>Value of instructions processed</td>
<td>Value of securities in account</td>
<td></td>
</tr>
</tbody>
</table>

Source: STET, Banque de France.

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⁴ This consists of an ex post comparison between the results actually obtained and the expected results derived from theoretical models, the aim being to check whether the models are relevant and reliable.

⁵ For this reason, the Dutch and Belgian competent authorities have not so far given their opinion on the assessment of the governance recommendation.

⁶ Euroclear Settlement of Euronext-zone Securities.

⁷ Banque de France, Autorité des marchés financiers.

⁸ National Bank of Belgium, Financial Services and Markets Authority.
securities settlement systems of the Euroclear group, under the primary responsibility of the National Bank of Belgium. The Banque de France takes part in these mechanisms as the supervisor of ESES France.

Triparty collateral management service

This project, which is important for ESES France, LCH.Clearnet SA and the Paris markets, is described in Box 5.

Box 5

**Triparty collateral management service**

Euroclear France and LCH.Clearnet SA are working with the Paris markets and the Banque de France to develop an intermediated triparty collateral management service called Collateral Basket with Pledge (CBWP), which includes a clearing solution.

In this context, intermediated management means that counterparties allow an agent – in this case Euroclear France – to manage the financial instruments they put up as collateral. In consequence, Euroclear France acts as a subcontractor, managing counterparties’ collateral on their behalf and sharing its skill and know-how with them in order to streamline and optimise their use of collateralised assets. This is especially important in a context where demand for collateral is increasing, making it harder to find assets that can be pledged. The CBWP project also involves LCH.Clearnet SA, which ensures the performance of open contracts and centralises counterparty risk.

Euroclear France provides a triparty collateral management service on the ESES France platform for the settlement of direct trades between two counterparties and for Eurosystem credit operations, allowing delivery versus payment in central bank money. This is possible because the triparty collateral management tool, Collateral Management System (CMS), previously available only through Euroclear Bank, has been deployed on ESES. Going forward, CMS will be used for bilateral trades and for transactions cleared by LCH.Clearnet SA. Counterparties benefit from highly automated collateral management, including automatic substitution of securities and handling of corporate actions.

The collateral eligible for this new service is grouped into predefined baskets of assets with similar characteristics, especially in terms of types of financial instruments and risk levels. The baskets contain only collateral that is eligible for Eurosystem credit operations and can therefore be refinanced by the Banque de France. In November 2011 the Bank opened the ESES triparty management service to its counterparties to enable them to optimise their collateral.

For the service to operate at full capacity, the financial instrument databases held by Euroclear France and Euroclear Bank need to be linked so that CMS can process securities held by the same counterparty in either institution without distinction. This intraoperability between Euroclear Bank and Euroclear France will considerably

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1 The crisis has triggered a sharp rise in risk aversion, resulting in a significant increase in transactions collateralised by financial instruments and a steep fall in unsecured transactions.
2 So-called “bilateral” transactions, in contrast to transactions in which a CCP interposes itself between the counterparties for clearing purposes.
3 Delivery-versus-payment procedures ensure that selling firm’s securities are delivered to the buyer only if it makes the corresponding payment (and vice versa).
4 For example, coupon payments.
5 Intraoperability applies to infrastructures belonging to the same group, as opposed to interoperability, which applies to infrastructures from different groups.

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broaden the range of securities covered by the service at Euroclear France, since more than 50% of European debt is held at Euroclear Bank.

The service is being rolled out in several phases between November 2011 and first-half 2013.

Once implemented, the CBWP will make the Paris markets more attractive while consolidating Euroclear France’s position in collateral management and LCH.Clearnet SA’s role in debt clearing.

**Figure**

**Triparty collateral management**

1. Repo trading on cash against baskets defined by the triparty service.
2. Clearing and guarantee (novation, position keeping, risk and default management, ...) ensured by LCH.Clearnet SA.
3. Collateral instructions sent by LCH.Clearnet SA to CMS EB or CMS ESES. Re-use and substitution allowed by environment.
4. Settlement in delivery versus payment mode.
5. Possible use of the collateral to collateralise credit granted by Central Banks, in a STP mode in ESES environment (direct links) and in non STP mode in EB environment (indirect links).

Bank 1 and 2 to be eligible trading participants, eligible clearing members and eligible counterparts for Central Banks.

Sources: LCH.Clearnet SA, Banque de France.

2|2 Assessment

The ESES France assessment found a high level of compliance with ESCB/CESR recommendations for settlement systems in the European Union. ESES France complies with all the recommendations (except No. 19 on risks in cross-system links). These findings underscore the market infrastructure’s robustness.

Recommendation 19 was rated “broadly compliant”, since legal opinions on legal certainty of the links established by Euroclear France were not up to date when the assessment was carried out. As the manager of ESES France, Euroclear France is gradually bringing these legal opinions up to date.

Furthermore, ESES France experienced three material operational incidents at the end of 2011, two of which delayed the end-of-day close of TARGET2. ESES France relies on a so-called integrated model to settle the cash legs of securities trades in central bank money. In this type of model, cash flows from securities transactions are settled on the same platform as that used for securities flows. These cash flows are registered, under central bank mandate, on accounts opened directly on the settlement platform (this contrasts with interfaced systems, so-called because the platform that settles the securities leg of transactions is interfaced with the platform that settles the cash leg.) At day’s end, the liquidity presents in ESES France has to be transferred to TARGET2-Banque de France.
When the aforementioned incidents occurred, ESES France was unable to make the transfers on time, meaning that TARGET2-Banque de France had to stay open.

Euroclear France and ESA, Euroclear France’s IT subcontractor, took a series of measures to address the problem, especially the IT and organisational aspects. Further, to mitigate the risk of future postponement of the TARGET2-Banque de France end-of-day close, a joint review of ESES France’s end-of-day scheduling was conducted with participants of ESES France and TARGET2-Banque de France. The Banque de France closely monitored the preparation and implementation of these measures.

3| CORE

CORE is the French retail payment system. It is managed by Systèmes Technologiques d’échange et de traitement (STET), owned by five of the country’s largest banks. CORE replaced Système interbancaire de télécompensation (SIT) in 2008 with the aim of processing the new SEPA payment instruments (see chapter 1, 2) on a robust and efficient technical platform designed to handle large volumes.

CORE operates on the basis of multilateral clearing, with deferred settlement taking place once a day in central bank money on the accounts of direct participants in the large-value payment system TARGET2-Banque de France.
It has been notified to the European Commission and accordingly benefits from the protective measures in the Settlement Finality Directive. CORE is considered a systemically important payment system, firstly because of the essential role played by this retail payment system in the French financial system and secondly based on the Eurosystem classification of these systems.10

Governance of the system is the responsibility of a Clients’ Committee, composed of representatives of direct participants, which decides among other things on the scope of the system’s services and on pricing policy. CORE has 10 direct and 422 indirect participants.

CORE provides interbank clearing of domestic payment instruments as well as SEPA credit transfers and direct debits. In 2011 it processed 13,178 million transactions representing a total of EUR 5,373 billion, making it the leading retail payment system in Europe.

Transaction volume processed through CORE has risen 5.4% since the system was launched, with a 2.8% increase in 2011. During the same period, the value of those transactions has grown by 2.1%, with a near-5% rise in 2011. Of these transactions the volume of card payments, which account for relatively small amounts, has risen constantly while the share of cheque payments has contracted. SEPA credit transfers are gaining ground but most are domestic payments, whereas the number of SEPA direct debits is extremely insignificant.

3.1 Ongoing projects

As part of its European strategy and amid the roll-out of SEPA payment instruments, STET is focusing on establishing interoperability links with other European retail payment systems and developing solutions for managing foreign systems from its existing technical platform.

The process of establishing interoperability links between retail payment systems in Europe has gathered pace since 2009 with the deployment of SEPA payment instruments. The Regulation (EU) No. 260/2012 establishing technical and business requirements for credit transfers and direct debits in euro11 (known as the End-Date Regulation) lays down technical conditions and criteria for guaranteeing the efficiency of these two means of payment, in particular by eliminating technical barriers to their movement across domestic borders. This entails setting up interoperability links between retail payment systems so that Participant A in one system can reach Participant B in another system without having to become a participant in the latter system.

The development of link arrangements between retail payment systems prompted the Eurosystem to prepare a set of minimum expectations12 aimed at mitigating risks arising from interoperability links. The paper was put out to public consultation and the process of analysing the responses and finalising the expectations is underway.13

10 For further information about the Eurosystem’s specific oversight policy on retail payment systems, see Oversight standards for euro retail payment systems and the Banque de France reports on Oversight of Means of Payment and Transfer Systems for 2006 and 2009.
12 Oversight Expectations on Retail Payment Systems Links.
As a result, oversight of STET/CORE will be adjusted to keep pace with developments in the system and its European nature. This should lead to the establishment of cooperative oversight arrangements with the relevant central banks.

### 3.2 Assessment

The Banque de France completed an assessment of STET/CORE in 2011. It found that the system was in full compliance with eight principles and broadly compliant with Principles 5 and 10. This denotes a very high level of compliance with the principles, especially the system’s well-founded legal basis, effective management of all financial risks, high operational reliability (reflected in a 100% availability rate for the technical platform since launch) and superior efficiency, enabling it to cope smoothly with a sharp increase in activity, which gathered momentum in 2011, both in volume and especially in value.

Principle 5 concerns protection against the settlement risk specific to multilateral netting systems such as CORE.

Settlement takes place once daily with multilateral netting, so participants are exposed to settlement risk during the deferral period. They cannot be sure that the settlement will occur until the daily settlement operation has been effected. If a participant breaches its payment obligations, the net balances of non-defaulting participants are likely to be substantially impacted once the defaulting party’s transactions have been excluded, and they will be exposed to liquidity risk late in the business day. Consequently, by taking part in CORE, each participant bears the risk that the others might default.

To shield participants from this risk, the CORE system has arranged a safety mechanism based on a mutual guarantee fund supplemented by collateral posted individually by participants. This collateral takes the form of pre-funding deposits that cover participants’ CORE positions in excess of the amount of the guarantee fund.

However, this does not prevent participants who have not posted their individual deposits from presenting debit balances for settlement. As a result, the largest individual debit position may not be fully covered by the aggregate sum of the guarantee fund and the individual deposits, since the participant concerned has failed to post its collateral. Consequently, the Banque de France recommended STET to adopt an appropriate mechanism in order to comply with Principle 5.

Regarding Principle 10 on governance, the assessment highlighted several issues that need to be addressed in an action plan in order to achieve full compliance. In particular, the audit function needs be strengthened by ensuring its independence through a direct reporting line to the system’s management body, broadening its jurisdiction and bolstering the audit teams. The system’s management body should also sign off on the risk management and internal control framework. STET is currently implementing an action plan to meet these recommendations, under Banque de France supervision.
Oversight of Payment Instruments and Financial Market Infrastructures

In addition to overseeing infrastructures based in France, the Banque de France also takes part in the oversight of several infrastructures active at European or international level that could impact the French financial system. The infrastructures in question are the European large-value payment systems TARGET2 and EURO1; the international infrastructure CLS, a forex settlement system; SWIFT, a communications provider; and the trade repository for derivatives managed by Warehouse Trust Company LLC, a DTCC subsidiary.

The arrangements for overseeing these infrastructures are based on the principle of a lead overseer, namely the oversight authority of the place where the infrastructure’s registered office is based. Since TARGET2 and EURO1 are purely European infrastructures with no geographical anchorage, the ECB is their lead overseer. The Eurosystem Oversight Report published by the ECB describes the cooperative oversight activity. Since SWIFT is headquartered in Belgium, the Belgian National Bank is the lead overseer; and the US Federal Reserve plays the same role for CLS, which has its registered office in the United States.

The Warehouse Trust Company LLC (“WTC”) was admitted as a state member bank by the Federal Reserve in 2010. WTC is a wholly owned, indirect subsidiary of the Depository Trust & Clearing Corporation (“DTCC”), which is headquartered in the United States. DTCC’s subsidiaries comprise various market infrastructures that provide settlement, clearing and information services for market transactions. WTC registers OTC credit derivatives, thus contributing to the fulfilment of transparency requirements for derivative trades, which led to the recognition of a new category of financial market infrastructure, trade repositories.

WTC offers a centralised trade repository and trade lifecycle event services for multiple participants in numerous jurisdictions. As a financial market infrastructure, it is subject to cooperative oversight by authorities in different jurisdictions with a supervisory, regulatory, or oversight interest in WTC. The lead supervisor for WTC is the US Federal Reserve. The Banque de France takes part in the cooperative oversight arrangement, since French counterparties play an important role in the markets for which WTC records transactions.

Focus on TARGET2-Banque de France (T2BF)

The TARGET2 large-value payment system is organised around the Single Shared Platform, which provides harmonised settlement services to participating credit institutions. From the legal standpoint, however, TARGET2 is composed of all the domestic payment systems of the countries that have adopted the euro. Contractual and business relations with participants are decentralised at the level of the national central banks. In France, the national component of TARGET2 is TARGET2-Banque de France (T2BF), a payment system in its own right that has been notified to the European Commission and benefits from the protective measures in the Settlement Finality Directive.

TARGET2 provides settlement in central bank money of high-value transfers, monetary policy operations and other so-called ancillary systems, including France’s retail payment system (CORE), securities settlement system (ESES France) and clearing system (LCH.Clearnet SA).

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2 A detailed description of the Banque de France’s participation in cooperative oversight of SWIFT and CLS can be found in Oversight of Means of Payment and Transfer Systems, Banque de France, 2009, section 2.3.2.

The Banque de France is the overseer for T2BF and takes part in the cooperative oversight of TARGET2, an activity discussed by its lead overseer, the ECB, in its oversight report.4

The Banque de France is also attentive to feedback from T2BF participants, organising meetings with the key participants every year to get their opinion on the functioning of the system. Satisfaction is very high, undimmed by the operational incident that affected TARGET2 on 25 July 2011, the only major problem to occur since the platform opened. The contingency module was activated on this occasion, thus limiting the consequences of the incident by allowing very critical payments to be effected in due time.

During the period under review, the Banque de France also focused its T2BF oversight activities on identifying and monitoring interdependencies that show up in the system, both among participants and with ancillary systems,

Figure
Interdependencies between T2BF participants

Note: AS: ancillary system to TARGET2.
Source: Banque de France.

which settle with one other in central bank money in the Banque de France’s books. In this way it can pinpoint weaknesses in these infrastructures and their participants, proactively analyse any close dependencies between them, and anticipate the channels through which contagion might spread in the event of incident or crisis. The purpose of this analysis is to enable the Bank to react as swiftly as possible to contain such incidents or crises, maintain the smooth operation of T2BF and, in general, preserve the stability of the French financial system.

The diagram above illustrates the methodology developed by the Banque de France to diagnose interdependencies. The thickness of the arrows shows the intensity of exchanges between two participants or systems in T2BF.
Oversight of payment instruments

In the context of recent developments in retail payments (see Chapter 1, 42), non-cash means of payment in France remains highly secure. However, with the arrival of new market participants, the growing popularity of online payments and the introduction of SEPA instruments, heightened vigilance and appropriate protection measures are needed.

With this in mind, the Banque de France has:

– extended its activities to payment institutions as part of their authorisation procedure, further to the introduction in France of the new harmonised European legal framework for payment instruments;

– stepped up its action in the sphere of online banking transactions, online payments and direct debits.

1| The Bank’s role in the payment institution authorisation procedure

Implementation of the Payment Services Directive into French law opened up the market for issuing and managing payment instruments to a new category of participants, payment institutions. As is the case for credit institutions, obtaining payment institution status is subject to approval by the Autorité de contrôle prudentiel (ACP).

The ACP consults the Banque de France when processing authorisation applications, pursuant to Article L. 141-4 of the Monetary and Financial Code, to ascertain what technical, IT and organisational resources are in place to protect the means of payment for the proposed activities. The Banque de France issues an opinion on the consultation, which can be positive (with or without suspensive conditions) or negative.

To formulate its opinion, and in accordance with its terms of reference, the Banque de France

Box 9

Quantitative data on payment instrument usage in France in 2011

Use of non-cash means of payment in France continues to grow, with an average of 268 transactions per person per year in 2011, up 8% since the last report was published. In 2011, non-bank participants made 17.53 billion non-cash transactions, with a total value of EUR 28,389 billion. Measured by numbers of transactions, cards entrenched their position as the most popular non-cash instrument, accounting for 45.1% of all transactions. Conversely, cheque usage continues to decline by approximately 5% annually. Accounting for just 16.9% of total transactions, cheques have relinquished their place as the second most popular means of payment, overtaken by direct debits (20.1%) and credit transfers (17.0%). In value terms, however, the rankings are very different. Credit transfers alone account for 86.4% of the total transaction amount, way ahead of cheques (6.3%) and direct debits (4.6%). Card payments make up just 1.4% of the total amount because the average payment is smaller: EUR 50 compared with EUR 375 for direct debits, EUR 600 for cheques and EUR 8,250 for credit transfers.

…/…
More than two-thirds of transactions (70.9%) are processed by interbank systems. In value terms, the share is a slight 68.8%. Transactions exchanged outside interbank systems (“on-us” transactions) are divided between intrabank transactions (18.7% by volume, 20.0% by value), intragroup transactions (9.6% by volume, 5.3% by value), and interbank bilateral exchanges (0.8% by volume et 5.9% by value).

Chart A
Transactions breakdown between system/non-system processing (number of transactions) (%)

Sources: STET, Banque de France.

Chart B
Breakdown of the use of cashless payment instruments in France (%)

Sources: STET, Banque de France.
examines the documents in the application file, in particular those concerning:

– the general organisation of the business; the purpose of these documents is to describe the entire sequence of operations for each of the proposed payment services, the technical specifications of the means of payment used, and the operations to be carried out under an outsourcing arrangements;

– a risk analysis relating to the security of technical resources in order to identify and assess the potential risks affecting payment instruments and transactions and the institution’s IT system (including fraud risk), as well as the measures in place to mitigate these risks;

At 1 January 2012, 12 payment institutions had been authorised in France by the ACP and thus been the subject of a Banque de France opinion.

The authorised institutions provide payment services in categories 2, 3, 5 and 6 (see Box below).
Some offer innovative services, notably in new areas of payment instrument use, such as micropayments (online purchases involving very small sums), and payment media, especially mobile phones.

Furthermore, 133 payment institutions authorised in other EU member states now carry on a business in France under the principle of mutual recognition of their approval (i.e. freedom to provide services or right of establishment). They are overseen by the Banque de France, in the same way as other payment service providers and firms involved in issuing payment instruments in France.

2) Security of online payments and banking transactions

Faced with the rapid growth of online banking services and an increase in fraud with online card payments, the Banque de France sent a questionnaire in 2007 to banks operating in France in order to assess the security of those transactions. The following year it issued recommendations aimed at making them more secure. Authentication of internet users or cardholders is vital when conducting online transactions, so in 2008 the Banque de France called on banks to supply strong authentication solutions to a significant portion of their customer base by 2009 and to extend these to all customers by June 2010. This consists in proving single-use codes (by SMS, certificate, token1 or card reader2) that ensure the security of the most sensitive online transactions and card payments.

At this writing, the vast majority of banks have complied with the Banque de France’s recommendations by providing customers with enhanced authentication mechanisms to protect transactions made on e-banking sites that lead directly or indirectly to the disbursement of funds (e.g. credit transfers, payment instrument orders).

The security of online card payments is a more complex issue because of the large number of participants involved.

E-commerce companies use an appropriate security mechanism to enable cardholders to deploy enhanced authentication solutions. Although slightly more than half of such companies in France are equipped with technical solutions such as 3D-Secure, which enable one-time authentication of cardholders when making payments, only 23% of internet payment transactions are actually protected by this type of solution at present.

The Banque de France worked closely with the e-commerce industry in 2011 to ensure widespread use of enhanced authentication solutions for transactions exposed to major fraud. That approach is especially relevant since remote payments, which accounted for 8.6% of domestic transaction value in 2011, now represent 62% of the total fraud amount, according to the Observatory for Payment Card Security (OSCP).3 Moreover, the results of the approach are beginning to show: several major e-commerce companies, including Air France, Orange Boutique and Voyages-SNCF, have adopted 3D-Secure, resulting in a steep fall in rates of fraud with no negative impacts on revenues or customer relations.

Achieving extensive use of these solutions by e-commerce companies, triggered by risk analysis, is therefore a top priority. It should be noted that SecuRe Pay made similar recommendations in 2012 that could eventually bring these solutions into mainstream practice at European level.

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1 A physical device that generates one-time codes.
2 EMV-CAP card readers generate a one-time password, which the cardholder have to enter when making the purchase.
3 The Observatory for Payment Card Security is a forum responsible for promoting dialogue and information exchange among all stakeholders in France concerned with the security and smooth operation of card payment systems. It comprises two members of Parliament, along with representatives of government authorities, card issuers and users (merchants, consumers), as well as persons chosen for their competences in these areas. Established under the Daily Security Act of November 2001, the Observatory’s remit is to monitor the security measures adopted by issuers and merchants, draw up aggregate fraud statistics and keep abreast of card payment technologies.
3| Verifying the security and smooth operations of direct debit schemes in France

One of the main on-site assessments during the period under review concerned the security and smooth operation of direct debit schemes. Conducted between September 2010 and May 2011, the assessment covered both management and execution of domestic direct debits and the work done to implement the SEPA direct debit scheme. It was based among other things on prevailing law, the Eurosystem’s harmonised oversight framework for direct debit schemes, published in October 2010, and on interbank rules set both at domestic level by the CFONB and at European level by the EPC. Special emphasis was placed on the standard of internal control, including the handling of fraud risk and compliance with consumer protection measures in relation to the legal framework. To obtain the fullest possible picture of the industry, a representative sample of French banks, including the largest in terms of direct debit flows, was selected.

The assessment was timely, in view of:

– the overhaul of the legal framework for payment instruments, prompted largely by implementation of the Payment Services Directive. The Monetary and Financial Code also contains new provisions on execution times, prohibition of value dates that adversely affect customers, and the handling of disputes over unauthorised transactions;

– the launch of SEPA direct debits in France on 1 November 2010. European Regulation No. 924/2009 introduces a reachability obligation, meaning that banks must be able to process SEPA direct debit flows;

– negotiations underway at the time on the SEPA End Date Regulation. The assessment was an opportunity to examine how the domestic direct debit system was operating and to draw conclusions concerning the level of service and the procedures for setting up its eventual successor, the SEPA direct debit scheme.

By and large, national direct debit schemes seem to operate satisfactorily. The Banque de France noted that occurrence rates for incidents, complaints and fraud were low and that institutions carried out numerous operating checks. Governance models are highly varied; they range from cross-functional structures to organisation structures for each payment instrument, making it easier to identify direct debits chains. Furthermore, all institutions were able to process SEPA direct debits at 1 November 2010.

However, several areas for improvement were suggested, particularly the drafting of contractual documents and respecting the consumer’s immediate right of refund within 13 months of the date of a disputed debit for unauthorised transactions. Internal control systems could also be improved and clarified by conducting formal risk analyses and introducing effective monitoring tools, especially for fraud.

Corrective action is currently being implemented and the Banque de France is monitoring them on a regular basis.

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4 Based on five common standards: sound legal basis; comprehensive information; security, operational reliability and business continuity; sound governance and internal control; management of financial risks relating to clearing and settlement.

5 Centre français d’organisation et de normalisation bancaires/French Centre for Banking Organisation and Standardisation. Founded in 1930 and authorised as an AFNOR standards bureau, the CFONB is a professional body charged with studying and finding solutions, in terms of organisation and standardisation, to technical problems in the banking industry. It focuses primarily on payment instruments and systems, but also deals with securities.
1| Principles for financial market infrastructures

1|1 General organisation (Principles 1 to 3)

The first three principles seek to ensure a sound operating framework for Financial market infrastructures (FMIs). They deal with the legal basis of FMIs (Principle 1), governance (Principle 2) and the framework for the comprehensive management of risks (Principle 3). In particular, Principle 2 on governance requires FMIs to have robust governance structures to promote their safety and efficiency, while supporting the stability of the broader financial system. Principle 2 also gives more specific guidance than was previously provided on the responsibilities and composition of boards of directors.

1|2 Credit and liquidity risk management (Principles 4 to 7)

Principles 4 to 7 deal with the management of credit and liquidity risks arising from the payment, clearing and settlement activities performed by FMIs. Principle 4 on credit risk and Principle 7 on liquidity risk are supplemented by Principle 5 on collateral and Principle 6 on margin. Together, these four principles are designed to ensure that FMIs can continue to operate and support the stability of the financial system in extreme but plausible market conditions. These principles detail the quality and quantity of collateral needed to cover the default of the largest participant (or the two largest participants in the case of central counterparties – CCPs).

Box 1

Coverage of FMI credit and liquidity risks

Depending on FMI risk profiles, the minimum requirements for financial resources are as follows:

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<th>Credit risk (Principle 4)</th>
<th>Liquidity risk (Principle 7)</th>
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<tr>
<td>Deferred net settlement</td>
<td>Settlement guarantee</td>
<td>Cover all</td>
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<td>payment system or</td>
<td>No settlement guarantee</td>
<td>Cover 1</td>
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<td>deferred net system-</td>
<td>and participants face</td>
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<td>securities settlement</td>
<td>credit exposures</td>
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<td>No settlement guarantee</td>
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<td>and participants face no</td>
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<td></td>
<td>credit exposures</td>
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<td>Central counterparties</td>
<td>Complex risk profile or</td>
<td>Cover 2</td>
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<tr>
<td>(CCPs)</td>
<td>systemically important in</td>
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<td></td>
<td>several countries</td>
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<td>Other</td>
<td>Cover 2 should be</td>
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<tr>
<td></td>
<td>considered</td>
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Notes:
- cover all: cover all current and potential future exposures of participants
- cover 1: cover the exposure of the participant representing the largest exposure and exposures of its affiliates (members of its group)
- cover 2: cover the exposures of the two participants representing the largest exposures and exposures of their affiliates (members of their groups)

Source: Principles for financial market infrastructures (CPSS-IOSCO), April 2012.
that are systemically important in multiple jurisdictions and/or that handle complex derivative products) and require financial resources to be regularly reviewed.1

1|3 Settlement (Principles 8 to 10)

Principle 8 (Settlement finality) defines the conditions under which settlement is considered as final. Principle 9 (money settlements) encourages money settlements in central bank money and provides a framework for using commercial bank money. Principle 10 addresses management of the risk associated with physical delivery, notably of commodities.

1|4 Central securities depositories and exchange-of-value settlement systems (Principles 11 and 12)

These principles cover the critical role that central securities depositories and settlement systems play in the protection, safekeeping and exchange of securities. Principle 11 requires CSDs to maintain securities in an immobilised or dematerialised form for their transfer by book entry. Principle 12 seeks to eliminate principal risk by ensuring that, when final settlement of one obligation is conditional upon the settlement of another obligation, a system is used that ensures both legally and operationally that settlement of each obligation occurs if and only if settlement of the linked obligation also occurs. These systems include securities settlement systems but also payment versus payment systems (for the settlement of foreign exchange transactions).

1|5 Default management (Principles 13 and 14)

Principle 13 (Participant default) addresses the rules and procedures to manage a participant default and ensure that FMIs can meet their obligations. Principle 14 (Segregation and portability)

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**Box 2**

**Quality of resources used to cover liquidity risk**

Principle 7 (liquidity risk) requires FMIs to maintain sufficient liquid resources in all relevant currencies to meet their settlement obligations even in extreme but plausible market conditions. The following table shows the resources that qualify for use in satisfying the minimum liquid resource requirements:

<table>
<thead>
<tr>
<th>Resources for meeting the minimum liquid resource requirement</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Deposits with the central bank: an FMI with access to routine credit at a central bank may count such access in its qualifying resources.1 However, FMIs should not include emergency central bank credit, which cannot be considered as guaranteed.</td>
<td></td>
</tr>
<tr>
<td>• Deposits with creditworthy commercial banks.</td>
<td></td>
</tr>
<tr>
<td>• Committed lines of credit, committed foreign exchange swaps, and committed repos.2</td>
<td></td>
</tr>
<tr>
<td>• Collateral that is readily available and convertible into cash with prearranged and highly reliable funding arrangements, even in extreme but plausible market conditions.</td>
<td></td>
</tr>
<tr>
<td>Other liquid resources</td>
<td>Assets that are likely to be saleable or acceptable as collateral for lines of credit, swaps, or repos following a default, even if this cannot be guaranteed in extreme market conditions.</td>
</tr>
</tbody>
</table>

1 Provided it has collateral that is eligible for pledging to the central bank.
2 i.e. that the counterparty has irrevocably committed to provide in all situations, including crises.

Source: Principles for financial market infrastructures (CPSS-IOSCO), April 2012.

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1 Stress tests on extreme market conditions and backtests based on ex post comparisons of available financial resources and needs.
is specific to CCPs and seeks to protect the positions and collateral of participants’ customers in the event of a participant default.

1|6 General business and operational risk management (Principles 15 to 17)

These principles cover the general business and operational risks of FMIs and seek particularly to protect participants against general business risk (Principle 15), custody and investment risks (Principle 16) and operational risk (Principle 17). Principle 15 requires FMIs to hold liquid net assets funded by equity equal to at least six months of current operating expenses so that they can function normally under normal circumstances and in the event of a participant default. These assets are in addition to resources held to cover participant defaults. This principle is new in that it de facto creates the status of FMI operator, with specific requirements. Principle 16 seeks to ensure that FMIs safeguard their own assets and those of their participants by applying an investment policy consistent with the framework for the comprehensive management of risks described in Principle 3. Principle 17 on operational risk bolsters the requirements on reliability and resilience, notably by introducing the target of resuming operations within two hours following disruptive events.

1|7 Access (Principles 18 to 20)

These three principles are designed to promote fair and open access to FMIs. Principle 18 (Access and participation requirements) seeks to open FMIs to the largest number of participants while maintaining a reasonable risk/efficiency ratio. This principle is particularly important for CCPs, given the G20 commitment to centrally clear OTC derivatives. Given that OTC derivative clearing services are chiefly offered by major CCPs with global reach, it is vital that the access requirements of these FMIs do not restrict the possibility for counterparties to make use of their clearing services. Principle 19 (Tiered participation arrangements) is a new principle that deals with risks to FMIs arising from tiered participation arrangements. Principle 20 (Links) seeks to secure links between FMIs.

1|8 Efficiency (Principles 21 and 22)

Principles 21 (Efficiency and effectiveness) and 22 (Communication procedures and standards) are designed to ensure that FMIs are efficient and effective in meeting the requirements of financial markets and their participants, at domestic and international levels.

1|9 Transparency (Principles 23 and 24)

Principle 23 (Disclosure of rules, key procedures, and market data) seeks to ensure that market participants are transparently and objectively informed about the operating frameworks of infrastructures to which they are exposed. Principle 24 (Disclosure of market data by trade repositories), which is specific to trade repositories, seeks to ensure that market data are transparent and available to participants, authorities and the public.

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2 See also the November 2011 report by the Committee on the Global Financial System (CGFS) on the macrofinancial implications of alternative configurations for access to central counterparties in OTC derivatives markets (www.bis.org/publ/cgfs46.htm).
2) Authorities’ responsibilities

The report outlines five responsibilities for central banks, market regulators, and other relevant authorities that regulate, supervise and oversee FMIs.

**Responsibility A** requires FMIs to be subject to regulation, supervision and oversight by a central bank, market regulator, or other relevant authority.

**Responsibility B** requires these authorities to have the powers and resources to carry out effectively their responsibilities.

**Responsibility C** requires authorities to clearly define their regulatory, supervisory and oversight policies with respect to FMIs.

**Responsibility D** requires authorities to adopt the CPSS-IOSCO Principles for financial market infrastructures and apply them consistently.

**Responsibility E** requires that authorities undertake to cooperate with each other, both domestically and internationally, in promoting the safety and efficiency of FMIs.

3) Draft disclosure framework and assessment methodology

The disclosure framework is designed to promote consistent FMI disclosures in compliance with Principle 23.

The assessment methodology provides guidance on assessing and monitoring compliance with the principles and responsibilities. It is intended for use by the International Monetary Fund and the World Bank when these international financial institutions assess the financial sectors of member countries. It also provides a baseline for national authorities to assess compliance with the principles by FMIs under their oversight or supervision. FMIs may also use the assessment methodology for self-assessment purposes.