	Βrι	ıssels
ECFIN/CEFCPE(2008)REP/53106 R	FV	REV

MEMORANDUM OF UNDERSTANDING ON COOPERATION BETWEEN THE FINANCIAL SUPERVISORY AUTHORITIES, CENTRAL BANKS AND FINANCE MINISTRIES OF THE EUROPEAN UNION

ON CROSS-BORDER FINANCIAL STABILITY

1 June 2008

ANNEXES:

ANNEX 1: THE COMMON PRACTICAL GUIDELINES

ANNEX 2: TEMPLATE FOR A SYSTEMIC ASSESSMENT FRAMEWORK

Introduction

This Memorandum is an extension and update of the 2005 Memorandum and is based on Council conclusions of 9 October 2007; and on the EFC Report of 5 September 2007 (doc. ECFIN/CEFCPE(2007)REP/53990) endorsed by the EU Finance Ministers and Central Bank Governors. The agreement of the *Parties*¹ leading to this Memorandum is based on the following considerations:

- (1) The integration of financial markets and *financial infrastructures* in the European Union (EU), together with the growing number of large and complex *financial groups* with cross-border operations, contributes to the efficiency and stability of the EU financial system. At the same time, financial integration increases the scope for cross-border and cross-sector contagion and thus the likelihood of a systemic crisis affecting more than one Member State. Financial stability is, therefore, a common concern for all Member States and the EU as a whole, and must be safeguarded on the basis of close cooperation among all *Parties*, taking also into account the wider international context.
- (2) In order to limit the economic impact of a cross-border systemic financial crisis, the EU arrangements for crisis management and resolution must allow a timely and effective response. Crisis preparation in advance is necessary, while preserving sufficient flexibility to deal with the specific circumstances of any potential crisis. Accordingly, it is important to have in place at the EU level common principles, procedures and practical arrangements concerning cooperation among the authorities responsible for preserving financial stability.
- (3) The *Parties* see this Memorandum as an appropriate instrument for setting out further arrangements, promoting cooperation between them and preparing for the management and resolution of a cross-border systemic financial crisis. The *Parties* will cooperate through appropriate procedures for sharing of information, views and assessments so as to facilitate the pursuance of their respective policy functions in the management and resolution of a crisis, and to preserve financial stability at a minimum cost. In particular, the *Relevant Parties* should at any time be in a position to timely engage in informed discussions amongst themselves at the cross-border level.
- (4) Assessing the potential for systemic implications of a financial crisis is a necessary starting point for any coordinated action among the *Relevant Parties*. The *Parties* agree that such assessments should make use of a common analytical framework in order to enhance communication and facilitate agreement on a joint assessment. Responsibility for conducting these assessments lies with the *Financial Supervisory Authorities* and Central Banks. Finance Ministries should be kept fully informed of the process and the outcome of the assessments so as to ensure that a common systemic assessment can be promptly achieved among *Relevant Parties* at the national level.
- (5) Cooperation between the *Parties* will take place on the basis of the existing institutional and legal framework for financial stability in Member States as well as the applicable Community legislation, fully respecting the roles and the division of responsibilities among the *Parties*. In

_

¹ The definitions to the words written in *italics* are found under "Key definitions used in the Memorandum".

particular, in the context of this Memorandum, *Financial Supervisory Authorities*' responsibilities should be interpreted in accordance with the applicable Community directives, including the role of *Group Supervisor*, with regard to each authority's capacity to contribute to preserving the soundness of individual *financial groups* as well as of the financial system as a whole. Central banks' responsibilities should be interpreted with regard to their functions relating to monetary policy and oversight of payment systems, as well as to their task to contribute to the financial stability. Finance Ministries' responsibilities should be interpreted with regard to their overall political responsibility for the stability of the financial system and their role in the management and resolution of systemic financial crises, in particular regarding the involvement of public funds.

- (6) Financial crisis situations may in practice involve a wider range of functions and authorities than those represented by the *Parties*, including deposit guarantee schemes, competition policy authorities or other public authorities. Certain financial crises may require cooperation with authorities whose jurisdiction lies outside the EU. In this context, the authorities of the European Economic Area (EEA) are invited to associate themselves to this Memorandum.
- (7) The *Parties* emphasise that this Memorandum is designed to facilitate the management and resolution of cross-border systemic financial crises and will seek to facilitate private sector solutions, to minimise the economic and social costs, while promoting market discipline and limiting moral hazard. This Memorandum does not create any legal commitment for any of the *Parties* to intervene in favour of anyone affected by a financial crisis.
- (8) Those *Parties* that have specific common financial stability concerns are encouraged to develop Voluntary Specific Cooperation Agreements with a view to provide for more specific and detailed, procedures and arrangements of crisis management and resolution for their respective countries and in relevant contexts. An example of a Voluntary Specific Cooperation Agreement is attached to the Common Practical Guidelines in Annex 1 to this Memorandum.

Key definitions used in the Memorandum

Parties: Signatories of this Memorandum, i.e. *Financial Supervisory Authorities*, Finance Ministries and other Ministries according to national competencies, Central Banks in Member States and the European Central Bank:

Relevant Parties: A sub-set of signatories whose policy-making functions may be significantly affected by a specific financial crisis situation;

Other Relevant Bodies: Public/private entities who are not signatories of this Memorandum, but whose involvement in the procedures may be necessary (i.e. competition authorities, Deposit Guarantee Schemes, authorities in third countries);

Financial Supervisory Authority: Authority in charge of the supervision of banks and/or, insurance companies and/or investment firms and/or occupational pension funds and/or financial markets, as well as the supplementary supervision of the regulated entities in a financial conglomerate. There can be more than one *Financial Supervisory Authority* in a given country;

Domestic Standing Group: A group which consists of the *Financial Supervisory Authorities* (or a sub-set thereof), Central Banks, Finance Ministries at the national level, with the objective to enhance preparedness in normal times and facilitate the management and resolution of a financial crisis. Such a group could be extendable to also include *Other Relevant Bodies*.

National Coordinator: An Authority designated by the *Parties* of the *Domestic Standing Group* which, taking into account its legal competencies, is responsible for the overall coordination of activities in order to enhance preparedness in normal times and facilitate the management and resolution of a crisis at the national level in a particular crisis situation; The *Party* assuming the role of *National Coordinator* may vary according to the nature and stage of the crisis.

Cross-Border Stability Group: A group which involves all Relevant Parties from different Member States with the objective to enhance preparedness in normal times and which may facilitate the management and resolution of a cross-border financial crisis. A Cross-Border Stability Group is chaired by a Cross-Border Coordinator designated by the Group.

Cross-Border Coordinator: The Party from the home country which is responsible for the overall coordination of actions in a particular cross-border context, and which may vary according to the nature and stage of the crisis.

Group Supervisor: The supervisory authority, responsible for the supervision on a consolidated basis of an EU cross-border *financial group*, as defined in the current Community legislation;

Financial group: A bank, banking group, insurance undertaking or insurance group, financial conglomerate and investment firm, which is important in several Member States due to significant subsidiaries or branches in host countries;

Financial Infrastructure: Payment systems, trading and post-trading systems and other market infrastructure which may be important in several Member States.

Home country: The country of *Group Supervisor* responsible for the supervision on a consolidated basis.

Host country: The country which hosts relevant subsidiaries or branches.

Cooperation arrangements: Arrangements agreed among Parties, possibly involving also Other Relevant Bodies, for the purpose of preserving financial stability as defined in the MoUs or corresponding engagements between authorities which specify the content of such agreements. Cooperation arrangements typically specify details of the functioning of the Domestic Standing Groups and may define Cross-Border Stability Groups.

College of Supervisors: A permanent, although flexible, structure for cooperation and coordination among supervisors responsible for and involved in the supervision over the different components of a cross-border *financial group*.

THE PARTIES TO THIS MEMORANDUM OF UNDERSTANDING AGREE TO THE FOLLOWING:

1. Objective and scope of the Memorandum

- 1.1. Building on the existing national and EU legislation, the objective of the Memorandum is to ensure cooperation in financial crises between *Financial Supervisory Authorities*, Central Banks and Finance Ministries through appropriate procedures for sharing of information and assessments, in order to facilitate the pursuance of their respective policy functions and to preserve stability of the financial system of individual Member States and of the EU as a whole.
- 1.2. This Memorandum applies both (a) in normal times to enhance the preparedness of the *Parties* to deal with a cross-border systemic financial crisis; and (b) in a crisis situation regardless of its origin, affecting the stability of the financial system in at least one Member State with a potential cross-border systemic impact in other Member States and involving at least one *financial group* or affecting the *financial infrastructure* or the functioning of financial markets.
- 1.3. A cross-border systemic crisis, having its origin in individual *financial groups*, is most likely to involve banks or banking groups, due to the specific features of banks balance sheets. In view of their relevance for the stability of the financial system, this Memorandum will also apply with regard to the possible cross-border and systemic implications of events originating in or propagating across sectors of the financial system other than banking, and involving financial conglomerates, insurance groups or investment firms.
- 1.4. The *Parties* commit themselves to open, full, constructive and timely cooperation; and to prepare and search for jointly acceptable solutions. Cooperation between the *Parties* both in normal times and financial crises will involve:
 - 1. setting up an appropriate framework for cooperation with the aim to prepare common solutions and actions to manage potentially detrimental effects of a crisis;
 - exchanging information relevant for the preparation, management and resolution of a crossborder systemic financial crisis, including assessments of the situation in order to allow the Relevant Parties to promptly assess the systemic nature and cross-border implications of the crisis, making use of the common framework for systemic assessments on the basis of the agreed template (summarised in Annex 2);
 - 3. coordinating public communication; and,
 - 4. establishing contingency plans, including stress testing and simulation exercises.
- 1.5. The Common Practical Guidelines in Annex 1 of the Memorandum provide more detailed operational guidance on the steps and procedures to be taken by the *Parties* in normal times and during a crisis to manage a cross-border systemic financial crisis. The guidelines serve as a useful tool to further develop the procedures for cooperation between different *Parties* with common interests and reflect the common understanding about their respective roles.

2. Common principles for cross-border financial crisis management²

2.1. The *Parties* agree to follow a set of common principles in the management of any cross-border financial crisis, which involves at least one banking group which (i) has substantial cross-border activities and (ii) is facing severe problems which are expected to trigger systemic effects in at least one Member State; and (iii) is assessed to be at risk of becoming insolvent.

The common principles are the following:

- 1. The objective of crisis management is to protect the stability of the financial system in all countries involved and in the EU as a whole and to minimise potential harmful economic impacts at the lowest overall collective cost. The objective is not to prevent bank failures.
- 2. In a crisis situation, primacy will always be given to private sector solutions which as far as possible will build on the financial situation of a banking group as a whole. The management of an ailing institution will be held accountable, shareholders will not be bailed out and creditors and uninsured depositors should expect to face losses.
- 3. The use of public money to resolve a crisis can never be taken for granted and will only be considered to remedy a serious disturbance in the economy and when overall social benefits are assessed to exceed the cost of recapitalisation at public expense. The circumstances and the timing of a possible public intervention can not be set in advance. Strict and uniform conditions shall be applied to any use of public money.
- 4. Managing a cross-border financial crisis is a matter of common interest for all Member States affected. Where a bank group has significant cross-border activities in different Member States, authorities in these countries will carefully cooperate and prepare in normal times as much as possible for sharing a potential fiscal burden. If public resources are involved, direct budgetary net costs are shared among affected Member States on the basis of equitable and balanced criteria, which take into account the economic impact of the crisis in the countries affected and the framework of *home* and *host countries*' supervisory powers.
- 5. Arrangements and tools for cross-border crisis management will be designed flexibly to allow for adapting to the specific features of a financial crisis, individual institutions, balance sheet items and markets. Cross-border arrangements will build on effective national arrangements and cooperation between authorities of different countries. Competent authorities in the Member States affected by a crisis should be in a position to promptly assess the systemic nature of the crisis and its cross-border implications based on common terminology and a common analytical framework.
- 6. Arrangements for crisis management and crisis resolution will be consistent with the arrangements for supervision and crisis prevention. This consistency particularly refers to the division of responsibilities between authorities and the coordinating role of *home country* supervisory authorities.
- 7. Full participation in management and resolution of a crisis will be ensured at an early stage for those Member States that may be affected through individual institutions or infrastructures, taking

-

The common principles endorsed by the ECOFIN Council of 9 October 2007.

into account that quick actions may be needed to solve the crisis.

- 8. Policy actions in the context of crisis management will preserve a level playing field. Especially, any public intervention must comply with EU competition and state-aid rules.
- 9. The global dimension will be taken into account in financial stability arrangements whenever necessary. Authorities from third countries will be involved where appropriate.
- 2.2. The common principles include references to banks and banking groups, reflecting their specific role in the financial system. To the extent that some of the principles may be of relevance to financial markets or other types of *financial groups*, they also apply to them, in case the stability of the financial system is at risk with a potential cross-border systemic impact.

3. Cooperation arrangements

- 3.1. Cooperation among the *Parties* at a national level is based on the *Domestic Standing Groups*. In line with the ECOFIN conclusions of 9 October 2007, these Groups facilitate the operation of this Memorandum at a national level, including by: determining which *Party* is the *National Coordinator* in particular situations, in line with its legal competencies; reaching common views on systemic assessments at a national level; developing tools for crisis management; setting out contingency plans in case of a potential national or cross-border systemic financial crisis; organising crisis simulation exercises; and taking decisions on the practicable ways of organising cross-border contacts.
- 3.2. Those *Parties* with common financial stability concerns stemming from the presence of at least one *financial group* are encouraged to develop as soon as possible Voluntary Specific Cooperation Agreements (VSCA), providing for more specific and detailed crisis management procedures taking into account the particular circumstances and contexts relevant for those *Parties*. For illustrative purpose, to facilitate their development by the *Relevant Parties*, an example of such an agreement for *financial groups* is attached to the Common Practical Guidelines.
- 3.3. Relevant Parties sharing specific common financial stability concerns should consider the establishment of Cross-Border Stability Groups, building on the Domestic Standing Groups and existing cross-border networks of Supervisory Authorities (Colleges of Supervisors) and Central Banks. Such groups will have a flexible and practicable set-up consistent with the existing networks, reflecting the particular needs of the Relevant Parties with the objective to enhance crisis preparation in normal times so as to facilitate the management and resolution of a cross-border crisis.

4. Activation of procedures and responsibility for co-ordination in a cross-border crisis

4.1. The *Party* who becomes aware of the emergence of a potentially serious financial disturbance will inform as soon as practicable the *National Coordinator or the Cross-Border Coordinator*. The *National Coordinator* or the *Cross-Border Coordinator* will ensure that information will be shared among the *Relevant Parties*. Similarly, a request for information or assessment from one *Relevant Party* to another will be promptly considered and fulfilled to the maximum extent possible without delay.

- 4.2. Any *Relevant Party* may request the *Cross-Border Coordinator* to activate the crisis procedures. When the cross-border crisis cooperation procedures are activated, all *Relevant Parties* shall be informed at an early stage.
- 4.3. Financial Supervisory Authorities and Central Banks are responsible for assessing the systemic nature of the financial crisis and its cross-border implications. All members of the Domestic Standing Groups shall be kept fully informed of the process and outcome of the assessments. They are responsible for facilitating a common systemic assessment among Relevant Parties at national level. Cross-Border Stability Groups may help to reach a common understanding among the Relevant Parties of the systemic nature of the crisis in the cross-border context.
- 4.4. As a rule, the *National Coordinator* of the *home country* assumes the task of *Cross-Border Coordinator* in the management of a cross-border financial crisis. The *Cross-Border Coordinator* may delegate tasks to authorities in a *host country*. The *Party* assuming the role of coordinator may vary according to the nature and the stage of the crisis, reflecting the division of responsibilities between the *home country Parties* which is as follows:
 - In the case of a crisis affecting a cross-border financial group, the Group Supervisor shall coordinate the gathering and dissemination of information and alert the Relevant Parties. It shall also plan and coordinate supervisory activities, including the assessment of the systemic nature of the crisis and its cross-border implications as well as possible corrective actions towards individual institutions within the supervisors' competencies. Where supervisory functions are performed in separate entities at a national level, the Group Supervisor will be responsible for establishing contacts to insurance, occupational pensions' and investment firms' and financial markets' supervisors.
 - Without prejudice to the responsibilities of the supervisors of financial markets and financial infrastructures, in a crisis situation potentially affecting the performance of central banking functions, the relevant Central Banks shall coordinate actions among themselves in addressing the situation, and shall cooperate with Financial Supervisory Authorities and other Central Banks. Where a liquidity crisis could affect a cross-border financial group with a potential for systemic implications, the Central Bank in the home country will coordinate actions among relevant Central Banks. The ECB and the Eurosystem will be involved in accordance with their responsibilities. The Central Banks involved will cooperate closely with the banking supervisory authorities and are expected to inform the Finance Ministries in the case of provision of Emergency Liquidity Assistance at the national level in line with the existing national legal framework.
 - Where a solvency crisis could affect a cross-border *financial group* with a potential for systemic implications which may imply the use of public funds, the Finance Ministry in the *home country* will coordinate the process of deciding on whether, to what extent and how public funds will be used. The Finance Ministry of the *home country* shall identify in normal times procedures to be applied and *Parties* to be involved with a view: to propose solutions respecting state aid rules pursuant to the EC Treaty in a crisis situation and to ensure timely decisions on the use of public funds, including by reaching agreements on burden sharing based on equitable and balanced criteria.
- 4.5. The *Parties* undertake to co-ordinate any policy measures that may be required in the context of

the crisis situation, without prejudice to any urgent decision by a *Relevant Party* as it fulfils its responsibility according to Community and national legislation.

5. Information exchange

- 5.1. The *Relevant Parties* stand ready to share available information and assessments necessary to fulfil their respective role in the preparation and the management of a cross-border systemic financial crisis.
- 5.2. In normal times, in order to enhance their preparedness for a crisis, the *Relevant Parties* will engage, within their respective competences, in the regular sharing of information and assessments relating to issues of common interest and of information needed for assessing the systemic implications of *financial crises*, and will create efficient cooperation procedures for information sharing, timely planning and joint crisis management.
- 5.3. The *Cross-Border Coordinator* shall ensure, in light of the particular features of the potential crisis, that information will be shared among *Relevant Parties* in view of the possible effects of the crisis on *financial groups, financial infrastructures* or the functioning of financial markets within the competence of those *Parties*.
- 5.4. At the cross-border level, the *Relevant Parties* will share information with, as a rule, their respective counterparts in other countries. Only in exceptional cases, where necessary, information may be transmitted directly at the cross-border level between different types of authorities with concurrent transmission to the corresponding counterpart authority in the country concerned.
- 5.5. In the cross-border context, each *Party* is expected to use its normal channels of cooperation where in place, namely the *Colleges of Supervisors* and the networks of Central Banks or other authorities.
- 5.6. In cases where wider multilateral cooperation among the *Parties* needs to be activated, such as in major disturbances that may affect the EU as a whole, existing committees in the EU may provide a platform for exchange of information and assessments with a view towards facilitating the timely actions and decisions by the *Relevant Parties*.
- 5.7. The Common Practical Guidelines in Annex 1 present examples of concrete items of information that are likely to be needed, shared and assessed between the *Parties*, without prejudice to specific information needs to be determined by the *Relevant Parties* in a potential or particular crisis situation. The analytical framework in Annex 2 is the base to be used in the systemic assessment of a crisis.

6. Public communication

- 6.1. The *Relevant Parties* in a crisis situation will, to the maximum extent possible, co-ordinate public communications relating to the specific circumstances, and avoid making announcements to the public on their own. Public statements are issued after consulting the other *Relevant Parties*. Only in exceptional circumstances with an overriding and sudden public need, the *Parties* may issue separate statements. The *Parties* commit to share with each other, before releasing, any written statement to the public.
- 6.2. The Parties agree to discuss the challenges and propose solutions, in advance, related to the

- communication strategies. Members of the *Domestic Standing Groups* should work in advance towards addressing the practical and legal issues related to communication in their respective countries.
- 6.3. The *National Coordinator* is in charge of managing the communication process to the public between the *Relevant Parties* at a national level. The *Cross-Border Coordinator* is in charge of coordinating the public communication process at a cross-border level.

7. Contingency planning

7.1. The *Parties* will endeavour to conduct, as part of contingency arrangements for managing crisis situations, stress-testing and simulation exercises. The primary goal of such exercises would be to enhance the preparedness of authorities for handling potential financial crisis situations with cross-border systemic implications. The *Parties* should share, by utilising the existing EU committees, the methods and assumptions used in organising and conducting such stress-testing and crisis simulation exercises.

8. Confidentiality

- 8.1. Any information exchanged and received by virtue of the application of the provisions of this Memorandum is subject to conditions of confidentiality and professional secrecy as provided in Community and national legislation.
- 8.2. The *Parties* will maintain, vis-à-vis third parties, the confidentiality of any request for information made under this Memorandum, the contents of such requests, the information received, and the matters arising in the course of cooperation without prejudice to relevant Community and national legislation.
- 8.3. The *Parties* will ensure that all persons dealing with, or having access to, such information are bound by the obligation of professional secrecy.

9. Implementation and review of the Memorandum

9.1. The relevant EU committees bringing together the Parties to this Memorandum shall exchange views on the main features of this Memorandum and contribute to its full implementation at the

EU level and report to the Economic and Financial Committee on a regular basis.

9.2. The functioning of this Memorandum shall be tested in an EU wide crisis simulation exercise.

The Economic and Financial Committee and the Parties shall review this Memorandum within

three years of its entry into effect and propose, if deemed necessary, amendments.

9.3. After its entry into effect, Other Relevant Bodies may sign this Memorandum if agreed by the

Parties. The Economic and Financial Committee shall coordinate this process.

10. Nature of the Memorandum

10.1. As the provisions of this Memorandum are not legally binding on the *Parties*, they may not give

rise to any legal claim on behalf of any Party or third parties in the course of their practical

implementation.

10.2. The provisions of the Memorandum do not prejudge or assume any particular decisions or

remedies to be taken in crisis situations.

10.3. This Memorandum complements other present and future arrangements on cooperation between

Relevant Parties. In this context, the Parties commit to reviewing their existing arrangements in order to bring them in line with this Memorandum. They also commit to keep consistency with

this Memorandum when developing Voluntary Specific Cooperation Agreements illustrated in

the example attached to the Common Practical Guidelines in Annex 1.

11. Entry into effect

11.1 This Memorandum shall enter into effect on 1 June 2008 and replace the Memorandum of

Understanding on Cooperation between the Banking Supervisors, Central Banks and Finance

Ministries of the European Union in Financial Crisis Situations, which entered into force on 1

July 2005.

ANNEXES:

ANNEX 1: THE COMMON PRACTICAL GUIDELINES

ANNEX 2: TEMPLATE FOR A SYSTEMIC ASSESSMENT FRAMEWORK

Signatories

Financial Supervisory Authorities:

Finanzmarktaufsicht, Austria

Oesterreichische Nationalbank, Austria

Commission bancaire, financière et des assurances / Commissie voor het Bank-, Financie- en Assurantiewezen, Belgium

Българска Народна Банка (Bulgarian National Bank)

Комисия за финансов надзор (Bulgarian Financial Supervision Commission)

Authority for the Supervision and Development of Co-operative Societies, Cyprus

Cyprus Securities and Exchange Commission

Insurance Companies' Control Service, Cyprus

Κεντρική Τράπεζα της Κύπρου (Central Bank of Cyprus)

Česká národní banka, Czech Republic

Finanstilsynet, Denmark

Finantsinspektsioon, Estonia

Rahoitustarkastus (Financial Supervision Authority), Finland

Vakuutusvalvontavirasto (Insurance Supervisory Authority), Finland

Commission Bancaire, France

Autorité des marchés financiers, France

Autorité de contrôle des assurances et des mutuelles. France

Bundesanstalt für Finanzdienstleistungsaufsicht (Federal Financial Supervisory Authority), Germany

Deutsche Bundesbank, Germany

Private Insurance Supervisory Authority, Greece

Hellenic Capital Market Commission, Greece

Τράπεζα της Ελλάδος (Bank of Greece)

Pénzügyi Szervezetek Állami Felügyelete (Hungarian Financial Supervisory Authority), Hungary

Irish Financial Services Regulatory Authority

The Pensions Board, Ireland

Central Bank and Financial Services Authority of Ireland

Commissione di Vigilanza sui Fondi Pensione, Italy

Istituto per la Vigilanza sulle Assicurazioni Private e di Interesse Collettivo, Italy

La Commissione Nazionale per le Società e la Borsa, Italy

Banca d'Italia

Finanšu un Kapitāla Tirgus Komisija, Latvia

Lietuvos Respublikos draudimo prieziuros komisija, Lithuania

Lietuvos Respublikos vertybiniu popieriu komisija, Lithuania

Lietuvos Bankas, Lithuania

Commission de Surveillance du Secteur Financier, Luxembourg

Commissariat aux Assurances, Luxembourg

Malta Financial Services Authority

Autoriteit Financiële Markten, the Nederlands

De Nederlandsche Bank, the Nederlands

Komisja Nadzoru Finansowego, Poland

Instituto de Seguros de Portugal

Comissão do Mercado de Valores Mobiliários, Portugal

Banco de Portugal

Comisia de Supraveghere a Sistemului de Pensii Private, Romania

Comisia de Supraveghere a Asigurărilor, Romania

Comisia Națională a Valorilor Mobiliare, Romania

Banca Națională a României, Romania

Národná banka Slovenska, Slovakia

Agencija za zavarovalni nadzor, Slovenia

Agencija za trg vrednostnih papirjev, Slovenia

Banka Slovenije, Slovenia

Dirección General de Seguros y Fondos de Pensiones, Spain

Comisión Nacional del Mercado de Valores, Spain

Banco de España, Spain

Finansinspektionen, Sweden

Financial Services Authority, United Kingdom

The Pensions Regulator, United Kingdom

Central Banks:

European Central Bank

Oesterreichische Nationalbank, Austria

Nationale Bank van België/Banque Nationale de Belgique, Belgium

Българска народна банка, Bulgaria

Κεντρική Τράπεζα της Κύπρου, Cyprus

Česká národní banka, Czech Republic

Danmarks Nationalbank, Denmark

Eesti Pank, Estonia

Suomen Pankki (Finlands Bank)

Banque de France

Deutsche Bundesbank, Germany

Τράπεζα της Ελλάδος, Greece

Magyar Nemzeti Bank, Hungary

Central Bank and Financial Services Authority of Ireland

Banca d'Italia

Latvijas Banka, Latvia

Lietuvos bankas, Lithuania

Banque centrale du Luxembourg

Central Bank of Malta

De Nederlandsche Bank, the Netherlands

Narodowy Bank Polski, Poland

Banca Națională a României, Romania

Banco de Portugal

Národná banka Slovenska, Slovakia

Banka Slovenije, Slovenia

Banco de España, Spain

Sveriges Riksbank, Sweden

Bank of England, United Kingdom

Finance Ministries:

Bundesministerium für Finanzen, Austria

Service Public Fédéral Finances, Belgium

Министерство на финансите, Bulgaria

Υπουργείο Οικονομικών, Cyprus

Ministerstvo financí, Czech Republic

Finansministeriet, Denmark

Økonomi- og Erhvervsministeriet, Denmark

Rahandusministeerium, Estonia

Valtiovarainministeriö, Finland

Ministère de l'Économie, de l'Industrie et de l'Emploi, France

Bundesministerium der Finanzen, Germany

Υπουργείο Οικονομίας και Οικονομικών, Greece

Pénzügyminisztérium, Hungary

Department of Finance, Ireland

Ministero dell'Economia e delle Finanze, Italy

Finansu Ministrija, Latvia

Lietuvos Respublikos Finansų Ministerija, Lithuania

Ministère des Finances, Luxembourg

Ministeru tal-Finanzi, Malta

Ministerie van Financiën, the Netherlands

Ministerstwo Finansów, Poland

Ministério das Finanças e da Administração Pública, Portugal

Ministerul Economiei și Finanțelor, Romania

Ministerstvo Financií, Slovakia

Ministrstvo za finance, Slovenia

Ministerio de Economía y Hacienda, Spain

Finansdepartementet, Sweden

HM Treasury, United Kingdom

ANNEX 1 TO THE MEMORANDUM OF UNDERSTANDING:

COMMON PRACTICAL GUIDELINES

FOR CRISIS MANAGEMENT

Introduction

The common practical guidelines for crisis management provide detailed operational guidance and reflect a common understanding between the *Parties* of their respective role as well as of the steps and procedures to be taken in relation to a cross-border systemic financial crisis situation.

The guidelines describe what processes should be activated for:

- 1) strengthening crisis preparedness in normal times;
- 2) crisis alert;
- 3) crisis assessment;
- 4) crisis management network;
- 5) crisis management; and
- 6) external communication.

These processes should involve the cooperation and coordination among *the Parties* to enhance their preparedness in normal times to deal with the different stages of the crisis. The main objective of the coordination is to ensure that information is shared and that decisions, policy measures and related external communications of the *Relevant Parties* are coordinated and consistent.

The *Parties* with common financial stability concerns stemming from the presence of one or several *financial groups* are encouraged to develop *Voluntary Specific Cooperation Agreements* (VSCA) which are consistent with the MoU and which defines more detailed procedures to be put in place in normal times and to be activated in a crisis situation. As outlined in the example in attachment to these guidelines, these agreements will, in greater detail, describe the operational cooperation between *Parties* in the relevant countries and in relevant contexts. Well-defined governance, oversight and crisis management arrangements are also needed for systemically important *financial infrastructures* operating across borders.

In the VSCAs, in order to enhance crisis preparedness, the *Relevant Parties* may agree inter alia:

- to establish and utilise a Cross-Border Stability Group (CBSG) as a cooperation forum for the Parties of the VSCA;
- to develop procedures for regular exchange of information and assessments regarding the

common components of the respective financial systems of the countries concerned;

- to develop and conduct assessments of various systemic problems and their interactions based on a common terminology and a common analytical framework using the agreed systemic assessment framework (summarised in Annex 2 of the Memorandum);
- to design practical procedures and arrangements for coordinated decision-making and to check the availability of tools and their interoperability for cross-border crisis management;
- to develop procedures that facilitate the evaluation of costs and the possible sharing of a potential fiscal burden;
- to address public communication issues;
- to develop contingency arrangements for managing crisis situations, including by developing and conducting crisis management simulation exercises and stress testing.

1. Strengthening crisis preparedness in normal times

- 1. In order to be able to act timely and effectively when a potential crisis situation occurs, the *Relevant Parties* will enhance their preparedness in normal times in order to comply with the processes covered in these guidelines, i.e. crisis alert, crisis assessment, crisis management network, crisis management and external communication.
- 2. *Parties* will have in place **contact lists** of persons with sufficient seniority and communicate them to the other *Parties* in order to facilitate the prompt activation of the relevant coordination arrangement. Each *Party* is responsible for updating details of its members on the contact list on a continuous basis and for communicating them to the *Cross-Border Coordinator who* is responsible for distributing the list to the *Parties* regarding each particular *financial group* or *financial infrastructure*.
- 3. Finance Ministries, or other Ministry in accordance with national law, should establish procedures to prepare for financial facilities and possible sharing of fiscal burden and to initiate decision-making procedures in this regard at a national level by involving *Relevant Parties* and *Other Relevant Bodies*.
- 4. In order to allow **communication** among *Relevant Parties* to take place promptly whenever needed, secure means of communication (i.e. video-conferencing, tele-conferencing, e-mails) shall be established in normal times to allow confidential exchange of information and conference calls to take place. If a crisis breaks out, adequate processes and devices should be in place for exchanging information securely. The communications facilities should be tested in crisis simulation exercises.
- 5. Relevant Parties are expected to exchange information within their respective competencies both in normal times and in a crisis situation and to ensure that all relevant data is available rapidly in a crisis situation. Where Parties have common financial stability concerns, a common database consisting of publicly available actual data and a template for confidential up-to date data could be developed as described in Annex B to the example of a Voluntary Specific Cooperation Agreement. In order to ensure preparedness in a crisis situation, the Relevant Parties should consider, in normal times, sharing and reflecting upon the following information items that are likely to be needed in a crisis:
 - (i) Qualitative assessments on the emergency situation;
 - (ii) Systemic implications of a potential crisis for the domestic financial system and the systemic impact on other countries' financial systems as well as on the EU's financial markets as a whole, in line with the framework for systemic assessments outlined in Annex 2;

- (iii) Specific channels of contagion of the potential crisis to *financial groups*, *financial infrastructures* or the functioning of financial markets;
- (iv) Consideration of other relevant economic and budgetary implications of a crisis situation;
- (v) Constraints to the implementation of policy measures;
- (vi) Updates of relevant developments.
- 6. Consideration should be given beforehand on how to deal with publicly listed *financial groups and infrastructure* in the context of public intervention. In particular, a crisis situation affecting a publicly listed *financial group* should be addressed rapidly enough to allow legally required transparency rules to be fulfilled in the light of legal obligations of the institutions and the *Parties*. The EU regulation or national laws include provisions on the public disclosure that should be carefully interpreted before a crisis emerges. The provisions of the EU Market Abuse Directive provide the basis for disclosure in such occasion, including circumstances when the public disclosure of information may be delayed for a limited period of time³.
- 7. The *Domestic Standing Groups (DSG)* should beforehand look into possible problems that may arise in the management of a crisis in order to avoid any conflicts in a crisis situation between the *Relevant Parties*. As part of the preparedness in normal times, the DSGs should be formed in a manner that provides a clear mandate, reflects a representation of the *Parties* at an sufficient level of seniority, ensures effective functioning and provides for accountability at a national level so as to be in a position to contribute to the formulation of policy proposals on the management and resolution of a crisis.
- 8. While recognising that the specific issues can most effectively be dealt with in small groupings of *Relevant Parties*, each *Party* may use in normal times, as appropriate, their usual channels for the exchange of information at a cross-border level. The *Financial Supervisory Authorities* may use the Level 3 committees (CEBS, CESR, CEIOPS) or *Colleges of Supervisors* (where they are in place) to facilitate coordination between Supervisory Authorities; Central Banks may use, inter alia, the ESCB Committees (Banking Supervision Committee, Market Operations Committee, Payment and Settlement Systems Committee); and the Financial Ministries may use the Financial Services Committee to foster cooperation in normal times. *Financial Supervisory Authorities*, Central Banks and Finance Ministries should, as much as possible, cooperate with their respective counterparts in other countries.
- 9. The DSG of the *home country* is responsible for deciding to involve *Other Relevant Bodies* from 3rd countries.

The EU Market Abuse Directive (Directive 2003/6/EC), Article 6.1, obliges issuers of financial instruments to inform the public as soon as possible of inside information: "Member States shall ensure that issuers of financial instruments inform the public as soon as possible of inside information which directly concerns the said issuers". Hence, the issuers of financial instruments are in principle submitted to the obligation to disclose inside information, but there are exceptions. In case of emergency liquidity assistance, Article 6(2) of the same Directive is relevant: "An issuer may under his own responsibility delay the public disclosure of inside information, as referred to in paragraph 1, such as not to prejudice his legitimate interests provided that such omission would not be likely to mislead the public and provided that the issuer is able to ensure the confidentiality of that information". In case of emergency liquidity assistance, there is a legitimate interest not to disclose information immediately. This is confirmed in Article 3.1 of Commission Directive 2003/124/EC of 22 December 2003 implementing the Market Abuse Directive as regards the definition and public disclosure of inside information and the definition of market manipulation: "For the purposes of applying Article 6(2) of Directive 2003/6/EC, legitimate interests may in particular relate to the following non-exhaustive circumstances: (a) ... In particular, in the event that the financial viability of the issuer is in grave and imminent danger, although not within the scope of the applicable insolvency law, public disclosure of information may be delayed for a limited period where such a public disclosure would seriously jeopardise the interest of existing and potential shareholders by undermining the conclusion of specific negotiations designed to ensure the long-term financial recovery of the issuer."

2. Crisis alert

- 10. Crisis alert should ensure that: (i) relevant information is transmitted without delay to the *Cross-Border Coordinator*; and that (ii) the *Cross-Border Coordinator* disseminates without delay the relevant information to the other *Relevant Parties*.
- 11. Concerning actions to be taken on a cross-border basis, the *Cross-Border Coordinator* should activate the subsequent steps and procedures as outlined in these guidelines. The activation may be requested by any *Relevant Party*. When the procedures are activated, all *Relevant Parties* shall be involved at an early stage.
- 12. To the best of its ability, it is the responsibility of each *Party* to share, with the *Cross-Border Coordinator*, the necessary information needed by the *Relevant Parties* to fulfil their responsibilities.
- 13. Any *Party* which is aware of facts or events that may give rise to significant problems for a *financial group, financial infrastructures* or the functioning of financial markets, will share that information, as soon as possible, with the *Cross-Border Coordinator*, with the corresponding *Party* in the *home country* and with the members of its *Domestic Standing Group* and with the Eurosystem/ECB where appropriate. The *Cross-Border Coordinator*, the *Group Supervisor*, the Central Bank of the home country or the Eurosystem/ECB will disseminate the information as soon as practicable to the other *Relevant Parties*.
- 14. Following a crisis alert, at least three actions should be launched without delay by the *National Coordinator* in the *home country*, namely: (i) conduct a crisis assessment as described in section 3; (ii) activation of crisis management networks as described in section 4; and (iii) coordination of communication among authorities as well as with the *financial group* or *financial infrastructure* concerned as described in section 6.

3. Crisis assessment

15. After a crisis alert, the *Group Supervisor* or the *home country* Central Bank or, the Eurosystem/ECB, where appropriate, will immediately assess the systemic implications. The other counterparts, namely *Financial Supervisory Authorities* or Central Banks informed as outlined in Section 2 will do likewise.

- 16. The *Parties* commit to employ a common terminology and a common analytical framework in assessing the systemic nature of the financial crisis and its cross-border implications, as outlined in Annex 2. For this purpose, they will use the template for a systemic assessment framework which may be further developed as agreed among the *Parties*.
- 17. The first goal of the assessment phase is to assess the systemic implications of the crisis. Furthermore, the assessment phase should:
 - (i) consider the link between the *financial group* and its shareholders in order to facilitate a potential private sector solution of the crisis; and the possibilities offered by the available tools such as possible preventive role of the deposit guarantee schemes;
 - (ii) gather and update data that could be used as a basis for possible public interventions at a later stage so as to assess the possibilities to utilise various tools; and, if intervention requiring public funds is considered, as an input for objective criteria for burden sharing. As an

In this regard, article 132.1 of the Capital Requirement Directive (CRD) establishes that supervisors shall share the essential information that can materially influence the assessment of the *Financial Supervisory Authorities* of a credit financial institution in another Member State.

example, for each country affected by the crisis, the following indicators could be used in a crisis situation and made available at the latest during the assessment phase:

- the share of deposits of the relevant bank and of other directly affected institutions in each country;
- the share of assets (in terms of accounting values/market values/risk-weighted values) of the relevant bank and of other directly affected institutions;
- the share of revenue flows of the relevant bank and of other directly affected institutions banks; and
- the share of payment system flows of the relevant bank and of other directly affected institutions.

The nature of the crisis will eventually determine the specific indicators needed.

- 18. The Members of *the Domestic Standing Group* are responsible for reaching, at the national level, a common view on the systemic assessments conducted by the Financial Supervisory Authority and the Central Bank. The initial assessments should reach without delay the members of the *Domestic Standing Group*⁵ and shared assessment should be made available to all *Relevant Parties*. Further assessments will be made as required. These assessments are used to identify the severity of the crisis, the need for policy actions and the need to involve other *Relevant Parties* or *Bodies*.
- 19. Based on the results of the assessments made by the *Relevant Parties* regarding the systemic implications of the crisis, the *Cross-Border Coordinator* is responsible for working towards a common understanding about the severity of the crisis on a cross-border basis and keep the *Relevant Parties* informed of the crisis situation; and propose which level of involvement is required by the *Relevant Parties* in the decision making process in the particular circumstances. In parallel, it is the responsibility of each *host country* to assess the significance of problems in their domestic markets. If necessary according to the impact assessment, the involvement of other *Relevant Bodies* from 3rd countries will be initiated by the *Cross-Border Coordinator*.

4. Establishing a crisis management network

20. The management of a cross-border crisis requires close cooperation between the *Relevant Parties*, and well structured coordination based on procedures and processes agreed upon in normal times, taking into account the responsibilities of *the Parties* as set out in the MoU.

Domestic Standing Group

21. The *Domestic Standing Groups (DSGs)* shall operate according to their national mandates and contribute to the efficient cooperation among *Parties* at a national level as well as to the functioning of the cross-border cooperation. In a crisis situation affecting the stability of the domestic financial system, the DSG facilitates the management and resolution of the emerging crisis situation at a national level. The *Parties* of the DSG shall designate a *National Coordinator* which is responsible for facilitating the coordination of actions at a national level and the exchange of information at a cross-border level. The *National Coordinator* may be any of the *Relevant Parties* in line with their legal competencies and depending on the specific features of the crisis. The *National Coordinator(s)* will communicate the national assessment(s) to the *Cross-Border Coordinator*.

Where a financial conglomerate is involved, the coordinator of the specific conglomerate will need to be involved (see FCD art. 11a 2002/87/EC)

Cross-Border Stability Group

- 22. The *Cross-Border Stability Group* (CBSG) is a voluntary structure typically composed of the relevant *Financial Supervisory Authorities*, the relevant Central Banks and the relevant Finance Ministries from the countries that share financial stability concerns. The CBSG may be developed between *Relevant Parties* in different countries with a focus on one or several *financial groups*.
- 23. The functioning and composition of the CBSG should be flexible and correspond to particular needs. CBSGs should engage in regular cooperation to enhance crisis preparedness in normal times and convene both in 'restricted composition(s)' (i.e. small groups involving *Relevant Parties* according to needs and competences) and in 'full composition' (all *Relevant Parties* represented). In a crisis situation CBSG should contribute, depending on the specific crisis, to the resolution and management of a crisis. Meetings should take place regularly but their sequence depends on particular needs, for example in the context of crisis simulation exercises and stress testing in normal times.
- 24. While the CBSG could form an integral part of cooperation and coordination of actions in crisis situation, it can also enhance preparedness to deal with crisis in normal times taking into account the work undertaken in other fora (e.g. *Domestic Standing Groups, Colleges of Supervisors* and networks of Central Banks). In a crisis situation, the CBSG can support the planning of effective policies for the management of cross-border financial crisis. The CBSG will coordinate the sharing of assessments of the crisis situation provided by the countries involved.
- 25. If a *Cross-Border Stability Group* is not in place, the *National Coordinator* designated by the home country *Domestic Standing Group* in line with the paragraph 3.1 and 4.4 of the Memorandum will assume the role of *Cross-Border Coordinator* and shall establish the relevant contacts in order to manage the situation. Delegation of tasks of *Cross-Border Coordinator* to a *Party* other than home country in the case of a *financial group* is possible. In case where a potential crisis situation may affect a cross-border *financial group*, the *Cross-Border Coordinator* will alert the *Relevant Parties* without delay and activate contacts to the relevant *National Coordinators* or to the members of the *Cross-Border Stability Group*, where established.

5. Crisis management

- 26. All *Relevant Parties* should assess the use of possible remedial measures and take part in the implementation of the agreed actions. Depending on the crisis situation, the *Cross-Border Coordinator* can be changed between the *Parties* of the *home country*, yet continued close coordination between the *Parties* will be required.
- 27. In the design of actions, the first priority is given to private sector solutions. The *Cross-Border Coordinator* is responsible for establishing contacts with the private sector and the coordination of subsequent policy actions that follow the initial assessment, unless otherwise agreed.
- 28. All *Relevant Parties* shall cooperate actively and closely in order to identify possible solutions to manage and resolve the crisis, either private or public, or a mix of them, and they shall assess the cost of various options to the extent possible.

Supervisory functions

29. In a crisis, the *Group Supervisor* will plan and coordinate the supervisory activities and will, in close cooperation with the *home country* Central Bank, coordinate the management of the situation, with a view towards: (i) specifying the assessment of the situation based on more detailed information provided by the *Relevant Parties*; (ii) reaching a common understanding of the crisis situation among relevant *Financial Supervisory Authorities*; and (iii) identifying possible remedial measures. Each *Financial Supervisory Authority* and Central Bank is responsible for assessing the systemic nature of the crisis.

Central banking functions

- 30. If there is a liquidity crisis, the *home country* Central Bank, in close cooperation with the *Group Supervisor* and the other relevant *Financial Supervisory Authorities* and other Central Banks concerned, will manage the situation, including a possible Emergency Liquidity Assistance (ELA) intervention. The Eurosystem/ECB will be involved in accordance to its responsibilities. The assessment of the financial condition of the *financial group* will rely to a large extent on the supervisory assessments prepared on the basis of the pertinent supervisory arrangements for such a group, possibly under the coordination of the *Group Supervisor*. The Central Banks involved are expected to inform Finance Ministries at the national level in line with the existing national legal framework in the case of provision of Emergency Liquidity Assistance.
- 31. Without prejudice to the competences of financial markets supervisors, regardless of the domicile of the different parts of the distressed *financial group*, if a crisis materialises through an event relating to the liquidity conditions of the markets or to the functioning of payment or securities settlement systems, or resulting in a disruption to a particular financial market, the *home country* Central Bank and the *host country* Central Banks overseeing those markets and systems, and the Eurosystem/ECB where appropriate, will be responsible for managing the situation and will coordinate action among Central Banks in close cooperation with *Financial Supervisory Authorities* in line with the existing cooperation agreements in this field.

Public sector functions

- 32. In the light of the possible need to use public funds to resolve a crisis, Finance Ministries will be closely involved, at an early stage, in the process of crisis management and resolution. The Finance Ministries should consider the public sector actions⁶ available for managing and resolving a crisis, assess the possible fiscal burden to be shared and launch the necessary procedure to initiate decisions taking into account that timely decision must be taken at a high political level to resolve the crisis.
- 33. If public resources are likely to be needed to resolve the crisis, the Finance Ministry of the *home country* will coordinate the process of deciding on whether, to what extent and how public funds will be used, with the relevant Finance Ministries in other countries; and involve relevant *Financial Supervisory Authorities* and Central Banks.
- 34. In this context, agreement should be reached on the sharing of the direct budgetary net costs among the affected countries on the basis of equitable and balanced criteria⁷. If needed, the Finance Ministry of the *home country* will make a proposal for the sharing of financial burden among the affected Member States. These criteria will be guided by the principles defined in section 2 of the MoU and take into account the economic impact of the crisis in the countries affected and the framework of *home and host countries*' supervisory powers. They will also take into account the indicators set up during the assessment phase, while recognising the specificities of crisis situations. To this end, Finance Ministries of the home and host countries should reach a common understanding on ex-post burden and how it will be shared. If public resources will be needed, state aid rules pursuant to the EU Treaty shall be respected. The Finance Ministries will, as early as possible, establish contacts with the DG Competition of the European Commission on a confidential basis and at a high level to ensure a smooth and timely decision-making process.

Monitoring

35. As part of the crisis management functions, *National Coordinators* in each country involved should endeavour that appropriate procedures are in place to ensure the necessary monitoring, governance

⁶ Options have been discussed in the EFC Report (ECFIN/CEFCPE(2007)REP/53990).

Final costs and sharing of burden can be defined at a much later stage only. At this stage, broad picture on possible cost is needed to ensure decision making.

and follow-up of the actions and the continuity of crisis management functions in various stages of a crisis.

Involvement of other bodies or authorities

36. The *Cross-Border Coordinator* should endeavour at an early stage to involve other *Relevant Bodies* that are likely to be involved in the management of the cross-border crisis, including especially the deposit guarantee schemes in some countries.

6. External communication

- 37. Communication towards the public will, to the maximum extent possible, be handled in a coordinated fashion at all stages of the crisis (alert, assessment, management), taking into account the possibility of exercising discretion regarding the information that should (or should not) be disclosed in order to maintain market confidence in specific cases referred to in paragraph 6 of the Guidelines.
- 38. The *Relevant Parties* should prepare joint public statements even in the case where only one *Party* has to make such a statement, if the interests of the other *Parties* may be at stake. The *Relevant Parties* will share "terms of references" (that are not released to the public) so as to facilitate the consistency of communication.
- 39. As a general rule, the *Cross-Border Coordinator* is in charge of coordinating the public communication process at each stage of the crisis. It should ensure that the communication (or non communication) of the *Relevant Parties* is consistent with the communication of the *financial group* or the *financial infrastructure* to the public.
- 40. It is essential to identify at an early stage, the legal obligations or constraints of the *financial group* or the *financial infrastructure* to communicate to the public. In particular, the *financial group* or the *financial infrastructure* may become under pressure to disclose information or, if its shares are listed in a stock exchange, face legal requirements for disclosure.
- 41. In the case when one *Party* is obliged to make a separate public statement, it should (1) coordinate as much as possible ex ante with all the other *Relevant Parties*, which must be in a position to respond promptly; (2) ensure, to the maximum extent possible and practicable, that all *Relevant Parties* are informed about the statement before its release; and (3) ensure that no use of information delivered by one *Party* to another will be made without the consent of this authority.

ATTACHMENT TO THE COMMON PRACTICAL GUIDELINES: EXAMPLE OF A VOLUNTARY SPECIFIC COOPERATION AGREEMENT.

Voluntary Specific Cooperation Agreement (VSCA) on crisis management and resolution between

the Finance Ministries, Central Banks and Financial Supervisory Authorities of Countries A, B and C

INTRODUCTION

- 1. This agreement is based on the following considerations:
 - a. The Finance Ministries, Central Banks and *Financial Supervisory Authorities* of Country A, Country B and Country C (the *Parties*) recognise that there (is) are (a) common *financial group*(s) with significant activities in all their countries. The *Parties* further recognise that they therefore have common financial stability concerns stemming from potential systemic interlinkages between their respective Member States, justifying enhanced cooperation in crisis management and resolution. This agreement covers the *financial group*(s) specified in Annex A.
 - b. This agreement is specifically designed to facilitate the management and resolution of crossborder systemic crises, potentially affecting the stability of the financial sectors in their respective countries. The ultimate objective of such cooperation is safeguarding the smooth functioning of the financial system and minimizing overall costs of a crisis.
 - c. This agreement is in accordance with the responsibilities specified in the EU-wide MoU ⁸. Furthermore, the present agreement does not change the content of the EU-wide MoU but builds on it and expands it where special circumstances so require.

DEFINITIONS

- 2. For the purpose of this agreement, the following definitions are used:
 - a. **Parties:** the Signatories to the present agreement i.e. *Financial Supervisory Authorities*, Central Banks, Finance Ministries and other Ministries of Countries A, B and C, according to national competencies;
 - b. **Relevant Parties:** a cross-country sub-set of the above signatories whose policy-making functions may be significantly affected by a specific *financial crisis*;
 - c. **Relevant financial froup**: a financial group included in Annex A;
 - d. *Financial group:* a bank, banking group, insurance undertaking or insurance group, financial conglomerate and investment firm, which is important in several Member States due to significant subsidiaries or branches in host countries;

Memorandum of Understanding on Cooperation between the *Financial Supervisory Authorities*, Central Banks and Finance Ministries of the European Union on Cross-Border Financial Stability agreed in April 2008.

- e. *Home country:* the country responsible for the supervision on a consolidated basis;
- f. *Host country*: for the purpose of this agreement, the country where the relevant *financial group* has subsidiaries or branches;
- g. **Domestic Standing Group (DSG):** a group which consists of the competent *Financial Supervisory Authorities*, Central Banks, Finance Ministries at the national level, with the objective to enhance preparedness in normal times and facilitate the management and resolution of a *financial crisis*. Such a group should be extendable to other relevant bodies if necessary;
- h. *College of Supervisors:* a permanent, although flexible, structures for the cooperation and coordination among supervisors responsible for and involved in the supervision over the different components of cross-border *financial groups*;
- i. *Cross-Border Stability Group* (CBSG) consists of representatives from the *Parties*, with the objective to enhance preparedness for and facilitate the management and resolution of a cross-border *financial crisis*;
- j. *Cross-Border Coordinator*: The *Party* from the *home country* which is responsible for the overall coordination of actions in a particular cross-border context, and which may vary according to the nature and stage of the *financial crisis*;
- k. *Financial crisis:* a situation starting from the emergence of a disturbance, regardless of its origin, affecting the stability of the financial system in one or more Member States with a potential cross-border systemic impact in other Member States or the EU as a whole and involving at least one *financial group*, infrastructure or market which (i) has substantial cross-border activities; (ii) is facing severe problems which are expected to trigger systemic effects in at least one Member State; and (iii) is assessed to be at risk of becoming insolvent.

OBJECTIVE AND NATURE OF THE AGREEMENT

- 3. The *Parties* have signed this agreement in recognition of the fact that a *financial crisis* involving (one of) the *financial group*(s), included in Annex A, could pose a threat to the stability of the financial system in several of their countries.
- 4. The objective of this agreement is to ensure that the *Parties* are prepared to deal with crisis situations by agreeing in advance on procedures for cooperation and information sharing as well as for the *crisis* management and resolution of cross-border crises.
- 5. While recognising that the responsibility for the management and resolution of crises remains with the individual authorities, the *Parties* will, as far as possible, voluntarily coordinate their decisions and actions and take account of each others' needs and problems.
- 6. This agreement is not legally binding. Therefore its provisions may not give rise to any legal claim on behalf of any *Party* or third parties in the course of their practical implementation.
- 7. The provisions of the agreement do not prejudge or assume that any particular decisions or remedies should be taken.
- 8. Cooperation among the *Parties* will take place in accordance with, and without prejudice to, their responsibilities under national and Community legislation. This agreement does not override the respective institutional responsibilities of the different *Parties* or restrict their capacity for

- independent and timely decision-making in their respective fields of competence, notably with regard to the conduct of day-to-day central banking and supervisory tasks.
- 9. The *Parties* recognise the different responsibilities of *Financial Supervisory Authorities*, Central Banks and Finance Ministries and their roles at different stages of a *crisis*. Depending on the nature and severity of the *crisis*, cooperation may therefore require the intervention of different Authorities.
- 10. The *Parties* recognise that certain crises may require international cooperation with authorities whose jurisdiction lies outside the countries involved. When needed, such cooperation will be agreed on a case by case basis.

GENERAL PROVISIONS

- 11. The *Parties* agree that the Common principles for cross-border crisis management as endorsed by the October 2007 Ecofin Council and included in the EU-wide MoU of July 2008 should guide their actions in any crisis management and resolution.
- 12. The *Parties* agree to cooperate closely, including through exchange of relevant information, with the aim of reaching an efficient and coordinated management and resolution of a *crisis*.
- 13. The *Parties* agree that if any public resources are involved in solving the *crisis*, direct budgetary net costs should be shared among affected Member States on the basis of equitable and balanced criteria, which take into account the economic impact of the *crisis* in the countries affected and the framework of home and host countries' supervisory powers.
- 14. The *Parties* agree that, if any public costs are shared as a consequence of a *crisis*, such costs will be shared when incurred. Any benefits accruing from subsequent asset sales or similar resolution actions will also be shared accordingly.

CROSS-BORDER COOPERATION MECHANISMS

- 15. The *Parties* will prepare cooperative mechanisms to handle and resolve *crisis* situations efficiently.
- 16. In order to enhance the cooperation procedures to deal with a cross-border and systemic crisis affecting (a) relevant *financial group*(s), the *Parties* will form a **Cross-Border Stability Group** (**CBSG**), composed of one representative of sufficient seniority from each of the *Parties*. The functions and tasks of the CBSG complement those of other cooperative structures.
- 17. The CBSG may convene in 'restricted composition' (i.e. small groups involving relevant authorities according to needs and competences) or in 'full composition' (all interested *Parties* represented).
- 18. The CBSG will be chaired by the relevant home country authority, taking into account its legal competencies and the specificities of the crisis situation, also called *Cross-Border Coordinator* and designated in accordance with the stipulations of the July 2008 MoU. The *Cross-Border Coordinator* will organise the work as well as the meetings of the CBSG.
- 19. In normal times, the group will meet regularly, at least yearly. Restricted multilateral or bilateral meetings may be convened by the *Cross-Border Coordinator* when the situation so requires. Any of the *Parties* may ask for ad hoc meetings to be arranged by providing supporting evidence for that. Summary results of all meetings will be circulated to all *Parties*.

- 20. In a *crisis* situation the functioning and composition of the CBSG should be flexible depending on the specific features and stages of the *crisis*. The CBSG should contribute to the management of a *crisis*, when deemed necessary according to specific circumstances, taking into account the roles of the other existing channels of cross-border cooperation among authorities (*Domestic Standing Groups, Colleges of Supervisors* and networks of Central Banks).
- 21. The main task of the CBSG is to implement and efficiently apply the provisions of this agreement, with the aim of fostering an efficient and sufficiently detailed **process** for cooperation in the *crisis* management and resolution. More specifically the CBSG shall:
 - a. maintain an updated list of its members,
 - b. maintain an up-to-date description of the relevant *financial group(s)* based on publicly available data; containing at least the information items of the **common database** as shown in Annex B paragraph 1 to this agreement; and in order to enable a rapid coordinated assessment of the relevant *financial group's* financial position;
 - c. develop a **template** for useful crisis data according to the indicative list shown in Annex B paragraph 2 to this agreement where the template does not necessarily contain any real data in normal times;
 - d. establish procedures to ensure that the relevant *financial group* can provide the information needed in a *crisis* in a timely manner;
 - e. ensure that *Financial Supervisory Authorities* and Central Banks will implement the **analytical framework for the assessment** of the systemic impact of the *crisis* of the relevant *financial group*, based on the analytical framework approved by the Ecofin Council of October 2007, where the assessment will include information on:
 - (1) the impact of the *crisis* on the relevant *financial group*;
 - (2) the potential systemic implications for the domestic financial system;
 - (3) the systemic impact on other Member States' financial systems as well as on the EU 's financial markets as a whole;
 - (4) the specific channels of contagion of the *crisis* to institutions, markets and market infrastructures;
 - (5) the consideration of other relevant economic implications of the *crisis* situation;
 - (6) any constraints to the implementation of policy measures;
 - f. prepare for an efficient management of any potential *crisis* and aim at a joint understanding on how to resolve such a *crisis*;
 - g. prepare for an efficient coordination of any action, if taken in a *crisis*;

- h. aim at agreeing on common principles to determine which costs are to be shared if public support is needed to solve a crisis, and on how to share these costs as well as making adequate preparations to support discussions on cost sharing in a *crisis* and indicating specific criteria which may be used as a tentative benchmark for this discussion;
- i. investigate and, as far as possible, help remove any national or other constraints there may be to efficient cross-border *crisis* management solutions;
- j. establish and test procedures for coordinating any public communications;
- k. suggest and assist in regularly conducted joint *crisis* simulations exercises, to support the provisions in this agreement; and
- 1. document its work and suggestions in a sufficient manner.

COOPERATION IN FINANCIAL CRISIS SITUATIONS

- 22. The *Party* that first identifies a potential *financial crisis* shall:
 - a. activate the DSG, with the purpose inter alia, to reach a joint assessment of the impact of the *crisis* on the domestic financial system; and
 - b. request a meeting of the CBSG or a subset thereof including the *Parties* relevant to the situation.
- 23. Once requested by one of the members of the CBSG, the *Cross-Border Coordinator* shall organise a meeting of the CBSG, or a subset thereof, to be held as soon as possible.
- 24. In the event of a *crisis* or emerging *crisis*, the *Parties* will, as far as practical,
 - a. use the assessment framework outlined in the BSC TFCM-report from September 2007 with the aim of producing a joint assessment;
 - b. aim at a coordinated response to the *crisis*; and
 - c. inform and consult each other before taking any significant policy action.
- 25. In a *crisis* or an emerging *crisis*, the CBSG, or a subset thereof, may have an advisory and supportive function to the extent deemed appropriate by the individual *Parties*. Specifically, the CBSG may:
 - a. be instrumental in the fulfilment of the tasks in paragraphs 20-21;
 - b. prepare the *crisis* resolution discussions between the *Parties*; and
 - c. assist in the implementation of the outcome of any *crisis* resolution discussions.
- 26. The responsibility for the management and resolution of any *crisis* as well as for any decisions taken, however, rests with the individual *Parties*.

OTHER POSSIBLE ELEMENTS

The *Parties* agreeing on a voluntary specific cooperation agreement may also consider including:

- I. A section on the workings of the **Colleges of Supervisors**⁹ in the context of cross-border cooperation at supervisory level, by including the following paragraphs in the VSCA:
- 1. The "Colleges of Supervisors" are permanent, although flexible, structures for the cooperation and coordination among the authorities responsible for and involved in the supervision over the different components of cross-border financial groups.
- 2. The *College of Supervisors* is chaired and coordinated by the *Group Supervisor*. According to the activities to be carried out, it convenes in a plenary format or in a restricted multilateral configuration. Bilateral relationships are also used as a form of continuous dialogue between *Financial Supervisory Authorities*.
- 3. While the colleges do not have decision making powers, they play a role in the coordination of supervisory activities and in enhancing supervisory cooperation. In the context of the colleges¹⁰, supervisors regularly exchange information; develop a common understanding of the risk profile of the relevant group/institution; determine priorities and establish supervisory plans, arrange any allocation of tasks and joint on-site examinations and co-ordinate major decisions.
- II. The possibility to set-up a **mediation panel** for dealing with non-compliance with the provisions of the agreement, by including the following paragraphs in the VSCA:
- 1. The *Parties* may agree to appoint a Mediation Panel, consisting of at least three independent and impartial experts. The task of the Mediation Panel is to evaluate whether any *Party* has refrained from complying with the provisions in the agreement.
- 2. Parties have the right to bring non-compliance issues before the Mediation Panel. If the Mediation Panel finds that one *Party* has not complied with the agreement's provisions, it shall give the *Party* reasonable time to comply. In the case of further non-compliance, the Mediation Panel will decide whether and how to inform other EU-*Parties* or the public.

⁹ In case colleges of supervisors are prescribed by the CRD, the Parties should pay attention to the relationship between the college and the CBSB in order to avoid overlap.

Ongoing cooperation among Banking Supervisors of the relevant financial group is performed pursuant to the Capital Requirements Directive (CRD), in particular art. 129, 131 and 132, and to the Multilateral Agreement on the Supervision of relevant *financial group* which defines the roles and tasks of Banking Supervisors represented in the College of Supervisors of the relevant financial group.

PUBLIC COMMUNICATION

- 27. The *Parties* agree to inform each other, as early and fully as possible, before issuing any public statements. If the communication relates to any public support to (a) relevant *financial group*(s), the *Parties* also agree to coordinate such communication with this group(s).
- 28. The *Parties* agree to aim for jointly crafted public statements even in cases where only one *Party* makes the statement. Only in cases of overriding and sudden public need will any *Party* be expected to make separate statements before consulting all other *Parties*.

CONFIDENTIALITY

- 29. The *Parties* agree that any information exchanged and received by virtue of the application of the provisions of this Memorandum is subject to conditions of confidentiality and professional secrecy as provided in Community and national legislation. The *Parties* will ensure that all persons dealing with, or having access to, such information are bound by the obligation of professional secrecy.
- 30. The *Parties* will maintain, vis-à-vis third *Parties*, the confidentiality of any request for information made under this Memorandum, the contents of such requests, the information received, and the matters arising in the course of cooperation without prejudice to relevant Community and national provisions.

EXTENDING THE AGREEMENT

31. The *Parties* agree that this agreement may need to be extended. If the activities of the relevant *financial group*(s) become(s) significant in another Member State or in a country which is part of the European Economic Area, the authorities in that country should be invited to take part in the agreement.

ENTRY INTO EFFECT

32. This agreement shall enter into effect on (date).

ANNEX A TO THE VSCA:

This agreement is relevant for the following *financial group*(s):

Financial Group	Home Country	Host countries
Group X	Country A	Countries B and C
Group Y	Country B	Country A, C and D
Group Z	Country A	Countries A, B and F

ANNEX B TO THE VSCA:

CONTENT OF THE COMMON DATABASE

According to Articles 20.b and c, one of the tasks of the CBSG is to create a **common database** structured in two parts, one with publicly available actual data and one part for confidential data in the form of a template database:

- 1. The CBSG shall ensure that the database with **publicly available** data of the relevant *financial group* and all its different parts is updated regularly with the most recent and reliable information available, and including at least the following items:
 - a. a concise description of ownership, legal structure, management structure and key business areas;
 - b. a list of all the relevant major payment, clearing and settlement systems; and
 - c. the financial position of at least the last five years.
- 2. A **template** for *crisis* data of the relevant *financial group* and all its different parts (but which does not necessarily contain any actual data in normal times), would include at least the following items:
 - a. the relevant supervisor's assessment of the projections of revenues and costs;
 - b. the relevant supervisor's assessment of the quality of the assets and liabilities;
 - c. the liquidity position, including relevant cash flow projections, funding structure, collateral buffers and intra-group lending;
 - d. the size of the large exposures, at least according to region, collateral used, type of customer and currency;
 - e. the size, nature and extent of the problem at hand, e.g. bad loans; and
 - f. the legal domicile of the major assets and off-balance sheet items.

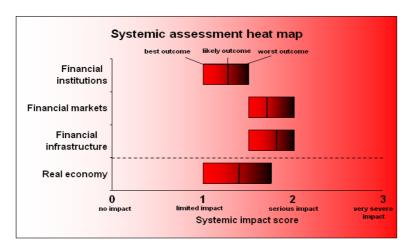
The required data should, where appropriate, be in line with the data reporting under the Capital Requirements Directive.

Page 31 of 36

ANNEX 2 TO THE MEMORANDUM OF UNDERSTANDING:

TEMPLATE FOR A SYSTEMIC ASSESSMENT FRAMEWORK

Section 1: Summary assessment



Note: The colour shading in the chart indicates the degree of impact (light=low; dark=high).

- The **heat map** and its **key underlying assumptions** (e.g. assessment time frame, with/without intervention)
- Overall assessment of the impact on the domestic financial system and the domestic real economy
- Uncertainty relating to the assessment; "worst case" assessment
- Most relevant policy issues if the overall disturbance is serious
- **Key supporting elements** for the assessment [Discussed in greater detail in the following sections]
- Main cross-border contagion channels [Discussed in greater detail in Section 6]

Section 2: Summary of events

- Characteristics of the crisis: (i) size and nature (idiosyncratic or general) of the shock, (ii) expected pace (fast-moving or slow-moving) of the crisis, (iii) affected financial systems and their constituent components (institutions, markets, infrastructure)
- **Present state** of the financial system and the real economy
- **Measures** already taken or under consideration by: (i) the private sector, (ii) domestic authorities, (iii) foreign authorities

Section 3: Financial institutions

- Most relevant **policy issues** if the disturbance is serious
- Supporting elements for the assessment of the critical nature of the affected parts (see the table "Examples of indicators for assessing the critical nature of the financial system's parts" hereafter "Table"); their extent of disturbance (possible indicators: shortage in liquidity, loss of capital, fall in future profits, market sentiment/depositor confidence); and risk mitigants of a financial (e.g. capital buffers), legal (e.g. collateral, netting) or institutional nature (e.g. deposit insurance, shareholder structure)

Section 4: Financial markets

- Most relevant **policy issues** if the disturbance is serious
- Supporting elements for the assessment of the critical nature of the affected parts (see *Table*); their extent of disturbance (possible indicators: bid-ask spreads, market turnover, price volatility, price information, liquidity risk premiums, market sentiment); and risk mitigants of a legal (e.g. collateral, netting) or institutional nature (e.g. central counterparties, regulation/supervision)

Section 5: Financial infrastructure

- Most relevant **policy issues** if the disturbance is serious
- **Supporting elements** for the assessment of the **critical nature** of the affected parts (see *Table*); their **extent of disturbance** (possible indicators: recovery time, pending transactions, critical dependency transactions); and risk mitigants of a technical (e.g. back-up systems), legal (e.g. collateral, netting) or institutional nature (e.g. central counterparties, oversight)

Section 6: Contagion channels

- [Brings together the contagion elements discussed in Sections 3 to 5; see the overview table in the user guide for the main possible channels]
- **Overall assessment** of the contagion effects
- Main **financial institutions**, **markets and infrastructures affected** through real/exposure-based or information-based contagion channels and their vulnerability
- Cross-border dimension in the contagion channels

Section 7: Real economy

- Most relevant **policy issues** if the disturbance is serious
- Supporting elements for the assessment of the financial losses of non-financial economic agents (possible indicators: losses on uninsured deposits, market losses on assets) and the restricted access of non-financial economic agents to financial services (possible indicators: pay-out time for insured deposits, sector/regional lending concentrations for banks, market share of non-financial corporations in affected financial markets)

User guide

Policy background. In a crisis authorities will be confronted with two basic questions: whether to intervene, and if so how to intervene (e.g. through facilitating a private sector solution, public statements, liquidity support and recapitalisation). As a rule, the handling of a crisis and its resolution are primarily the responsibility of the institution(s) involved. Public intervention, in particular when public money is at risk, should only occur when there is a clear systemic risk, i.e. when there is a serious disturbance of the financial system that, as a result, may have a major impact on the real economy. The purpose of the template is to provide a common language to authorities when they discuss such systemic assessments and the possible effects of related policy measures in a cross-border context. In this way, it enables them to address more clearly any differences in their views on the impact of the crisis and reduces the risk that under the pressure of circumstances they might start discussing how to resolve a crisis before assessing its potential impact. A formal assessment, backed-up by supporting material, further enhances the authorities' accountability for any recommendations made.

Scope assessment. The assessment should be made from the perspective of the *domestic financial system*, composed of financial institutions, markets and infrastructure, and the *domestic real economy*. The domestic financial system needs to be defined with reference to those parts that have the potential to disturb the domestic real economy. In defining the financial system's three components, one should be wary of possible overlaps (resulting in double counting) and gaps. The real economy assessment should include and only include the effects of the crisis intermediated via the domestic financial system and via foreign financial systems (e.g. direct lending from abroad). In principle, *all foreseeable effects* should be taken into account, although the further away in time the effects are, the greater the uncertainty. Hence, it might be useful to differentiate between short-term and long-term effects.

Prioritisation in the assessment. In the case of a rapidly unfolding crisis, one may need to focus the assessment on the most critical parts of the financial system. These are likely to be the (major) banks, the markets they use for their daily funding and active balance sheet management, and the related infrastructure (e.g. large value payment systems). In such a situation, one may also need to place more reliance on qualitative judgements rather than on up-to-date quantitative information.

Factors influencing the assessment. The assessment of the *financial system's* components should reflect the *critical nature* of their affected parts and their *extent of disturbance*. For both factors, a number of possible indicators can be used. The *extent of disturbance* will be influenced by the presence of *risk mitigants*. Two main criteria are relevant for a part's *critical nature*: (i) its role in performing the *key financial functions* (executing payments, matching savings to investments, managing financial risks) and (ii) its *main users*. Three additional criteria can be used to further differentiate the affected parts: (i) the part's *activity level* ("size"), (ii) the *availability of alternatives* ("substitutability") within a reasonable time/at a reasonable cost and (iii) its *linkages* with other parts. For the *real economy*, relevant factors are the *reduction in the financial wealth* of non-financial economic agents and their *restricted access to financial services*.

Systemic impact score. The score is a decimal number that *reflects the assessment of the impact* of the crisis on the components of the financial system and the real economy relative to four base cases: 0 (no impact), 1 (limited impact), 2 (serious impact), 3 (very severe impact). The score should take into account both the state of the financial system and the real economy before the crisis and the additional impact of the crisis. For example, when the financial system is already in a weak shape, the effect of a crisis is likely to be bigger (higher score) than if the financial system is robust (lower score). The score should be supported as much as possible by quantitative information. The four separate scores are graphically represented in a "heat map". The heat map is a snapshot in time and one may need to construct a series of maps over the life of a crisis. Moreover, an initial assessment that is relatively benign can quickly change if vulnerabilities are present in the financial system or the real economy. Authorities should therefore be careful not to overlook elements that are not fully captured by the map.

Range of the score. The score is a reflection of an assessment which involves a significant degree of uncertainty and discretion. A range can be defined for each score *reflecting the uncertainty relating to the assessment*, with the lower boundary corresponding to a "best case" scenario and the upper boundary to a "worst case" scenario. Authorities may try to attach a qualitative likelihood (e.g. "most likely", "very unlikely") to the scenarios. Given the large potential costs associated with a systemic *financial crisis*, authorities should pay particular attention to the *worst case scenario*.

Contagion channels. These are the *real/exposure-based or information-based* channels through which shocks can be transmitted between various parts of the financial system. They should be explicitly considered in the assessment, in particular their *cross-border dimension*, as they are often crucial in times of crisis. The following table might be helpful in identifying the main channels.

Main possible contagion channels

ТО

		Institutions	Markets	Infrastructure
F	Institutions	 Shareholder links Credit risk exposures Revenue/service channel Information channel Deposit insurance 	- Core market participant	System operatorParticipant/accessproviderUser for own/customerbusiness
R O M	Markets	 Liquidity management Trading and investment portfolio management Credit risk management Revenue/service channel 	Arbitrage/hedging between marketsInformation channel	- Covering counterparty exposures with collateral
	Infrastructure	- Executing transactions for own or customers' account - Liquidity management - Counterparty and systemic risk management - Revenue/service channel	 Trading facility Trading execution Clearing and settlement Risk management (e.g. margins for market risk in central counterparties) 	Technical linksSupporting services channelCollateral channel

Note: This list of contagion channels is for illustrative purposes and is not exhaustive.

Examples of indicators for assessing the critical nature of the financial system's parts

Criterion	Key questions	Financial institutions	Financial markets	Financial infrastructure
Functions	Is access crucial for certain economic agents to carry out their business?	Market share in payment transactions Market share in retail deposits Market share in the lending market Market share in the branch network	Market's share of total savings/asset management Market's share of total funding Frequency of transactions Time between initiating and executing a transaction	Share of transactions executed via the system Average value of transactions executed via the system Nature of institutions/markets supported by the system
Main users	Which economic agents are the main users?	Sectoral breakdown of deposits and lending Volume interbank activity Volume correspondent banking Volume custodial business	Breakdown by turnover/outstanding positions of main market participants Main market makers and their relative rankings	Breakdown by value/volume of transactions of the main types of system user Breakdown by value/volume of the own and third party transactions of the main participants
Size	What is the level of activity?	Total assets as a percentage of domestic GDP Market share in retail deposits and lending Market share in payment transactions Market share in the branch network	Turnover and outstanding positions, possibly as a percentage of domestic GDP	Total value (possibly as a percentage of domestic GDP) /volume transactions
Substitutability	Are there alternatives available within a reasonable time and at a reasonable cost?	Degree of concentration of various markets in which the institution is active	Standardised/bespoke nature of instruments; relationship-intensity of instruments Volatility in the rankings of the main market makers Frequency of transactions Time between initiating and executing a transaction	Share of transactions executed via the system Volatility in the rankings of the main participants Frequency of transactions Time required between initiating and executing a transaction
Linkages	Are there links with other parts and if so, how important are those links?	Interbank exposures Intra-group exposures Exposures to countries under stress Exposures through shareholdings Ranking in markets in which the institution is a significant player Systems in which the institution participates and its share in transaction volumes Withdrawals of deposits/credit lines in other institutions	Main market makers and their rankings Breakdown by turnover/outstanding positions of main market participants Volume of derivatives market vs. underlying cash market Correlation between market shares in different markets of large financial institutions	Nature and size of markets/institutions supported by the system Technical links with other systems Type and volume of collateral (possibly as percentage of total transactions) used to mitigate risks in the system

Note: The indicators are for illustrative purposes only and may change depending on the type of financial institution, market, infrastructure or crisis under consideration,