

## **FEDERAL RESERVE SYSTEM**

**Docket No. OP-1259**

### **Policy on Payments System Risk**

**AGENCY:** Board of Governors of the Federal Reserve System.

**ACTION:** Policy Statement; Request for comment.

**SUMMARY:** The Board requests comments on proposed changes to Part I of its Policy on Payments System Risk (PSR policy) addressing risk management in payments and settlement systems. The proposed policy changes include (1) incorporating into the PSR policy the Recommendations for Central Counterparties (Recommendations for CCP) as the Board's minimum standards for central counterparties, (2) clarifying the purpose of Part I of the policy and revising its scope with regard to central counterparties, and (3) establishing an expectation that systemically important systems disclose publicly self-assessments against the Core Principles for Systemically Important Payment Systems (Core Principles), Recommendations for Securities Settlement Systems (Recommendations for SSS), or Recommendations for CCP, as appropriate, demonstrating the extent to which these systems meet the principles or minimum standards. The Board is also making other technical changes.

**DATE:** Comments must be received by September 22, 2006.

**ADDRESSES:** You may submit comments, identified by Docket No. OP-1259, by any of the following methods:

- Agency Web Site: <http://www.federalreserve.gov>. Follow the instructions for submitting comments at <http://www.federalreserve.gov/generalinfo/foia/ProposedRegs.cfm>.
- Federal eRulemaking Portal: <http://www.regulations.gov>. Follow the instructions for submitting comments.
- E-mail: [regs.comments@federalreserve.gov](mailto:regs.comments@federalreserve.gov). Include the docket number in the subject line of the message.
- Fax: (202) 452-3819 or (202) 452-3102.
  
- Mail: Address to Jennifer J. Johnson, Secretary, Board of Governors of the Federal Reserve System, 20<sup>th</sup> Street and Constitution Avenue, N.W., Washington, DC 20551.

All public comments will be made available on the Board's web site at <http://www.federalreserve.gov/generalinfo/foia/ProposedRegs.cfm> as submitted, unless modified for technical reasons. Accordingly, comments will not be edited to remove any identifying or contact information. Public comments may also be viewed electronically

or in paper in Room MP-500 of the Board's Martin Building (20<sup>th</sup> and C Streets, N.W.) between 9:00 a.m. and 5:00 p.m. on weekdays.

**FOR FURTHER INFORMATION CONTACT:** Jeff Stehm, Assistant Director (202/452-2217), Division of Reserve Bank Operations and Payment Systems, or Jennifer Lucier, Senior Financial Services Analyst (202/872-7581), Division of Reserve Bank Operations and Payment Systems; for the hearing impaired only: Telecommunications Device for the Deaf, 202/263-4869.

## **SUPPLEMENTARY INFORMATION**

### **I. Background**

Since the early 1980s, the Board has published and periodically revised a series of policies encouraging the reduction and management of risks in payments and securities settlement systems.<sup>1</sup> In 1992, the Board issued its "Policy Statement on Payments System Risk," which provided a comprehensive statement of its previously adopted policies regarding payments system risk reduction, including risk management in private large-dollar funds transfer networks, private delivery-against-payment securities systems, offshore dollar clearing and netting systems, and private small-dollar clearing and settlement systems.<sup>2</sup>

During this same period, the Federal Reserve also worked with other central banks and securities regulators to develop standards to strengthen payments and securities settlement infrastructures and to promote financial stability. These efforts initially produced the Lamfalussy Minimum Standards, which were incorporated into the Board's PSR policy in 1994.<sup>3</sup> More recently, this work resulted in the publication of the Core Principles and the Recommendations for SSS in 2001, which were incorporated into the Board's PSR policy in 2004.<sup>4, 5</sup> The Core Principles extended and replaced the Lamfalussy Minimum Standards, while the Recommendations for SSS provided, for the first time, explicit standards for securities settlement systems.

In addition to establishing specific principles and standards, the Core Principles and Recommendations for SSS call for central banks to state clearly their roles

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<sup>1</sup> See 50 FR 21120, May 22, 1985; 52 FR 29255, August 6, 1987; and 54 FR 26104 and 26092, June 21, 1989.

<sup>2</sup> 57 FR 40455, September 3, 1992.

<sup>3</sup> 59 FR 67534, December 29, 1994. The Lamfalussy Minimum Standards were set out in the "Report of the Committee on Interbank Netting Schemes of the Central Banks of the Group of Ten Countries," published by the Bank for International Settlements in November 1990. See the full report at <http://www.bis.org/publ/cpss04.pdf>.

<sup>4</sup> The Core Principles were developed by the Committee on Payment and Settlement Systems (CPSS) of the central banks of the Group of Ten countries, and the Recommendations were developed by the CPSS in conjunction with the Technical Committee of the International Organization of Securities Commissions (IOSCO). In addition to the Federal Reserve, the Securities and Exchange Commission and the Commodity Futures Trading Commission participated in the development of the Recommendations for SSS. Both the Core Principles and the Recommendations for SSS were published by the CPSS and IOSCO for public comment before being adopted in their final form, and in their final form have been adopted as part of the Financial Stability Forum's Compendium of Standards that are widely recognized and endorsed by U.S. authorities as integral to strengthening global financial stability. The full reports on the Core Principles and the Recommendations for SSS are available at <http://www.bis.org/publ/cpss43.htm> and <http://www.bis.org/publ/cpss46.htm>, respectively.

<sup>5</sup> 69 FR 69926, December 1, 2004.

and policies regarding payments and securities settlement systems, assess compliance with the Core Principles and the Recommendations for SSS when overseeing relevant systems, and coordinate with other authorities in overseeing systems. Moreover, the Core Principles and Recommendations for SSS are intended to apply to systems operated by both central banks and the private sector.

Concurrent with the drafting and adoption of the 2004 policy revisions, the Federal Reserve was working with the CPSS and IOSCO to finalize the Recommendations for CCP.<sup>6</sup> These recommendations establish minimum standards for central counterparty risk management, operational reliability, efficiency, governance, transparency, and regulation and oversight. The Recommendations for CCP build upon the Recommendations for SSS and supersede those recommendations where central counterparties are concerned (these two sets of recommendations are collectively referred to as the “CPSS-IOSCO Recommendations”). At the time it incorporated the Core Principles and Recommendations for SSS into the PSR policy, the Board noted that the CPSS and IOSCO were developing the Recommendations for CCP and that it would review the Recommendations for CCP at a later time and determine whether it would be appropriate to incorporate them into its PSR policy.

## **II. Discussion of Proposed Policy Changes**

The policy changes proposed by the Board include (1) incorporating into the PSR policy the Recommendations for CCP as the Board’s minimum standards for central counterparties, (2) clarifying the purpose of Part I of the policy and revising its scope with regard to central counterparties, and (3) establishing an expectation that systemically important systems disclose publicly self-assessments against the Core Principles, Recommendations for SSS, or Recommendations for CCP demonstrating the extent to which these systems meet the principles or minimum standards. The Board is also making other technical changes.

### **A. Incorporation of the Recommendations for CCP**

The Board is proposing to incorporate the Recommendations for CCP with no modifications as the Board’s minimum standards for central counterparties. Central counterparties occupy an important place in the financial system, interposing themselves between counterparties to financial transactions. Given a central counterparty’s position in a market, its risk management practices can have implications for the stability of the financial system and pose risks to the Federal Reserve. The Board believes the Recommendations for CCP are an important framework for promoting sound risk management in central counterparties and believes that adherence to these recommendations can promote financial stability. The Federal Reserve, along with the Securities and Exchange Commission and the Commodity Futures Trading Commission,

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<sup>6</sup> Final recommendations were issued in November 2004. In addition to the Federal Reserve, the Securities and Exchange Commission and the Commodity Futures Trading Commission also participated in the development of the Recommendations for CCP. The full report on the Recommendations for CCP is available at <http://www.bis.org/publ/cpss64.htm>.

were actively involved in developing these recommendations, which reflect broad input and a balanced view of acceptable risk management practices.

The incorporation of the Recommendations for CCP into the PSR policy continues the Board's long-standing interest in the safety and soundness of the nation's payments and settlement systems. The Board believes that its incorporation of the Recommendations for CCP continues its past efforts to adopt appropriate international standards for key payments and settlement systems and to enhance the understanding and management of risks by users and other stakeholders in these systems. The Board also believes that this change is consistent with the spirit and intention of the 2004 PSR policy revisions, clarifying the Board's policy objectives and expectations for payments and settlement systems subject to its authority, and providing further guidance on how it expects systems to manage and disclose their risks. Accordingly, the Board is proposing to incorporate the Recommendations for CCP into the policy to highlight the importance of central counterparties to the financial markets and to demonstrate the Board's desire to encourage the use of Recommendations for CCP globally in cooperation with other domestic and foreign financial system authorities.

## **B. Purpose and Scope of Part I of the PSR Policy**

In support of incorporating the Recommendations for CCP, the Board is proposing to clarify the purpose of Part I of the policy and revise its scope with regard to central counterparties. First, the Board is proposing to revise the purpose of Part I of the PSR policy to set forth the Board's views and related principles and minimum standards regarding the management of risks in payments and settlement systems generally. A range of payments and settlement systems operate in the financial markets and a failure in one or more of them could affect financial stability and expose the Federal Reserve to certain risks. While the Federal Reserve does not directly oversee all of these systems, it does have a fundamental interest in financial stability for the financial system as whole. Robust risk management by these systems plays an important role in maintaining financial stability. Therefore, the Board is proposing to revise its policy to broadly state its views on risk management for all systems that could affect financial stability.

In this context, the Board encourages key payments and settlement systems and their primary regulators to take the principles and minimum standards in the PSR policy into consideration in the design, operation, monitoring, and assessment of these systems. Private- and public-sector systems subject to the Board's authority, however, are expected to meet the Board's expectations as described in the PSR policy. The Board's proposed revisions also clarify this latter point.

Second, the Board is also proposing to revise the scope to include central counterparties as key systems that could affect financial stability. The Board's current PSR policy applies to public- and private-sector "payments and securities settlement systems," that meet certain volume thresholds. The term "securities settlement system" currently includes foreign-exchange settlement systems and central counterparties in the

securities markets.<sup>7</sup> The Board is proposing to revise the scope to refer to “settlement systems,” which can include a range of systems, including a settlement system for foreign exchange transactions, a securities settlement system, or a central counterparty. To affect this change, the Board has deleted the exemption for clearance and settlement systems for exchange-traded futures and options.

The Board recognizes that several of the systems within the revised scope of Part I of the policy are supervised, regulated, or overseen by other financial system authorities. Where the Board does not have authority or does not have exclusive authority over systems covered by the policy, it will work with other domestic and foreign financial system authorities to promote the Core Principles and CPSS-IOSCO Recommendations and the objectives of this policy.<sup>8</sup> The Board believes clarifying the purpose of Part I and revising its scope to include the full range of current and future central counterparties for contracts in financial markets are warranted for several reasons.

First, the Board’s policy rests on a fundamental interest of the Federal Reserve as the central bank in financial stability and the role that payments and settlement systems play in promoting and maintaining resilience in the financial system. Therefore, the Board believes that its policy should reflect the Board’s views on risk management for the full range of systems that clear and settle payments and other financial instruments that could affect financial stability, including central counterparties.

Second, revising the scope will enable the policy to conform to changes in the payments and settlement landscape as it continues to evolve. The benefits of central counterparty clearing have been considered and implemented in multiple markets, including the securities, options, and futures markets. In addition, the financial services industry has proposed or implemented central counterparties for foreign exchange transactions in the past, such as Multinet and ECHO,<sup>9</sup> and continues to debate the efficacy of central counterparties for over-the-counter derivatives products. Should the industry pursue the implementation of central counterparty clearing models in these markets, introduce new systems, or redesign existing ones, the designers and owners of these systems will have clear ex ante knowledge of the Board’s views and expectations regarding risk management for central counterparties as they design and develop their systems.

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<sup>7</sup> The Board’s current PSR policy explicitly does not cover central counterparties for exchange-traded futures and options, and is silent on the coverage of central counterparties for foreign exchange contracts and over-the-counter derivative contracts.

<sup>8</sup> The revised scope will include central counterparties to contracts in financial markets, including derivatives and foreign exchange markets. The Board acknowledges that the policy’s current \$5 billion threshold and factors for considering a system’s systemic importance may not be useful benchmarks for central counterparties operating in these markets. Therefore, the Board encourages the appropriate financial system authorities to apply appropriate benchmarks or standards for determining whether central counterparties should meet specific risk management expectations, such as those included in the policy, or whether they should meet the Recommendations for CCP.

<sup>9</sup> In 1996, Multinet was authorized as a limited-purpose bank under New York law to provide multilateral netting services; Multinet, however, never became operational. ECHO, Exchange Clearing House Limited, was a London-based clearing house that, from 1995 to 1997, provided multilateral netting and settlement of spot and forward foreign exchange obligations for its users. In 1997, Multinet and ECHO merged forming the basis for the Continuous Linked Settlement (CLS) Bank which currently provides payment-versus-payment services to its users trading in the 15 currencies eligible for settlement at CLS.

Finally, in their role as providers of payments and settlement services, the Reserve Banks provide settlement services to a variety of private-sector payments and settlement arrangements. In providing such services, the Reserve Banks need to consider the risks that they might incur should a system fail to settle. One reason the Board developed its PSR policy was to address the risks that systems present not only to the financial system, but also to the Federal Reserve Banks. Revising the scope to cover the full range of potential payments and settlement systems, therefore, would provide a defined set of principles and standards that the Reserve Banks could look to for assessing the risks of systems seeking settlement services, if needed.

### **C. Self-Assessments by Systemically Important Systems**

The Board believes that the effective implementation of the risk management concepts embodied in the Core Principles and CPSS-IOSCO Recommendations will further strengthen the financial system. The Core Principles and CPSS-IOSCO Recommendations establish an expectation that a system will disclose sufficient information to allow users and other stakeholders to identify, understand, and evaluate accurately the risks and costs of using the system's services. Central banks as well as systems have pursued a variety of disclosure practices, resulting in varying levels of information being disseminated to users and the public generally. Given these varying practices, users and others may find it difficult to obtain access to sufficient information in order to assess a particular system against internationally accepted principles or minimum standards. The Board believes that broadening the availability of information concerning a system's risk management controls, governance, and legal framework, for example, can assist users and other interested persons in evaluating and managing their risk exposures while furthering global financial stability.

The Board acknowledges that disclosure can be achieved in several ways, including through public disclosure of assessments by the central bank. Certain central banks in other countries functioning as overseers publish oversight reports that have included summarized and, in some cases, detailed assessments of systemically important systems against the same principles and minimum standards in the Board's policy. The Board, however, supervises as well as oversees certain systemically important systems. In order to produce robust assessments, it is important for the Board to draw upon all relevant and available information, including supervisory information that traditionally has been treated confidentially. This constrains the ability of the Board to issue a public assessment that relies, at least in part, on confidential information. In this context, and in order to promote appropriate disclosure, the Board believes the individual system operators are well positioned to make informed, accurate disclosures to meet both the information needs of users and other persons and the stated policy objectives.

Therefore, in furtherance of its objectives, the Board is proposing to revise its policy to establish an expectation that systemically important systems subject to the Board's authority will complete self-assessments against the principles or minimum standards, as applicable, in the policy and publicly disclose those assessments. The

Board is proposing several guidelines to assist the system operator in developing a self-assessment consistent with the Board's expectations.

The Board expects the content of a self-assessment to be comprehensive and objective. The Board is proposing that a system determine its level of implementation and state whether each principle or minimum standard is observed, broadly observed, partly observed, or non-observed; all conclusions should be fully supported in the self-assessment. In documenting the basis for the self-assessment, however, the Board does not expect the system to disclose sensitive information that may expose system vulnerabilities, such as specific business continuity plans. For further guidance in developing a self-assessment and understanding the relevant principles or minimum standards, the Board would encourage a system operator to consult the interpretation discussion in the Core Principles or the assessment methodology for the relevant CPSS-IOSCO Recommendations as further guidance. A system may also consult the Board for assistance with respect to the individual principles and minimum standards and the completion of its self-assessment.

The Board believes that in order for a self-assessment to be useful to users and others in understanding and managing their risks the content must be accurate and readily available. Therefore, the Board is proposing that the system's senior management and board of directors review and approve a self-assessment prior to publication to ensure system accountability for accuracy and completeness. To achieve broad disclosure, the Board is proposing that the system publish its self-assessment on its public website. The Board is also proposing that a system complete and publish its first self-assessment within twelve months of the effective date of the final policy changes. Lastly, to ensure continued accuracy, the Board is proposing that the system update statements in its assessment following material changes to the system or its environment, and, at a minimum, review annually its self-assessment.

As part of its ongoing oversight of systemically important payments and settlement systems over which it exercises authority, the Federal Reserve will review published self-assessments and, if the Federal Reserve materially disagrees with the content of a self-assessment of a system, it will communicate its concerns to the system's senior management or the board of directors, as appropriate. The Federal Reserve may also discuss its concerns with other relevant financial system authorities, as appropriate. The Board would evaluate the effectiveness of this self-assessment framework after a few years to determine if the self-assessment process is meeting its policy objectives.

### **III. Request for Comment**

The Board requests comment on the proposed revisions to its PSR policy. In particular, the Board requests comment on whether the revisions to the scope and application of the policy are sufficiently clear and provide the appropriate coverage to achieve the policy's intended objectives. The Board will carefully consider comments submitted to ensure the final self-assessment framework is appropriate for all systems

subject to this policy and subject to the Board's authority. The Board also requests comment on the following specific questions:

1. Are the proposed policy objectives clear?
2. Is the incorporation of the Recommendations for CCP reasonable and appropriate?
3. Are the clarifications to the purpose and revisions to the scope with regard to central counterparties reasonable and appropriate?
4. Do you believe that self-assessments are an effective method to facilitate the availability of information for users and other interested parties to identify, understand, and evaluate the risks of a systemically important system?
5. Are the proposed guidelines regarding self-assessments clear and do they provide sufficient guidance to system operators?
6. Do the implementation measures included in the Core Principles and the assessment methodologies for the CPSS-IOSCO Recommendations provide sufficiently clear and useful frameworks to complete comprehensive and objective self-assessments? If not, please explain. Are there alternatives to these frameworks that can provide equally robust and objective self-assessments?
7. Will the inclusion of ratings (observed, broadly observed, partly observed, and non-observed) be helpful to persons evaluating a particular systemically important system against the principles and minimum standards? What are the pros and cons of including self-ratings as part of self-assessments?
8. Are there any drawbacks to the public disclosure of self-assessments? If so, what are they? Given the stated policy objectives, are there valid reasons to consider a more limited distribution of self-assessments and/or self-ratings (e.g., only to a system's users)?
9. Is the proposed twelve month time frame for a system to complete and publish its first self-assessment appropriate?
10. Are the proposed triggers for reviewing and updating a self-assessment appropriate? If not, what other triggers would ensure published self-assessments remain accurate?

#### **IV. Regulatory Flexibility Act Analysis**

The Board has determined that this proposed policy statement would not have a significant economic impact on a substantial number of small entities. The proposal would require payments and securities settlement systems to address material risks in their systems. The proposal is designed to minimize regulatory burden on smaller systems that do not raise material risks.

## **V. Competitive Impact Analysis**

The Board has established procedures for assessing the competitive impact of rule or policy changes that have a substantial impact on payments system participants.<sup>10</sup> Under these procedures, the Board will assess whether a change would have a direct and material adverse effect on the ability of other service providers to compete effectively with the Federal Reserve in providing similar services due to differing legal powers or constraints, or due to a dominant market position of the Federal Reserve deriving from such differences. If no reasonable modifications would mitigate the adverse competitive effects, the Board will determine whether the anticipated benefits are significant enough to proceed with the change despite the adverse effects. The proposed policy revisions provide that Reserve Bank systems will be treated similarly to private-sector systems and thus will have no material adverse effect on the ability of other service providers to compete effectively with the Federal Reserve Banks in providing payments and securities settlement services.

## **VI. Paperwork Reduction Act**

In accordance with the Paperwork Reduction Act of 1995 (44 U.S.C. Ch. 3506; 5 CFR 1320 Appendix A.1), the Board reviewed the policy statement under the authority delegated to the Board by the Office of Management and Budget. The Federal Reserve may not conduct or sponsor, and an organization is not required to respond to, this information collection unless it displays a currently valid OMB control number. An OMB control number will be assigned upon approval of the new information collection.

The collection of information that is proposed to be implemented by this notice is found in Part I of the Board's Policy on Payments System Risk (PSR policy). This information is required to evidence compliance with the requirements of the PSR policy. The respondents are systemically important systems, as defined in the PSR policy.

The Board proposes that systemically important systems, subject to the Board's authority, complete initial comprehensive self-assessments and thereafter, review and update self-assessments annually or as otherwise provided in the PSR policy. The Board also proposes that these self-assessments be reviewed and approved by the system's senior management and board of directors. Upon approval and in order to achieve broad disclosure, the systems should publish self-assessments on their public websites. In order to help minimize burden the Board is proposing guidelines to assist system operators in developing self-assessments consistent with the Board's expectations.

The proposed burden for the initial reporting and disclosure requirements associated with this policy statement is estimated to be on average 310 hours per system (ranging from 200 to 400 hours). The burden includes: 215 hours for staff to review the requirements and complete the self-assessment; 30 hours for senior management to review that each principle was fully assessed; 50 hours for the board of directors to

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<sup>10</sup> These procedures are described in the Board's policy statement "The Federal Reserve in the Payments System," as revised in March 1990 (55 FR 11648, March 29, 1990).

review and approve the self-assessment; and 15 hours for type-setting and technical editing of the document and preparing the website. The Board estimates that currently about three private-sector systems are systemically important and subject to the Board's authority; therefore, the total burden for systems under the Board's authority is estimated to 930 hours to complete the initial self-assessments.

Following the initial assessment, the Board estimates that the burden will decrease for a system to conduct an annual review and report and disclose updates to its self-assessment. The proposed burden for annual reviews and updates associated with this policy is estimated to be on average 70 hours per system (ranging from 50-100 hours). The burden includes: 25 hours for staff to review the self-assessment and update relevant sections; 15 hours for senior management to review the self-assessment; 25 hours for the board of directors to review and approve the self-assessment; and 5 hours for technical editing and website activities. The total burden for the approximately three private-sector systems under the Board's authority would be an estimated 210 hours. These initial estimates will be adjusted in the future, as appropriate.

Comments are invited on a. whether the proposed collection of information is necessary for the proper performance of the Federal Reserve's functions, including whether the information has practical utility; b. the accuracy of the Federal Reserve's estimate of the burden of the proposed information collection, including the cost of compliance; c. ways to enhance the quality, utility, and clarity of the information to be collected; and d. ways to minimize the burden of information collection on respondents, including through the use of automated collection techniques or other forms of information technology. Comments on the collections of information should be sent to Secretary, Board of Governors of the Federal Reserve System, Washington, DC 20551, with copies of such comments to be sent to the Office of Management and Budget, Paperwork Reduction Project (7100-PSR Policy), Washington, DC 20503.

## **VII. Federal Reserve Policy on Payments System Risk**

### **INTRODUCTION [Revised]**

### **RISKS IN PAYMENTS AND SETTLEMENT SYTEMS [Revised]**

#### **I. RISK MANAGEMENT IN PAYMENTS AND SETTLEMENT SYSTEMS [Revised]**

- A. Scope
- B. General Policy Expectations
- C. Systemically Important Systems
  - 1. Principles for Systemically Important Payments Systems
  - 2. Minimum Standards for Systemically Important Securities Settlement Systems and Central Counterparties

#### **II. FEDERAL RESERVE DAYLIGHT CREDIT POLICIES [No Change]**

- A. Daylight overdraft definition and measurement
- B. Pricing
- C. Net Debit Caps
- D. Collateral
- E. Special Situations
- F. Monitoring
- G. Transfer-size Limit on Book-Entry Securities

#### **III. OTHER POLICIES [No Change]**

- A. Rollovers and Continuing Contracts

### **INTRODUCTION**

Payments and settlement systems are critical components of the nation’s financial system. The smooth functioning of these systems is vital to the financial stability of the U.S. economy. Given the importance of these systems, the Board has developed this policy to address the risks that payments and settlement activity present to the financial system and to the Federal Reserve Banks (Reserve Banks).

In adopting this policy, the Board’s objectives are to foster the safety and efficiency of payments and settlement systems. These policy objectives are consistent with (1) the Board’s long-standing objectives to promote the integrity, efficiency, and accessibility of the payments mechanism; (2) industry and supervisory methods for risk management; and (3) internationally accepted risk management principles and minimum standards for systemically important payments and settlement systems.<sup>1</sup>

Part I of this policy sets out the Board’s views, and related principles and minimum standards, regarding the management of risks in payments and settlement systems, including those operated by the Reserve Banks. In setting out its views, the

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<sup>1</sup> For the Board’s long-standing objectives in the payments system, see “The Federal Reserve in the Payments System,” September 2001, FRRS 9-1550, available at <http://www.federalreserve.gov/paymentsystems/pricing/frpaysys.htm>.

Board seeks to encourage payments and settlement systems, and their primary regulators, to take the principles and minimum standards in this policy into consideration in the design, operation, monitoring, and assessing of these systems. The Board also will be guided by this part, in conjunction with relevant laws and other Federal Reserve policies, when exercising its authority over certain systems or their participants, when providing payment and settlement services to systems, or when providing intraday credit to Federal Reserve account holders.

Part II of this policy governs the provision of intraday or “daylight” overdrafts in accounts at the Reserve Banks and sets out the general methods used by the Reserve Banks to control their intraday credit exposures.<sup>2</sup> Under this part, the Board expects depository institutions to manage their Federal Reserve accounts effectively and minimize their use of Federal Reserve daylight credit.<sup>3</sup> Although some intraday credit may be necessary, the Board expects that, as a result of this policy, relatively few institutions will consistently rely on intraday credit supplied by the Federal Reserve to conduct their business.

Through this policy, the Board expects financial system participants, including the Reserve Banks, to reduce and control settlement and systemic risks arising in payments and settlement systems, consistent with the smooth operation of the financial system. This policy is designed to fulfill that aim by (1) making financial system participants and system operators aware of the types of basic risks that arise in the settlement process and the Board’s expectations with regard to risk management, (2) setting explicit risk management expectations for systemically important systems, and (3) establishing the policy conditions governing the provision of Federal Reserve intraday credit to account holders. The Board’s adoption of this policy in no way diminishes the primary responsibilities of financial system participants generally and settlement system operators, participants, and Federal Reserve account holders more specifically, to address the risks that may arise through their operation of, or participation in, payments and settlement systems.

## **RISKS IN PAYMENTS AND SETTLEMENT SYSTEMS**

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<sup>2</sup> To assist depository institutions in implementing this part of the Board’s payments system risk policy, the Federal Reserve has prepared two documents, the “Overview of the Federal Reserve’s Payments System Risk Policy” and the “Guide to the Federal Reserve’s Payments System Risk Policy,” which are available on line at [www.federalreserve.gov/paymentsystems/PSR](http://www.federalreserve.gov/paymentsystems/PSR) or from any Reserve Bank. The “Overview of the Federal Reserve’s Payments System Risk Policy” summarizes the Board’s policy on the provision of daylight credit, including net debit caps and daylight overdraft fees. The overview is intended for use by institutions that incur only small and infrequent daylight overdrafts. The “Guide to the Federal Reserve’s Payments System Risk Policy” explains in detail how these policies apply to different institutions and includes procedures for completing a self-assessment and filing a cap resolution, as well as information on other aspects of the policy.

<sup>3</sup> The term “depository institution,” as used in this policy, refers not only to institutions defined as depository institutions” in 12 U.S.C. 461(b)(1)(A), but also to U.S. branches and agencies of foreign banking organizations, Edge and agreement corporations, trust companies, and bankers’ banks, unless the context indicates a different reading.

The basic risks in payments and settlement systems are credit risk, liquidity risk, operational risk, and legal risk. In the context of this policy, these risks are defined as follows.<sup>4</sup>

**Credit Risk.** The risk that a counterparty will not settle an obligation for full value either when due, or anytime thereafter.

**Liquidity Risk.** The risk that a counterparty will not settle an obligation for full value when due.

**Operational Risk.** The risk of loss resulting from inadequate or failed internal processes, people, and systems, or from external events. This type of risk includes various physical and information security risks.

**Legal Risk.** The risk of loss because of the unexpected application of a law or regulation or because a contract cannot be enforced.

These risks arise between financial institutions as they settle payments and other financial transactions and must be managed by institutions, both individually and collectively.<sup>5,6</sup> Multilateral payments and settlement systems, in particular, may increase, shift, concentrate, or otherwise transform risks in unanticipated ways. These systems also may pose systemic risk to the financial system where the inability of a system participant to meet its obligations when due may cause other participants to be unable to meet their obligations when due. The failure of one or more participants to settle their payments or other financial transactions, in turn, could create credit or liquidity problems for other participants, the system operator, or depository institutions. Systemic risk might lead ultimately to a disruption in the financial system more broadly or undermine public confidence in the nation's financial infrastructure.

These risks stem, in part, from the multilateral and time-sensitive credit and liquidity interdependencies among financial institutions. These interdependencies often create complex transaction flows that, in combination with a system's design, can lead to significant demands for intraday credit, either on a regular or extraordinary basis. Some level of intraday credit is appropriate to ensure the smooth functioning of payments and settlement systems. To the extent that financial institutions or the Reserve Banks are the direct or indirect source of such intraday credit, they may face a direct risk of loss if daylight credit is not extinguished as planned. In addition, measures taken by Reserve Banks to limit their intraday credit exposures may shift some or all of the associated risks to private-sector systems.

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<sup>4</sup> These definitions of credit risk, liquidity risk, and legal risk are based upon those presented in the Core Principles for Systemically Important Payment Systems (Core Principles) and the Recommendations for Securities Settlement Systems (Recommendations for SSS). The definition of operational risk is based on the Basel Committee on Banking Supervision's "Sound Practices for the Management and Supervision of Operational Risk," available at <http://www.bis.org/publ/bcbs96.htm>. Each of these definitions is largely consistent with those included in the Recommendations for Central Counterparties (Recommendations for CCP).

<sup>5</sup> The term "financial institution," as used in this policy, includes a broad array of types of organizations that engage in financial activity, including depository institutions and securities dealers.

<sup>6</sup> Several existing regulatory and bank supervision guidelines and policies also are directed at institutions' management of the risks posed by interbank payments and settlement activity. For example, Federal Reserve Regulation F (12 CFR 206) directs insured depository institutions to establish policies and procedures to avoid excessive exposures to any other depository institutions, including exposures that may be generated through the clearing and settlement of payments.

The smooth functioning of payments and settlement systems is also critical to certain public policy objectives in the areas of monetary policy and banking supervision. The effective implementation of monetary policy, for example, depends on both the orderly settlement of open market operations and the efficient distribution of reserve balances throughout the banking system via the money market and payments system. Likewise, supervisory objectives regarding the safety and soundness of depository institutions must take into account the risks payments and settlement systems pose to depository institutions that participate directly or indirectly in, or provide settlement, custody, or credit services to, such systems.

## **PART I: RISK MANAGEMENT IN PAYMENTS AND SETTLEMENT SYSTEMS**

This part sets out the Board's views regarding the management of risk in payments and settlement systems, including those operated by the Reserve Banks. The Board will be guided by this part, in conjunction with relevant laws and other Federal Reserve policies, when exercising its authority in (1) supervising state member banks, Edge and agreement corporations, bank holding companies, and clearinghouse arrangements, including the exercise of authority under the Bank Service Company Act, where applicable,<sup>7</sup> (2) setting or reviewing the terms and conditions for the use of Federal Reserve payments and settlement services by system operators and participants, (3) developing and applying policies for the provision of intraday liquidity to Reserve Bank account holders, and (4) interacting with other domestic and foreign financial system authorities on payments and settlement risk management issues. The Board's adoption of this policy is not intended to exert or create new supervisory or regulatory authority over any particular class of institutions or arrangements where the Board does not currently have such authority.

Where the Board does not have exclusive authority over systems covered by this policy, it will work with other domestic and foreign financial system authorities to promote effective risk management in payments and settlement systems, as appropriate. The Board encourages other relevant authorities to consider the principles and minimum standards embodied in this policy when evaluating the risks posed by and to payments and settlement systems and individual system participants that they oversee, supervise, or regulate. In working with other financial system authorities, the Board will be guided, as appropriate, by Responsibility D of the Core Principles, Recommendation 18 of the Recommendations for SSS, Recommendation 15 of the Recommendations for CCP, the "Principles for Cooperative Central Bank Oversight of Cross-border and Multi-currency Netting and Settlement Schemes," and the Principles for International Cooperative Oversight (Part B) of the Committee on Payment and Settlement Systems (CPSS) report,

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<sup>7</sup> 12 U.S.C. 1861 et seq.

“Central Bank Oversight of Payment and Settlement Systems.”<sup>8</sup> The Board believes these international principles provide an appropriate framework for cooperating and coordinating with other authorities to address risks in domestic, cross-border, multi-currency, and, where appropriate, offshore payments and settlement systems.

## A. Scope

This policy applies to public- and private-sector payments and settlement systems that expect to settle a daily aggregate gross value of U.S. dollar-denominated transactions exceeding \$5 billion on any day during the next 12 months.<sup>9, 10</sup> For purposes of this policy, a payments or settlement system is considered to be a multilateral arrangement (three or more participants) among financial institutions for the purposes of clearing, netting, and/or settling payments, securities, or other financial transactions among themselves or between each of them and a central party, such as a system operator or central counterparty.<sup>11, 12, 13</sup> A system generally embodies one or more of the following characteristics: (1) a set of rules and procedures, common to all participants, that govern the clearing (comparison and/or netting) and settlement of payments, securities, or other financial transactions, (2) a common technical infrastructure for

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<sup>8</sup> Payments and settlement systems within the scope of this policy may be subject to oversight or supervision by multiple public authorities, as a result of the legal framework or the system’s operating structure (e.g., multi-currency or cross-border systems). As such, the Federal Reserve, other central banks, securities regulators, or other financial system authorities may need to find practical ways to cooperate in order to discharge fully their own responsibilities. In some cases, multiple authorities may have responsibility for a multi-currency, cross-border, or other arrangement. In these situations, financial authorities need to be sensitive to the potential for duplicative or conflicting requirements, oversight gaps, or unnecessary costs and burdens imposed on the system. The “Principles for Cooperative Central Bank Oversight and Multi-currency Netting and Settlement Schemes” are set out in the [“Report of the Committee on Interbank Netting Schemes of the Central Banks of the Group of Ten Countries” \(Lamfalussy Minimum Standards\)](#). The CPSS report, “Central Bank Oversight of Payment and Settlement Systems” (Oversight Report), Part B, “Principles for international cooperative oversight,” provides further information on the practical application of the Lamfalussy Cooperative Oversight Principles. The Lamfalussy Minimum Standards and the Oversight Report are available at <http://www.bis.org/cpss/cpsspubl.htm>.

<sup>9</sup> The \$5 billion threshold was designed to apply to cash markets and may not be a useful benchmark for central counterparties operating in derivatives markets. The appropriate financial system authorities in derivatives markets may therefore have different benchmarks and standards relevant to such central counterparties.

<sup>10</sup> The ‘next’ twelve-month period is determined by reference to the date a determination is being made as to whether the policy applies to a particular system. Aggregate gross value of U.S. dollar-denominated transactions refers to the total dollar value of individual U.S. dollar transactions settled in the system which also represents the sum of total U.S. dollar debits (or credits) to all participants prior to or in absence of any netting of transactions.

<sup>11</sup> A system includes all of the governance, management, legal, and operational arrangements used to effect settlement as well as the relevant parties to such arrangements, such as the system operator, system participants, and system owners.

<sup>12</sup> The types of systems that may fall within the scope of this policy include, but are not limited to, large-value funds transfer systems, automated clearinghouse (ACH) systems, check clearinghouses, and credit and debit card settlement systems, as well as central counterparties, clearing corporations, and central securities depositories. For purposes of this policy, the system operator is the entity that manages and oversees the operations of the system.

<sup>13</sup> For the purposes of this policy, a “settlement system” includes a payment-versus-payment settlement system for foreign exchange transactions, a securities settlement system, and a system operating as a central counterparty. The CPSS defines “payment-versus-payment” as “...a foreign exchange settlement system which ensures that a final transfer of one currency occurs if and only if a final transfer of the other currency or currencies takes place.” The CPSS and the Technical Committee of the International Organization of Securities Commissions (IOSCO) define a “securities settlement system” as the full set of institutional arrangements for confirmation, clearance, and settlement of securities trades and safekeeping of securities and a “central counterparty” is an entity that interposes itself between counterparties to contracts traded in one or more financial markets, becoming the buyer to every seller and the seller to every buyer. A central counterparty can include a derivatives clearing organization, such as a clearinghouse, clearing association, clearing corporation, or similar entity, facility, system, or organization that, with respect to an agreement, contract, or transaction, acts as a central counterparty to each party to an agreement, contract, or transaction; arranges or provides for multilateral netting; or provide clearing services or arrangements that mutualize or transfer credit risk among participants in the organization.

conducting the clearing or settlement process, and (3) a risk management or capital structure where any credit losses are ultimately borne by system participants rather than the system operator, a central counterparty or guarantor, or the system's shareholders.

These systems may be organized, located, or operated within the United States (domestic systems), outside the United States (offshore systems), or both (cross-border systems) and may involve other currencies in addition to the U.S. dollar (multi-currency systems). The policy also applies to any system based or operated in the United States that engages in the settlement of non-U.S. dollar transactions if that system would be otherwise subject to the policy.<sup>14</sup>

This policy does not apply to bilateral relationships between financial institutions and their customers, such as traditional correspondent banking, including traditional government securities clearing services. The Board believes that these relationships do not constitute "a system" for purposes of this policy and that relevant safety and soundness issues associated with these relationships are more appropriately addressed through the bank supervisory process.

## **B. General Policy Expectations**

The Board encourages payments and settlement systems within the scope of this policy and expects systems subject to its authority to implement a risk management framework appropriate for the risks the system poses to the system operator, system participants, and other relevant parties as well as the financial system more broadly. A risk management framework is the set of objectives, policies, arrangements, procedures, and resources that a system employs to limit and manage risk. While there are a number of ways to structure a sound risk management framework, all frameworks should

- clearly identify risks and set sound risk management objectives;
- establish sound governance arrangements;
- establish clear and appropriate rules and procedures; and,
- employ the resources necessary to achieve the system's risk management objectives and implement effectively its rules and procedures.

In addition to establishing a risk management framework that includes these key elements, the Board expects systems subject to its authority that it determines are systemically important to meet the policy expectations set out in Section C (Core Principles, Recommendations for SSS, or Recommendations for CCP, as applicable).

Identify Risks and Set Sound Risk Management Objectives. The first element of a sound risk management framework is the clear identification of all risks that have the potential to arise in or result from the system's settlement process and the

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<sup>14</sup> The daily gross value threshold will be calculated on a U.S. dollar equivalent basis.

development of clear and transparent objectives regarding the system's tolerance for and management of such risks.

System operators should identify the forms of risk present in their system's settlement process as well as the parties posing and bearing each risk. In particular, system operators should identify the risks posed to and borne by themselves, the system participants, and other key parties such as a system's settlement banks, custody banks, and third-party service providers. System operators should also analyze whether risks might be imposed on other external parties and the financial system more broadly.

In addition, system operators should analyze how risk is transformed or concentrated by the settlement process. System operators should also consider the possibility that attempts to limit one type of risk could lead to an increase in another type of risk. Moreover, system operators should be aware of risks that might be unique to certain instruments, participants, or market practices. System operators should also analyze how risks are correlated among instruments or participants.<sup>15</sup>

Based upon its clear identification of risks, a system should establish its risk tolerance, including the levels of risk exposure that are acceptable to the system operator, system participants, and other relevant parties. The system operator should then set risk management objectives that clearly allocate acceptable risks among the relevant parties and set out strategies to manage this risk. Risk management objectives should be consistent with the objectives of this policy, the system's business purposes, and the type of instruments and markets for which the system clears and settles. Risk management objectives should also be communicated to and understood by both the system operator's staff and system participants.

System operators should reevaluate their risks in conjunction with any major changes in the settlement process or operations, the instruments or transactions settled, a system's rules or procedures, or the relevant legal and market environments. Systems should revisit their risk management objectives regularly to ensure that they are appropriate for the risks posed by the system, continue to be aligned with the system's purposes, remain consistent with this policy, and are being effectively adhered to by the system operator and participants.

**Sound Governance Arrangements.** Systems should have sound governance arrangements to implement and oversee their risk management frameworks. The responsibility for sound governance rests with a system operator's board of directors or similar body and with the system operator's senior management. Governance structures and processes should be transparent; enable the establishment of clear risk management objectives; set and enforce clear lines of responsibility and accountability for achieving these objectives; ensure that there is appropriate oversight of the risk

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<sup>15</sup> Where systems have inter-relationships with or dependencies on other systems (e.g., cross-guarantees, cross-collateralization, cross-margining, common operating platforms), system operators should also analyze whether and to what extent any cross-system risks exist and who bears them.

management process; and enable the effective use of information reported by the system operator's management, internal auditors, and external auditors to monitor the performance of the risk management process.<sup>16</sup> Individuals responsible for governance should be qualified for their positions, understand their responsibilities, and understand their system's risk management framework. Governance arrangements should also ensure that risk management information is shared in forms, and at times, that allow individuals responsible for governance to fulfill their duties effectively.

Clear and Appropriate Rules and Procedures. Systems should implement rules and procedures that are appropriate and sufficient to carry out the system's risk management objectives and that have a well-founded legal basis. Such rules and procedures should specify the respective responsibilities of the system operator, system participants, and other relevant parties. Rules and procedures should establish the key features of a system's settlement and risk management design and specify clear and transparent crisis management procedures and settlement failure procedures, if applicable.<sup>17</sup>

Employ Necessary Resources. Systems should ensure that the appropriate resources and processes are in place to allow them to achieve their risk management objectives and effectively implement their rules and procedures. In particular, the system operator's staff should have the appropriate skills, information, and tools to apply the system's rules and procedures and achieve the system's risk management objectives. System operators should also ensure that their facilities and contingency arrangements, including any information system resources, are sufficient to meet their risk management objectives.

The Board recognizes that payments and settlement systems differ widely in terms of form, function, scale, and scope of activities and that these characteristics result in differing combinations and levels of risks. Thus, the exact features of a system's risk management framework should be tailored to the risks of that system. The Board also recognizes that the specific features of a risk management framework may entail trade-offs between efficiency and risk reduction and that payments and settlement systems will need to consider these trade-offs when designing appropriate rules and procedures. In considering such trade-offs, however, it is critically important that systems take into account the costs and risks that may be imposed on all relevant parties, including parties with no direct role in the system. Furthermore, in light of rapidly evolving technologies and risk management practices, the Board encourages all systems to consider periodically making cost-effective risk-management improvements.

To determine whether a system's current or proposed risk management framework is consistent with this policy, the Board will seek to understand how a system

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<sup>16</sup> The risk management and internal audit functions should also be independent of those responsible for day-to-day functions.

<sup>17</sup> Examples of key features that might be specified in a system's rules and procedures are controls to limit participant-based risks, such as membership criteria based on participants' financial and operational health, limits on settlement exposures, and the procedures and resources to hedge, margin, or collateralize settlement exposures. Other examples of key features might be business continuity requirements and loss allocation procedures.

achieves the four elements of a sound risk management framework set out above. In this context, it may be necessary for the Board to obtain information from system operators regarding their risk management framework, risk management objectives, rules and procedures, significant legal analyses, general risk analyses, analyses of the credit and liquidity effects of settlement disruptions, business continuity plans, crisis management procedures, and other relevant documentation.<sup>18</sup> It may also be necessary for the Board to obtain data or statistics on system activity on an ad-hoc or ongoing basis. All information provided to the Federal Reserve for the purposes of this policy will be handled in accordance with all applicable Federal Reserve policies on information security, confidentiality, and conflicts of interest.

### **C. Systemically Important Systems**

Financial stability depends, in part, on a robust and well-managed financial infrastructure. If risks are not effectively managed by systemically important systems, these systems have the potential to be a major channel for the transmission of financial shocks across systems and markets. Financial system authorities, including central banks, have promoted sound risk management practices by developing internationally accepted guidelines to encourage the safe design and operation of payments and settlement systems, especially those considered systemically important.

In particular, the Core Principles, Recommendations for SSS, and Recommendations for CCP (the latter two collectively referred to as the CPSS-IOSCO Recommendations) set forth risk management practices for payments systems, securities settlement systems, and central counterparties, respectively.<sup>19, 20</sup> The Federal Reserve collaborated with participating financial system authorities in developing these principles and minimum standards. In addition, the Securities and Exchange Commission and Commodity Futures Trading Commission participated in the development of the CPSS-IOSCO Recommendations. The principles and minimum standards reflect broad input and provide a balanced view of acceptable risk management practices. The Core Principles and Recommendations for SSS are also part of the Financial Stability Forum's Compendium of Standards that have been widely recognized, supported, and endorsed by U.S. authorities as integral to strengthening the stability of the financial system. The Board believes that the implementation of the individual principles and minimum standards by systemically important systems can help promote safety and efficiency in the financial system and foster greater financial stability in domestic and global economies.

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<sup>18</sup> To facilitate analysis of settlement disruptions, systems may need to develop the capability to simulate credit and liquidity effects on participants and on the system resulting from one or more participant defaults, or other possible sources of settlement disruption. Such simulations may need to include, if appropriate, the effects of changes in market prices, volatilities, or other factors.

<sup>19</sup> The Core Principles were developed by the CPSS; references to "principles" in this policy are to the Core Principles. The Core Principles draw extensively on the previous work of the CPSS, most importantly the Lamfalussy Minimum Standards. The Core Principles extend the Lamfalussy Minimum Standards by adding several principles and broadening the coverage to include systemically important payments systems of all types, including gross settlement systems, net settlement systems, and hybrid systems, operated by either the public or private sector. The Core Principles also address the responsibilities of central banks in applying the Core Principles.

<sup>20</sup> The CPSS and IOSCO developed the CPSS-IOSCO Recommendations as "minimum standards" and are referred to as such in this policy. The full reports on the Core Principles and the CPSS-IOSCO Recommendations are available at <http://www.bis.org/publ/cpss43.htm>, <http://www.bis.org/publ/cpss46.htm>, and <http://www.bis.org/publ/cpss64.htm>.

Systemically important systems that are subject to the Board’s authority are expected to meet the specific risk management principles and minimum standards in this section, as appropriate, and the general expectations of Section B because of their potential to cause major disruptions in the financial system.<sup>21</sup> To determine whether a system is systemically important for purposes of this policy, the Board may consider, but will not be limited to, one or more of the following factors:<sup>22</sup>

- Whether the system has the potential to create significant liquidity disruptions or dislocations should it fail to perform or settle as expected;
- Whether the system has the potential to create large credit or liquidity exposures relative to participants’ financial capacity;
- Whether the system settles a high proportion of large-value or interbank transactions;
- Whether the system settles transactions for important financial markets;<sup>23</sup>
- Whether the system provides settlement for other systems; and,
- Whether the system is the only system or one of a very few systems for settlement of a given financial instrument.

Some systemically important systems, however, may present an especially high degree of systemic risk, by virtue of their high volume of large-value transactions or central role in the financial markets. Because all systems are expected to employ a risk management framework that is appropriate for their risks, the Board may expect these systems to exceed the principles and minimum standards set out below. Finally, the Board expects systemically important systems to demonstrate the extent to which they meet the applicable principles or minimum standards by completing self-assessments and disclosing publicly the results of their analyses in a manner consistent with the guidelines set forth in Section C.3.

## **1. Principles for Systemically Important Payments Systems**

1. The system should have a well-founded legal basis under all relevant jurisdictions.

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<sup>21</sup> Systemically important payments systems are expected to meet the principles listed in Section C.1. Securities settlement systems of systemic importance are expected to meet the minimum standards listed in Section C.2.a., and systemically important central counterparties are expected to meet the minimum standards listed in C.2.b. For a system not subject to its authority, the Board encourages the system and its appropriate financial system authority to consider these principles and minimum standards when designing, operating, monitoring, and assessing the system, as appropriate and applicable.

<sup>22</sup> The Board will inform a system subject to its authority if it considers it systemically important and therefore expected to meet the principles or minimum standards in this policy. The Board will also inform such systems if they are expected to exceed any of the principles or minimum standards. The appropriate financial system authorities responsible for supervising or regulating central counterparties are encouraged to inform the central counterparties as to whether they are expected to meet the Recommendations for CCP.

<sup>23</sup> Important financial markets include, but are not limited to, critical markets as defined in the “Interagency Paper on Sound Practices to Strengthen the Resilience of the U.S. Financial System” as the markets for federal funds, foreign exchange, and commercial paper; U.S. government and agency securities; and corporate debt and equity securities. See 68 FR 17809, April 11, 2003.

2. The system's rules and procedures should enable participants to have a clear understanding of the system's impact on each of the financial risks they incur through participation in it.
3. The system should have clearly defined procedures for the management of credit risks and liquidity risks, which specify the respective responsibilities of the system operator and the participants and which provide appropriate incentives to manage and contain those risks.
4. The system should provide prompt final settlement on the day of value, preferably during the day and at a minimum at the end of the day.
5. A system in which multilateral netting takes place should, at a minimum, be capable of ensuring the timely completion of daily settlements in the event of an inability to settle by the participant with the largest single settlement obligation.
6. Assets used for settlement should preferably be a claim on the central bank; where other assets are used, they should carry little or no credit risk and little or no liquidity risk.
7. The system should ensure a high degree of security and operational reliability and should have contingency arrangements for timely completion of daily processing.
8. The system should provide a means of making payments which is practical for its users and efficient for the economy.
9. The system should have objective and publicly disclosed criteria for participation, which permit fair and open access.
10. The system's governance arrangements should be effective, accountable and transparent.

## **2. Minimum Standards for Systemically Important Securities Settlement Systems and Central Counterparties**

The CPSS-IOSCO Recommendations apply to the full set of institutional arrangements for confirmation, clearance, and settlement of securities transactions, including those related to market convention and pre-settlement activities. As such, not all of these standards apply to all systems. Moreover, the standards applicable to a particular system also will vary based on the structure of the market and the system's design.

While the Board endorses the CPSS-IOSCO Recommendations in their entirety, its primary interest for purposes of this policy is in those recommendations related to the settlement aspects of financial transactions, including the delivery of securities or other financial instruments against payment, and related risks. The Board

expects that systems engaged in the management or conduct of clearing and settling financial transactions to meet the expectations set forth in the applicable set of CPSS-IOSCO Recommendations.

a. Recommendations for Securities Settlement Systems

1. Securities settlement systems should have a well-founded, clear, and transparent legal basis in the relevant jurisdictions.
2. Confirmation of trades between direct market participants should occur as soon as possible after the trade execution, but no later than the trade date (T+0). Where confirmation of trades by indirect market participants (such as institutional investors) is required, it should occur as soon as possible after the trade execution, preferably on T+0, but no later than T+1.
3. Rolling settlement should be adopted in all securities markets. Final settlement should occur no later than T+3. The benefits and costs of a settlement cycle shorter than T+3 should be evaluated.
4. The benefits and costs of a central counterparty should be evaluated. Where such a mechanism is introduced, the central counterparty should rigorously control the risks it assumes.
5. Securities lending and borrowing (or repurchase agreements and other economically equivalent transactions) should be encouraged as a method for expediting the settlement of securities transactions. Barriers that inhibit the practice of lending securities for this purpose should be removed.
6. Securities should be immobilized or dematerialized and transferred by book entry in central securities depository to the greatest extent possible.
7. Central securities depositories should eliminate principal risk linking securities transfers to funds transfers in a way that achieves delivery versus payment.
8. Final settlement should occur no later than the end of the settlement day. Intraday or real time finality should be provided where necessary to reduce risks.
9. Central securities depositories that extend intraday credit to participants, including central securities depositories that operate net settlement systems, should institute risk controls that, at a minimum, ensure timely settlement in the event that the participant with the largest payment obligation is unable to settle. The most reliable set of controls is a combination of collateral requirements and limits.
10. Assets used to settle the ultimate payment obligations arising from securities transaction should carry little or no credit or liquidity risk. If central bank money is not used, steps must be taken to protect central securities depository members

from potential losses and liquidity pressures arising from the failure of the cash settlement agent whose assets are used for that purpose.

11. Sources of operational risk arising in the clearing and settlement process should be identified and minimized through the development of appropriate systems, controls and procedures. Systems should be reliable and secure, and have adequate, scalable capacity. Contingency plans and backup facilities should be established to allow for the timely recovery of operations and completion of the settlement process.
12. Entities holding securities in custody should employ accounting practices and safekeeping procedures that fully protect customers' securities. It is essential that customers' securities be protected against the claims of a custodian's creditors.
13. Governance arrangements for central securities depositories and central counterparties should be designed to fulfill public interest requirement and to promote the objectives of owners and users.
14. Central securities depositories and central counterparties should have objective and publicly disclosed criteria for participation that permit fair and open access.
15. While maintaining safe and secure operations, securities settlement systems should be cost-effective in meeting the requirements of users.
16. Securities settlement systems should use or accommodate the relevant international communication procedures and standards in order to facilitate efficient settlement of cross-border transactions.
17. Central securities depositories and central counterparties should provide market participants with sufficient information for them to identify and evaluate accurately the risks and costs associated with using the central securities depository or central counterparty services.
18. Securities settlement systems should be subject to transparent and effective regulation and oversight. Central banks and securities regulators should cooperate with each other and with other relevant authorities.
19. Central securities depositories that establish links to settle cross-border trades should design and operate such links to reduce effectively the risks associated with cross-border settlement.

b. Recommendations for Central Counterparties

1. A central counterparty should have a well founded, transparent, and enforceable legal framework for each aspect of its activities in all relevant jurisdictions.

2. A central counterparty should require participants to have sufficient financial resources and robust operational capacity to meet obligations arising from participation in the central counterparty. A central counterparty should have procedures in place to monitor that participation requirements are met on an ongoing basis. A central counterparty's participation requirements should be objective, publicly disclosed, and permit fair and open access.
3. A central counterparty should measure its credit exposures to its participants at least once a day. Through margin requirements, other risk control mechanisms, or a combination of both, a central counterparty should limit its exposures to potential losses from defaults by its participants in normal market conditions so that the operations of the central counterparty would not be disrupted and non-defaulting participants would not be exposed to losses that they cannot anticipate or control.
4. If a central counterparty relies on margin requirements to limit its credit exposures to participants, those requirements should be sufficient to cover potential exposures in normal market conditions. The models and parameters used in setting margin requirements should be risk-based and reviewed regularly.
5. A central counterparty should maintain sufficient financial resources to withstand, at a minimum, a default by the participant to which it has the largest exposure in extreme but plausible market conditions.
6. A central counterparty's default procedures should be clearly stated, and they should ensure that the central counterparty can take timely action to contain losses and liquidity pressures and to continue meeting its obligations. Key aspects of the default procedures should be publicly available.
7. A central counterparty should hold assets in a manner whereby risk of loss or of delay in its access to them is minimized. Assets invested by a central counterparty should be held in instruments with minimal credit, market, and liquidity risks.
8. A central counterparty should identify sources of operational risk and minimize them through the development of appropriate systems, controls, and procedures. Systems should be reliable and secure, and have adequate, scalable capacity. Business continuity plans should allow for timely recovery of operations and fulfillment of a central counterparty's obligations.
9. A central counterparty should employ money settlement arrangements that eliminate or strictly limit its settlement bank risks, that is, its credit and liquidity risks from the use of banks to effect money settlements with its participants. Funds transfers to a central counterparty should be final when effected.

10. A central counterparty should clearly state its obligations with respect to physical deliveries. The risks from these obligations should be identified and managed.
11. Central counterparties that establish links either cross-border or domestically to clear trades should evaluate the potential sources of risks that can arise, and ensure that the risks are managed prudently on an ongoing basis. There should be a framework for cooperation and coordination between the relevant regulators and overseers.
12. While maintaining safe and secure operations, central counterparties should be cost-effective in meeting the requirements of participants.
13. Governance arrangements for a central counterparty should be clear and transparent to fulfill public interest requirements and to support the objectives of owners and participants. In particular, they should promote the effectiveness of a central counterparty's risk management procedures.
14. A central counterparty should provide market participants with sufficient information for them to identify and evaluate accurately the risks and costs associated with using its services.
15. A central counterparty should be subject to transparent and effective regulation and oversight. In both a domestic and an international context, central banks and securities regulators should cooperate with each other and with other relevant authorities.

### **3. Self-Assessments by Systemically Important Systems**

The Board believes that the implementation of these principles and minimum standards by systemically important systems can foster greater financial stability in payments and settlement systems. Users and others commonly are interested in understanding how these systems function in order to manage their risks. At this time, different disclosure practices and requirements for payments and settlement systems have resulted in varying levels of information being disseminated to users and others. Users and others outside the user community (such as prospective users or other public authorities) may find it difficult to obtain access to sufficient information to understand and assess a particular system's approach to risk management against internationally accepted principles and minimum standards. Broadening the availability of information concerning a system's risk management controls, governance, and legal framework, for example, can assist those interested in a system in evaluating and managing their risk exposures. The Board believes that operators of systemically important systems are well positioned to assess and demonstrate the extent to which they have implemented the principles or minimum standards in this policy. Therefore, in furtherance of its policy objectives, the Board expects systemically important systems subject to its authority to complete comprehensive, objective self-assessments against the applicable principles or minimum standards in this policy and disclose publicly the results of these efforts.

Adopting this self-assessment framework, however, does not preclude the Federal Reserve from independently assessing compliance of systemically important systems with relevant rules, regulations, and Federal Reserve policies.

The Board expects systemically important systems subject to its authority to complete self-assessments based on the following guidelines. First, systemically important systems are expected to document the basis for their self-assessment and support any conclusions regarding the extent to which they meet a particular principle or minimum standard.<sup>24</sup> The Board notes that the CPSS and CPSS-IOSCO have developed implementation measures and assessment methodologies that can assist system operators in structuring their self-assessments.<sup>25</sup> Accordingly, payment system operators are encouraged to consult Section 7 of the Core Principles for guidance when developing their self-assessments and in measuring the extent to which the system meets each principle. Likewise system operators for securities settlement systems and central counterparties are encouraged to consult the assessment methodology for the relevant minimum standards for further guidance on each minimum standard and are encouraged to respond to the key questions included therein.<sup>26</sup> A system may consult the Board for assistance with respect to the principles and minimum standards and the completion of its assessment. Second, to further ensure system accountability for accuracy and completeness, the Board expects the system's senior management and board of directors to review and approve self-assessments upon completion. Third, to achieve broad disclosure, the system is expected to make its self-assessments readily available to the public, such as by posting the self-assessment on the system's public website. Finally, in order for self-assessments to reflect correctly the system's current rules, procedures, and operations, the Board expects a systemically important system to update the relevant parts of the self-assessment following material changes to the system or its environment. At a minimum, a systemically important system would be expected to review its self-assessment annually to ensure continued accuracy.

As part of its ongoing oversight of systemically important payments and settlement systems, the Federal Reserve will review published self-assessments by systems subject to the Board's authority to ensure the Board's policy objectives and expectations are being met.<sup>27</sup> Where necessary, the Federal Reserve will provide feedback to these systems regarding the content of their self-assessments and their

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<sup>24</sup> System operators should use one of the following assessment categories to describe the extent to which the system meets a particular principle or minimum standard: observed, broadly observed, partly observed, or non-observed. The assessment should contain information robust enough to enable users and other interested persons to assess the risks associated with the system. The Board, however, does not expect payments and settlement systems to disclose publicly sensitive information that would expose system vulnerabilities or otherwise put the system at risk (e.g., specific business continuity plans).

<sup>25</sup> The Core Principles include an implementation summary for each principle. The CPSS, however, has not developed an assessment methodology for the Core Principles. In November 2002, CPSS-IOSCO published an Assessment Methodology for the Recommendations for SSS available at <http://www.bis.org/publ/cpss51.htm>. In November 2004, CPSS-IOSCO published the CCP Recommendations and an Assessment Methodology available at <http://www.bis.org/publ/cpss64.htm>.

<sup>26</sup> The assessment methodologies for the CPSS-IOSCO Recommendations include key questions to assist an assessor in determining to what extent a system meets a particular minimum standard.

<sup>27</sup> Any review of an assessment by the Federal Reserve should not be viewed as an approval or guaranty of the accuracy of a system's self-assessment.

effectiveness in achieving the policy objectives discussed above.<sup>28</sup> The Board acknowledges that payments and settlement systems vary in terms of the scope of instruments they settle and markets they serve. It also recognizes that systems may operate under different legal and regulatory constraints and within particular market infrastructures or institutional frameworks. The Board will consider these factors when reviewing self-assessments and in evaluating how a systemically important system addresses a particular principle or minimum standard and complies with the policy generally. Where the Board does not have exclusive authority over a systemically important system, it will encourage appropriate domestic or foreign financial system authorities to promote self-assessments by systemically important systems as a means to achieve greater safety and efficiency in the financial system.

By order of the Board of Governors of the Federal Reserve System, June 22, 2006.

Jennifer J. Johnson (signed)  
Jennifer J. Johnson,  
Secretary of the Board

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<sup>28</sup> If the Federal Reserve materially disagrees with the content of a system's self-assessment, it will communicate its concerns to the system's senior management and possibly to its board of directors, as appropriate. The Federal Reserve may also discuss its concerns with other relevant financial system authorities, as appropriate.