

# THE EU ARRANGEMENTS FOR FINANCIAL CRISIS MANAGEMENT

## ARTICLES

The EU arrangements for financial crisis management

*The increased integration of financial markets and market infrastructures, the growing number of institutions active on a cross-border basis and the diversification of financial activities in the EU have helped to make markets more liquid and efficient and to increase the resilience and shock-absorbing capacity of the integrated financial sector. This increased integration also entails addressing effectively financial disturbances and their cross-border systemic implications at the EU level. Against this background, the specific arrangements for managing financial crises at the EU level between the authorities responsible for safeguarding financial stability have been considerably enhanced. The enhancements include legislative initiatives, the adoption of non-binding voluntary agreements on cooperation between authorities, and an improvement in the practical arrangements for managing a cross-border crisis situation, which have been tested through the organisation of financial crisis simulation exercises. This article provides an overview of the progress made in developing the EU financial crisis management arrangements and of the challenges ahead regarding further enhancements.*

## I INTRODUCTION

Financial stability arrangements are based on the principle that the first line of defence against financial crises rests with financial institutions themselves, which are responsible for their own safety and soundness. The second line of defence involves measures taken by public authorities to prevent financial crises. These measures include (i) financial regulation, which lays down the prudential rules with which financial institutions have to comply to ensure effective risk management as well as disclosure rules to promote market discipline; (ii) financial supervision, which is aimed at ensuring that financial institutions in practice monitor and manage effectively all relevant risks; and (iii) financial stability monitoring and assessment, which identifies sources of vulnerability and risks for the financial system as a whole. If, despite all these preventive measures, financial institutions run into trouble, public authorities may be required to intervene in order to facilitate, if necessary, an orderly winding up of the institution and to mitigate more generally adverse effects on the stability of the financial system.

In the EU, financial crisis management arrangements between public authorities are based on central banks, financial supervisors and finance ministries exercising their statutory responsibilities. Measures to enhance the specific arrangements for dealing with potential

crisis situations have focused on improving coordination and introducing wider cooperation processes, both among the different authorities and across Member States. The overall objective of such enhancements is to enable financial stability tasks to be carried out more effectively by facilitating the exchange of information and the consistency of potential policy action taken by different authorities within and across Member States.

This article is structured as follows. Section 2 presents the impetus given to the enhancement of EU crisis management arrangements following the introduction of the euro. Section 3 illustrates the main features of the EU crisis management arrangements, focusing on the regulatory, voluntary cooperation and central banking arrangements. Section 4 addresses the initiatives taken to make the arrangements more effective, namely the organisation of financial crisis simulation exercises at the EU level and also by the Eurosystem. Section 5 concludes, with an assessment of the progress achieved thus far and challenges ahead.

## 2 BACKGROUND

Following the introduction of the euro on 1 January 1999, the landscape of the European financial system changed significantly. There is evidence that the increased degree of financial integration in the EU – particularly in the euro

area – at the level of markets, market infrastructures and financial institutions (with regard to the large cross-border financial groups) has significantly improved market liquidity and efficiency.<sup>1</sup> At the same time, however, it has also led to broader and deeper systemic interlinkages between Member States, increasing the likelihood of potential financial market disturbances in one Member State spreading across borders. These developments prompted a review of the financial stability arrangements in place at the EU level, to assess whether they were able to accommodate changes in the financial markets and still provide a sufficient safeguard for financial stability.

The Economic and Financial Committee (EFC)<sup>2</sup> issued a report in April 2000 concluding that, whereas the institutional arrangements provided a coherent and flexible basis for safeguarding financial stability in increasingly integrated markets, their operational features could be improved. To this end, the report put forward the following main recommendations:<sup>3</sup> (i) strengthen cross-sectoral cooperation; (ii) enhance the exchange of information between the responsible authorities; (iii) reinforce cooperation between supervisors and central banks to tackle crisis situations; and (iv) work on the convergence of supervisory practices.

Subsequently, the EFC also examined the specific arrangements for financial crisis management in a report issued in April 2001.<sup>4</sup> The main conclusion of the report was the need to further strengthen cross-border cooperation and coordination between the responsible authorities in order to ensure the effective safeguarding of financial stability. The report put forward the following four main recommendations (endorsed by the EFC and the ECOFIN Council). First, supervisory authorities should take measures to ensure that large financial groups can produce accurate information at short notice, have adequate contingency procedures in place and perform stress-testing exercises on a regular basis. Second, Member States should remove any

remaining legal or practical obstacles that could prevent the timely exchange of necessary information, both on a cross-border and cross-sector basis, among supervisors, central banks, overseers of payment systems and the bodies administering deposit-guarantee schemes. In addition, each authority should develop its own checklist that should not only identify the main issues to be addressed in a crisis but also specify which other authorities have to be informed. Third, the development of ex-ante agreements was recommended as an effective means to deal with information-sharing issues and the assignment of responsibilities among authorities in the event of a crisis, especially as regards large financial groups. Finally, the competition authorities were called upon to maintain timely and robust procedures for considering the competitive implications of crisis management measures.

Following the 2001 recommendations, the ECOFIN Council asked the EFC to continue to give high priority to crisis management arrangements. In 2004 the EFC set new priorities for enhancing the EU framework for financial stability and crisis management. In particular, special attention was paid to the extension of the arrangements on crisis management to finance ministries and to the organisation of an EU-wide financial crisis simulation exercise involving the relevant authorities. These developments are described below.

- 1 See the article entitled “The contribution of the ECB and the Eurosystem to European financial integration” in the May 2006 issue of the Monthly Bulletin.
- 2 The EFC was set up by the Treaty establishing the European Community to provide advice to the EU Council meeting in the composition of the ministers of economy and finance (the ECOFIN Council) and to the European Commission. In its composition dealing with financial stability issues – the Financial Stability Table – the EFC comprises high-level representatives of finance ministries, central banks and supervisory committees.
- 3 The recommendations, endorsed by the EFC and subsequently by the ECOFIN Council, are available at [http://ue.eu.int/ueDocs/cms\\_Data/docs/pressdata/en/misc/ACF16BD.htm](http://ue.eu.int/ueDocs/cms_Data/docs/pressdata/en/misc/ACF16BD.htm).
- 4 Available at [www.consilium.europa.eu/ueDocs/cms\\_Data/docs/pressdata/en/misc/Brouwerreport.html](http://www.consilium.europa.eu/ueDocs/cms_Data/docs/pressdata/en/misc/Brouwerreport.html).

## Overview of the EU framework for financial crisis management

	Authorities responsible for financial stability		
	Central banks	Banking supervisors	Finance ministries
<b>Regulatory arrangements</b>	Capital Requirements Directive (CRD)		
	Financial Conglomerates Directive (FCD) <sup>1)</sup>		
<b>Voluntary cooperation arrangements</b>	2005 MoU on crisis management		
	2003 MoU on crisis management		
	2001 MoU on payment systems		
	Regional MoUs <sup>2)</sup>		
	National MoUs <sup>2)</sup>		
<b>Central banking arrangements</b>	Eurosystem		
<b>EU committees</b>	BSC and CEBS		FSC
	EFC		EFC
<b>Tools for practical implementation</b>	Financial crisis simulation exercises		
	Development of practices by EU Committees		

1) The exchange of information between supervisory authorities and finance ministries regarding the regulated entities of a financial conglomerate is subject to the sectoral rules in EU legislation for credit institutions, insurance companies and securities firms.

2) Regional and national memoranda of understanding (MoUs) may involve different sets of authorities, including either the central banks or banking supervisors or both. Some Member States' finance ministries are also party to MoUs.

### 3 THE EU CRISIS MANAGEMENT ARRANGEMENTS

As a result of the implementation of the above recommendations, the specific arrangements for dealing with financial crises in the EU between the authorities responsible for safeguarding financial stability have been considerably enhanced. Measures taken include legislative initiatives and the adoption of agreements on voluntary cooperation between authorities. This section provides an overview of the current arrangements for crisis management and the recent enhancements regarding the regulatory, voluntary cooperation and central banking frameworks. The role of the EU committees will also be briefly touched upon (see table).

#### 3.1 THE REGULATORY FRAMEWORK

With regard to the regulatory framework, the following two pieces of legislation contain provisions that have a direct bearing on crisis management situations, in particular by defining the information flows between the authorities potentially involved in the management of cross-border crises, notably supervisors and central banks.<sup>5</sup>

#### THE CAPITAL REQUIREMENTS DIRECTIVE

The Capital Requirements Directive (CRD)<sup>6</sup>, which transposes the “Basel II” framework into EU legislation, sets forth requirements concerning the tasks relating to the monitoring and supervision of banking groups in both “normal” and emergency situations (Articles 129 to 132). It includes the coordination and cooperation between the home-country and host-country supervisors of a credit institution or banking group.<sup>7</sup>

The CRD (i) assigns a coordinating role to the authority responsible for the supervision of the banking group on a consolidated basis – the consolidating supervisor<sup>8</sup>; (ii) strengthens and

5 These directives were among the measures adopted under the EU's broader Financial Services Action Plan (FSAP), which is outside the scope of this article. Further information on the FSAP can be found at [www.ec.europa.eu](http://www.ec.europa.eu).

6 The CRD, comprising Directive 2006/48/EC and Directive 2006/49/EC, was published in the Official Journal on 30 June 2006.

7 The terminology in this article regarding the consolidating supervisor of a banking group and the host-country supervisors of subsidiaries and branches of a banking group is consistent with the Committee of European Banking Supervisors' (CEBS) guidelines on supervisory cooperation for cross-border banking and investment firm groups of 25 January 2006, which are available at [www.c-eb.org](http://www.c-eb.org).

8 As a rule, the consolidating supervisor is from the Member State where the credit institution or the financial holding company heading the group is based.

clarifies the requirements for information-sharing and cooperation among all the authorities responsible for the supervision of the entities comprising the banking group and (iii) requires the competent supervisory authorities to have written coordination and cooperation arrangements in place.

With regard to specific provisions relevant for crisis management, the CRD requires (i) the consolidating supervisor to alert central banks and ministries of finance as soon as is practicable in the event of an emergency which threatens the stability of the financial system of a Member State (Article 130); and (ii) the competent supervisory authorities to cooperate closely and to share information which is essential or relevant to their respective tasks (Article 132).<sup>9</sup>

#### **THE FINANCIAL CONGLOMERATES DIRECTIVE**

Developments in financial markets have led to an increase in the number of financial groups with significant cross-sectoral financial activities, i.e. financial conglomerates. Such groups, which are defined as combining at least one entity from the insurance sector and one entity from the banking or the investment services sector, are subject to the regulatory framework set forth in the Financial Conglomerates Directive (FCD),<sup>10</sup> which provides for supplementary supervision of the regulated entities comprising a financial conglomerate operating in the EU.

The FCD contains a number of significant provisions of relevance for crisis management. In particular, the tasks to be carried out by the coordinating supervisor<sup>11</sup> include the coordination of the gathering and dissemination of relevant or essential information in “normal” times and emergency situations, including the dissemination of information which is of importance for a given authority’s supervisory task under sectoral rules (Article 11).

Furthermore, as in the CRD provisions mentioned above, the authorities responsible for the supervision of regulated entities in a financial conglomerate are obliged to cooperate closely

with one another (Article 12). This entails, among other things: (i) the gathering and the exchange of information with regard to adverse developments in regulated entities or in other entities of a financial conglomerate which could seriously affect the regulated entities; and (ii) the sharing of information with central banks, the European System of Central Banks (ESCB) and the European Central Bank (ECB) as may be needed for the performance of their respective tasks.

The concrete application of the regulatory provisions in the area of crisis management will benefit from the procedures envisaged in the multilateral memoranda of understanding (MoUs) on crisis management, which are described in the next section.

#### **3.2 THE FRAMEWORK FOR VOLUNTARY COOPERATION**

The cooperation among EU authorities in the area of crisis management has been enhanced to a large extent through voluntary agreements in the form of MoUs between various authorities. Such agreements, which set out procedures for cooperation and information-sharing in potential crisis situations, have been adopted at the EU, regional and national levels.

<sup>9</sup> Information is regarded as essential if it materially influences the assessment of the financial soundness of an institution.

<sup>10</sup> Directive 2002/87/EC of the European Parliament and of the Council of 16 December 2002 on the supplementary supervision of credit institutions, insurance undertakings and investment firms in a financial conglomerate and amending Council Directives 73/239/EEC, 79/267/EEC, 92/49/EEC, 92/96/EEC, 93/6/EEC and 93/22/EEC, and Directives 98/78/EC and 2000/12/EC of the European Parliament and of the Council.

<sup>11</sup> The FCD provides for the identification of the coordinating supervisor, which coordinates the supplementary supervision of the financial conglomerate and manages the information-sharing and cooperation among the supervisors of the regulated entities in the financial conglomerate. The FCD also lays down a structured way for the coordinating supervisor to exercise its responsibilities.

## MEMORANDA OF UNDERSTANDING ON COOPERATION IN CRISIS SITUATIONS AT THE EU LEVEL

The MoUs on crisis management are a key component of the EU institutional framework for safeguarding financial stability. They are generally designed to provide basic principles and practical arrangements for cross-border cooperation between authorities in the event of disturbances with cross-border systemic implications. A disturbance has cross-border systemic implications if it risks propagating across institutions, financial markets, payment systems or other market infrastructures and has

the potential to ultimately hinder the adequate functioning of the financial system in more than one Member State.

There are currently two multilateral MoUs on crisis management and one on payment systems oversight. They have been adopted by the responsible authorities of all EU Member States (see Box 1). The MoUs are not legally binding and are based on the principle of voluntary cooperation, as they are without prejudice to the exercise of statutory responsibilities by the relevant authorities.

### Box 1

#### MULTILATERAL MEMORANDA OF UNDERSTANDING ADOPTED BY EU MEMBER STATES

Following the 2001 EFC recommendations, the first EU-wide MoU on cooperation in crisis management situations was adopted in March 2003 under the auspices of the ESCB's Banking Supervision Committee (BSC).<sup>1</sup> This MoU was designed to contribute to effective crisis management by ensuring a smooth interaction between the authorities concerned, thus facilitating an early assessment of the systemic scope of a crisis at both the national and EU levels. It sets out specific principles and procedures for the identification of the authorities responsible for the management of a crisis in the EU. It also indicates the required flows of information between banking supervisors and central banks, and the practical arrangements for sharing information across borders. It establishes a framework for cross-border communication between banking supervisors and central banks, including a list of emergency contacts.<sup>2</sup>

As a follow-up to the priorities set by the EFC in 2004, a second MoU was adopted by the EU banking supervisors, central banks and finance ministries under the aegis of the EFC in May 2005.<sup>3</sup> This MoU provides a set of principles and procedures for sharing information, views and assessments in order to assist the signatory authorities in pursuing their respective policy functions and to preserve the overall stability of the financial systems of individual Member States and of the EU as a whole. In particular, the authorities concerned should be in a position, if need be, to engage in informed discussions among themselves at the cross-border level through existing networks and committees. To further support cooperation between authorities, the 2005 MoU also includes arrangements for the development of contingency plans for the management of crisis situations, along with stress-testing and simulation exercises. Lastly, the MoU includes an explicit statement that it should not be construed as representing an exception

1 The BSC contributes to the macro-prudential and structural monitoring of the EU financial system, to the cooperation and exchange of information between banking supervisors and central banks on issues of common interest, and to the analysis of the impact of regulatory and supervisory requirements on financial stability.

2 See the related press release, available at [www.ecb.int/press/pr/date/2003/html/pr030310\\_3.en.html](http://www.ecb.int/press/pr/date/2003/html/pr030310_3.en.html). The authorities of the Member States that joined the EU in 2004 signed this agreement in June of that year.

3 See the related press release, available at [www.ecb.int/press/pr/date/2005/html/pr050518\\_1.en.html](http://www.ecb.int/press/pr/date/2005/html/pr050518_1.en.html).

to (i) the principle of the firm's owners'/shareholders' primary financial responsibility, (ii) the need for creditor vigilance, and (iii) the primacy of market-led solutions when it comes to solving crisis situations in individual institutions.

In addition, since January 2001 a multilateral MoU has been in place regarding cooperation between banking supervisors and central banks in their capacity as payment systems overseers.<sup>4</sup> Although this agreement does not specifically focus on crisis management, it does contain a number of provisions dealing with the transmission of information in the event of liquidity or solvency problems. This relates in particular to the potential risk of contagion should the inability of a market participant to meet its obligations in a large-value payment system jeopardise counterparties' ability to meet their obligations at short notice.

4 See the related press release, available at [www.ecb.int/press/pr/date/2001/html/pr010402.en.html](http://www.ecb.int/press/pr/date/2001/html/pr010402.en.html).

## REGIONAL AGREEMENTS

The EU-wide MoUs on crisis management provide a broad framework for voluntary cooperation among the authorities responsible for safeguarding financial stability. This framework has been, and still is being, developed at the bilateral and regional levels.

In line with the 2001 recommendations of the EFC, authorities from some Member States

may require closer cooperation structures, for instance as a result of specific systemic interlinkages stemming from banking groups with a significant presence in those countries. Such enhanced cooperation structures have been set up in the form of bilateral or regional agreements. Box 2 briefly reviews two examples of regional MoUs and discusses how they complement the EU-wide arrangements.

### Box 2

#### REGIONAL MEMORANDA OF UNDERSTANDING ON CRISIS MANAGEMENT

This box describes two regional MoUs, namely the MoU between the central banks of the Nordic region and the MoU between Dutch and Belgian authorities.

The central banks of the Nordic region – Denmark, Finland, Iceland, Norway and Sweden – have adopted a regional agreement represented by the MoU on the “Management of a financial crisis in banks with cross-border establishments”.<sup>1</sup> This agreement is based on two principles. First, the establishment of a structure for crisis management and the dissemination of relevant information is expected to facilitate cooperation between the central banks. Second, the non-legally binding nature of the MoU is considered an appropriate way to enable such cooperation without curtailing the flexibility of the central banks as independent institutions. On the basis of these principles, the agreement addresses the significant cross-border activity of one particular Nordic banking group, which may have implications for financial stability in more than one of these countries.

The MoU between the Nordic central banks specifies the same provisions as the 2003 MoU between EU banking supervisors and central banks. While the EU-wide MoU provides a broad

1 Available on the websites of the central banks involved.

framework, the Nordic MoU sets out more specific and detailed arrangements for cooperation and information exchange concerning the management of crises affecting banking groups. It includes conditions under which measures regarding liquidity and solvency can be taken, practical arrangements with regard to the coordination of the central banks (namely the activation of a crisis management group), specifications for the necessary contacts and information-gathering, and the coordination of public communication. In addition, the Nordic MoU widens the scope of 2003 MoU, given that it has been signed by the authorities of two non-EU Member States (Iceland and Norway).

The Nationale Bank van België/Banque Nationale de Belgique, the Commission Bancaire, Financière et des Assurances and De Nederlandsche Bank have also recently adopted a regional agreement.<sup>2</sup> As in the case of the Nordic countries, the adoption of this agreement is based on the view that the financial systems of Belgium and the Netherlands are so closely intertwined that they require further cooperation in the areas of supervision and financial crisis management.

To this end, the agreement is aimed at facilitating cross-border cooperation, in part by setting up a crisis management committee composed of the three authorities, which would deal with consultation and coordination practices, collect information, prepare decisions and maintain contacts with the crisis-affected institution and other market participants. The MoU is also aimed at ensuring that specific information is available in a crisis. Lastly, it acknowledges the need for closer cross-border cooperation as required by the CRD.

<sup>2</sup> See the related press release, available on the websites of the institutions involved.

## NATIONAL ARRANGEMENTS

The national arrangements for financial crisis management also form an important component of the overall EU financial stability framework. Effective communication and policy action at the cross-border level depend to a large degree on the smoothness of the interaction between authorities in the national setting.

The national arrangements drawn up between the authorities responsible for safeguarding financial stability with the aim of facilitating their interaction in potential crisis situations involve a variety of institutional mechanisms. These mechanisms include financial stability committees, MoUs and other formal or informal coordination instruments. An example is the MoU in the UK, which establishes a framework for cooperation in the field of financial stability between the Treasury, the Bank of England and the Financial Services Authority. It sets out the role of each authority and explains how they

work together towards the common objective of financial stability.<sup>12</sup>

## EU COMMITTEES

A number of committees organise cooperation and information-sharing at the EU level among the authorities responsible for safeguarding financial stability. They include the EFC, the BSC, the Committee of European Banking Supervisors (CEBS) and the Financial Services Committee (FSC).<sup>13</sup>

These committees play an important role in enhancing the arrangements for financial crisis management, for example in the design and

<sup>12</sup> The MoU is available on the Bank of England's website, at <http://www.bankofengland.co.uk/financialstability/mou.pdf>.

<sup>13</sup> The EFC comprises representatives of finance ministries and central banks; the BSC and the CEBS comprise representatives of central banks and banking supervisory authorities; and the FSC comprises representatives of finance ministries. The ECB is represented in all these committees, either as a member or an observer.

implementation of the aforementioned MoUs. In cases where EU-wide multilateral cooperation among the authorities might be needed, the existing EU committees may be used, within the scope of their role and tasks, to facilitate the exchange of information, views and assessments.

In this context, it should be noted that work has been carried out by the CEBS<sup>14</sup> with regard to the implementation of the CRD and related convergence of supervisory practices.<sup>15</sup> Furthermore, joint work is currently being undertaken by the BSC and the CEBS on the central banking and supervisory practices for handling financial crises at the cross-border level. The aim is to enhance the operational effectiveness of the existing arrangements, including the relevant provisions of the CRD.

### 3.3 THE CENTRAL BANKING FRAMEWORK

In a potential financial crisis situation, central banks have an important role to play as monetary authorities and in the context of their responsibility for contributing to the smooth functioning of payment systems and to the safeguarding of financial system stability.

In exercising these responsibilities, central banks are able to detect warning signs or disturbances in the money markets or the financial markets in general, as well as in payment systems, that could evolve into crisis situations. In addition, they are able to assess the potential channels for contagion arising from a financial market disturbance or crisis, and accordingly the likely propagation of the disturbance across financial institutions, markets and market infrastructures.

In case of financial market disturbances, central banks have the necessary tools to help restore the smooth functioning of the markets' liquidity distribution channels. These tools may include fine-tuning operations, aimed at providing aggregate liquidity to the markets, or measures concerning payment systems, such as delaying the closure of the systems so that pending

payments can be settled. In addition, central banks have available standing facilities which provide liquidity with an overnight maturity to counterparties on the latter's initiative. The interest rate on standing facilities is normally substantially higher than the corresponding market rate. As a result, counterparties normally only use standing facilities when there are no other alternatives.<sup>16</sup>

One of the specific tools available to central banks in a crisis situation is the provision of emergency liquidity assistance (ELA) to individual credit institutions against adequate collateral. Generally, this tool consists of providing liquidity support in exceptional circumstances to a temporarily illiquid credit institution which cannot obtain liquidity through either the market or participation in monetary policy operations. This exceptional and temporary liquidity provision should respect the prohibition of monetary financing embodied in the Treaty establishing the European Community and the associated EU Council Regulation.<sup>17</sup> A credit institution cannot, however, assume automatic access to central bank liquidity. As a central banking function, the provision of ELA is within the discretion of the national central bank, which will consider the relevant factors that may justify the access to this lending of last resort. Specifically, the provision of ELA may be justified to prevent or mitigate potential systemic effects on financial institutions, including repercussions for market infrastructure such as the disruption of payment and settlement

14 According to Commission Decision 2004/5/EC of 5 November 2003, the role of the CEBS is to: advise the European Commission, in particular as regards the preparation of draft implementing measures in the field of banking activities; contribute to the consistent implementation of Community directives and to the convergence of Member States' supervisory practices throughout the Community; and enhance supervisory cooperation, including the exchange of information.

15 In particular, the development of guidelines for the effective and consistent implementation of the revised legal framework for cross-border banking groups and for the enhanced operational networking of national supervisors.

16 See *The monetary policy of the ECB*, ECB, 2004, p. 74.

17 This prohibition is referred to in Article 101 of the Treaty, to which Council Regulation (EC) No 3603/93 is attached.



systems. Central bank liquidity support should not be seen as a primary means of managing financial crises, since it is limited to the temporary provision of liquidity in very exceptional circumstances. Hence if, despite preventive arrangements, a crisis at a financial institution occurs, a private sector solution is preferable whenever possible. When such private solutions are deemed insufficient or impossible, the relevant components of the financial safety net could be considered, such as specific supervisory measures, recourse to the deposit insurance schemes and ultimately the winding down of the institution concerned.

The cooperation between EU central banks in a cross-border crisis situation will be facilitated, where warranted, by the procedures set out in the EU-wide and regional MoUs. In particular, the envisaged procedures will support the sharing of information on emerging financial disturbances, the assessment of potential systemic implications, and the coordination of policy action, if deemed necessary, between central banks, as well as between central banks and other authorities.

Within the specific setting of the Eurosystem, the necessary mechanisms to tackle a financial crisis are in place.

First, the Eurosystem has set up the appropriate operational procedures to contain, within the scope of its functions, the potential systemic effects of a financial disturbance. This includes procedures for the conduct of monetary policy and foreign exchange operations, the operation of TARGET, the oversight of payment systems (also considering potential consequences for the functioning of other market infrastructures) and the safeguarding of financial stability. In this context, the Eurosystem/ESCB committees established to provide assistance and advice to the ECB's decision-making bodies also provide the necessary technical infrastructure for managing the effects of a potential disturbance across the euro area.<sup>18</sup>

Second, the Eurosystem also has procedures in place regarding the provision of ELA to individual credit institutions in the euro area, which are under the responsibility of the national central banks (NCBs). These procedures are aimed at ensuring an adequate flow of information within the Eurosystem to the decision-making bodies of the ECB. In this way, the impact of an ELA intervention on aggregate liquidity conditions in the euro area can be managed in a manner consistent with the maintenance of the appropriate single monetary policy stance.

#### 4 TESTING THE FRAMEWORK: THE RUNNING OF FINANCIAL CRISIS SIMULATION EXERCISES

As described in the previous sections, the EU financial crisis management arrangements comprise principles and procedures which support cooperation and information-sharing between authorities. Most of the components of these arrangements are of a practical nature, which allows authorities the necessary flexibility and discretion concerning the specific action to be taken vis-à-vis the unique features of a crisis situation. This degree of flexibility and discretion is also important given the risk that private parties could engage in excessive risk-taking in the expectation of public support in the event of difficulties, thus reducing the incentives for prudent behaviour and thereby even making a crisis more likely to occur. Therefore, as a principle, market-led solutions should be the primary avenue for resolving crisis situations in individual institutions. This principle was reaffirmed in the EU context in the 2001 EFC recommendations and the 2005 MoU.

Given the practical nature of financial crisis management arrangements, they are likely to become more effective as the EU authorities

<sup>18</sup> Among the committees assisting the work of the decision-making bodies of the ECB, the Market Operations Committee (MOC), the Payment and Settlement Systems Committee (PSSC) and the BSC are those which could be most directly involved in financial crisis management.

become more familiar with their functioning. Authorities have therefore organised financial crisis simulation exercises, which aim as far as possible to replicate real-life crisis situations, and to test the functioning of the arrangements and the operational use of the tools provided in the EU rules and procedures. By revealing potential pressure points in these arrangements, crisis simulation exercises may also help authorities to identify possible refinements to the procedures for cooperation in crisis management.

#### **4.1 THE SCOPE AND USEFULNESS OF SIMULATION EXERCISES**

Simulation exercises can focus on different aspects of the processes underlying financial crisis management. First, the focus may be on policy arrangements, i.e. the arrangements for cooperation and information-sharing between authorities which are designed to ensure an effective decision-making process. In particular, the authorities may need to ascertain whether there are adequate procedures to exchange information with the necessary content to assess the nature and the systemic implications of a crisis, as well as to coordinate the policy decisions needed to safeguard the stability of the financial system. The crisis scenario may involve conflicting incentives among the participating authorities in order to simulate difficult policy choices.

Second, the focus may be on contingency arrangements. In this case, the simulation exercise is aimed at testing the technical and operational procedures and infrastructures. This type of exercise is designed to create a crisis scenario that would test the most relevant procedures in place to ensure the continuous and effective performance of authorities' tasks. Emphasis is placed on pressure factors, such as time, ambiguity, uncertainty, information overload and logistical limitations. In addition, the exercise tests the authorities' internal communication and decision-making procedures, as well as related processes such

as contact with external parties or public communication.

The organisation of a simulation exercise includes different stages, all of which may provide valuable information. The learning process begins with the design of the exercise. For the organisers, thinking about the main elements of an unfolding crisis scenario can contribute to a better understanding of the initial signals and transmission channels of a potential disturbance, which could be complex to assess in a real situation. This can also provide input into regular financial stability analysis through the identification of additional indicators and factors which may warrant monitoring.

The actual conduct of the exercise can also bring valuable lessons, since the simulation of a crisis can be viewed as a "training facility". The participants become more aware of the information flows and decision-making processes in a crisis situation, and improve their own ability to use the existing arrangements under pressure and in cases of heightened uncertainty and possible ambiguity. Moreover, the challenge of making the necessary assessments and decisions under a very tight time constraint is an important experience for participating authorities. As a corollary, exercises can increase the ability of key persons to respond in a timely and effective manner to the rapid unfolding of complex events. Finally, participation in a simulation exercise can lead to better relationships between different authorities, which may increase the preparedness for cooperation in an emergency situation.

The evaluation phase of an exercise can provide information on the adequacy of existing frameworks for financial crisis management. A simulation exercise can highlight the existence of legal, regulatory or behavioural obstacles to the smooth interplay among authorities. This is especially important in a cross-border context, where the exchange of information, coordination and decision-taking are more complex than at the national level.

Conflicting views can arise regarding the systemic impact of a crisis and the tools which should be used to resolve it. A simulation exercise can also provide insight into whether policy and operational arrangements need to be upgraded, and whether the various tools the authorities have at their disposal to address a crisis are adequate or should be further developed. Overall, a simulation exercise contributes to the better ex-ante planning of the management of a potential crisis.

A financial crisis simulation exercise cannot, and should not seek to, deliver a blueprint for crisis management. Given the uniqueness of the factors behind the origin and the propagation of a financial crisis, there is no “right answer” regarding the process and outcome of crisis management. The value of an exercise rather lies in the lessons learnt as regards the interplay between organisations and the adequacy of existing arrangements.

#### 4.2 THE EXPERIENCE WITH SIMULATION EXERCISES

Financial crisis simulation exercises based on the arrangements described in this article have taken place at the national, regional and EU levels.

At the EU level, financial crisis simulation exercises have been organised to test the effectiveness of the overall financial stability arrangements. The first such exercise took place in September 2003 under the aegis of the BSC and was aimed at testing the provisions of the 2003 MoU. It provided useful insights into the different aspects of cross-border cooperation between banking supervisors and NCBs in the event of a systemic financial crisis.

A recent EU-wide financial crisis management simulation exercise took place in April 2006 at the ECB under the aegis of the EFC and was aimed at testing the 2005 MoU. The exercise involved representatives from all the EU banking supervisors, central banks and finance ministries. On the basis of the findings of the

exercise, the ECOFIN Council agreed on further work to enhance cooperation among Member State authorities responsible for financial market stability.<sup>19</sup>

In the context of the Eurosystem arrangements to safeguard financial stability, the Eurosystem central banks have also carried out exercises to assess the ability of the Eurosystem to address a complex financial crisis with potential systemic implications for several countries in the euro area. The most recent exercise took place in May 2006.

The exercises involved all the relevant central banking functions, including the conduct of monetary policy, the operation of TARGET, the oversight of payment systems (also considering potential consequences for the functioning of other market infrastructures) and the safeguarding of financial stability. Given the high degree of financial integration within the euro area, the exercises placed particular emphasis on the systemic interlinkages between the components of the financial system, including institutions, markets and market infrastructures, both on a national and on a cross-border basis. The conduct of the exercises confirmed the preparedness of the Eurosystem to deal with potentially systemic events that could affect the financial system of the euro area.

#### 5 CONCLUSION

Since the introduction of the euro, the debate regarding the adequacy of the EU’s institutional arrangements for financial stability has focused on the capability of a framework based mostly on the exercise of national responsibilities to prevent and manage crises in increasingly integrated financial markets. In this context, the specific EU arrangements for financial crisis management have been subject to comprehensive assessments, enhancements,

<sup>19</sup> See the ECOFIN Council press release available at [www.eu2006.fi/calendar/vko41/en\\_GB/1147696509264/?u4.highlight=](http://www.eu2006.fi/calendar/vko41/en_GB/1147696509264/?u4.highlight=)

and testing through simulation exercises, which have reinforced the ability of the current institutional set-up to handle crises effectively.

The approach followed thus far has involved the development of procedures aimed at supporting the interaction between the different sets of authorities, both at the cross-border and national levels, in order to ensure the effective safeguarding of financial stability in the single financial market. These procedures take account of the fact that the authorities, in the context of their responsibilities, need to retain the necessary discretion and flexibility to tackle the specific aspects of a potential crisis situation. Accordingly, the procedures were introduced by measures of differing nature, including legislative measures, voluntary cooperation agreements and the reinforcement of the practical application of the overall framework for financial crisis management, in part through extensive testing in simulation exercises.

This approach has the merit of providing a comprehensive, multi-layered and flexible framework at the EU level, with the potential to adapt to the specific challenges that a crisis situation may pose for the responsible authorities, particularly in terms of coping with cross-border systemic implications. In addition, such a framework is open to further practical refinements in particular areas, should these be considered necessary in view of developments in the financial landscape. The periodic assessment of the effective functioning of the institutional arrangements for crisis management may also provide the basis for such refinements. In this respect, the ECOFIN Council concluded at its meeting of 10 October 2006 in Luxembourg that, following the April 2006 EU-wide simulation exercise, efforts should be continued to further deepen the cooperation among relevant authorities and to ensure that EU arrangements for financial stability correspond to the developments in the financial markets.