

(Provisional Translation)

# Policy on Oversight of Payment and Settlement Systems

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Bank of Japan

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## I. Introduction

The Bank of Japan, as is the case with other central banks, oversees the payment and settlement systems operated by the private sector, so as to ensure the safety and efficiency of payment and settlement arrangements in Japan.

Oversight of payment and settlement systems is defined as the central bank's activities to monitor the design, risk management, and operations of systems operated by the private sector; to assess the systems against established safety and efficiency objectives; and to induce changes where necessary. In its oversight of payment and settlement systems, the Bank seeks to establish a common understanding with system operators and other stakeholders on ways to maintain and improve the safety and efficiency of systems, and supports their efforts for improvements. Through these activities, the Bank aims to ensure the safety and efficiency of settlement, not only in individual systems but also in the overall payment and settlement arrangements in Japan.

In September 2002, the Bank published "Role of the Bank of Japan in Payment and Settlement Systems," which explained the Bank's basic oversight policy, the outline of oversight activities and other roles played by the Bank. Since then, a number of improvements have been made in Japan's payment and settlement systems, including the establishment of new securities clearing and settlement systems, the dematerialization of major types of securities, and the expanded use of delivery-versus-payment (DVP) in securities settlement.<sup>1</sup> Interdependencies among payment and settlement systems have been increasing both in Japan and abroad. Further, following the experiences of the bankruptcy of Lehman Brothers Holdings in September 2008, good progress has been made in various efforts to improve the safety of payment and settlement systems both in Japan and abroad. The government is also working to enhance the legal framework for payment and settlements.

At the same time, the Bank has started to oversee these new securities clearing and settlement systems. Learning from the experience and lessons of the bankruptcy of Lehman Brothers Japan, the Bank's recent oversight activities include exchanging views

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<sup>1</sup> DVP is a link between a securities settlement system and a payment system to ensure that delivery of securities occurs if and only if transfer of funds occurs. It eliminates credit risk associated with securities settlement.

with system operators and other stakeholders to develop a common understanding concerning the challenges to the safety of Japan's systems, and working with them to support their efforts to improve systems.

This policy statement updates the relevant parts of "Role of Bank of Japan in Payment and Settlement Systems" published in September 2002 with an aim to better clarify the Bank's oversight objectives and policy, while taking into account various issues including the recent changes surrounding payment and settlement systems. Ensuring the safety and efficiency of payment and settlement systems contributes to the stability of the overall financial system in Japan. It also promotes the use of individual payment and settlement systems and brings further benefits to system operators and participants. The Bank expects that this policy statement and oversight activities will help stakeholders to gain a better understanding of oversight. The Bank continues to make further efforts to ensure the safety and efficiency of payment and settlement arrangements in Japan in cooperation with the stakeholders, including system operators and participants as well as the relevant governmental agencies.

## II. Payment and Settlement Systems

### A. Clearing and Settlement

An economic transaction ("transaction") in many cases involves a promise between two parties to exchange money with goods or services. In the execution of a transaction, one party assumes an obligation to pay money as promised and acquires the right to receive goods or services from its counterparty. The other party assumes an obligation to deliver goods or services as promised and acquires the right to receive payments from its counterparty.

"Settlement" is an act of discharging these obligations by making payments or delivery of goods or services. The transfer of money is called "payment," while delivery of securities, such as bonds and equities, is called "securities settlement."

"Clearing" is a process of netting down a large number of obligations into a smaller number of obligations prior to settlement.

## B. Payment and Settlement Systems

Payment and settlement systems are arrangements to process clearing and settlement among many participants in accordance with a standard set of rules and procedures in an organized manner. Payment and settlement systems not only refer to physical facilities such as computer systems, but also include institutional arrangements, such as settlement rules and procedures agreed upon among the participants.

Payment and settlement systems can in general be divided into three types of systems: a payment system, a securities settlement system, and a central counterparty. A "payment system" is an arrangement to process the transfer of money, while a "securities settlement system" is an arrangement to process the delivery of securities. A "central counterparty" is an arrangement to process the clearing of obligations resulting from financial transactions, such as securities and derivatives transactions. A central counterparty replaces an obligation between two clearing members with a pair of obligations between the central counterparty and a clearing member and carries out the netting of positions of clearing members.<sup>2</sup>

## C. Payment and Systemic Risk

Payment and settlement systems potentially pose systemic risk. Systemic risk is the risk that the failure of a financial institution or the disruption in a financial market or a payment and settlement system will cause subsequent disruptions in other financial institutions, financial markets or the financial system in general. A disruption can spread through various channels. For example, if one financial institution fails to settle its payment obligations, this could result in subsequent failures in other financial institutions or payment and settlement systems. Further, financial difficulties in one bank could trigger a situation in which a large number of depositors rush to their banks to withdraw deposits or investors cease to place their money in other marketable assets from a fear that their banks might also become insolvent. Ultimately, the unwillingness of market participants to engage in new transactions could lead to the drying up of market liquidity and the malfunctioning of market functions, possibly resulting in disruption in the overall financial and capital markets.

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<sup>2</sup> In addition, a central counterparty also settles the accepted obligations with the clearing members. In many cases, the number of obligations is reduced prior to settlement by netting of obligations.

With respect to oversight of payment and settlement systems, the most critical requirement is to prevent a chain of failures that could take place in the settlement of payment obligations.

When one party fails to make payments when due, this raises the risk that its counterparties, who will be making onward payments to other counterparties with the money received from the failing party, could also fail to make payments. Payment and settlement systems process a large number of settlement instructions involving many participants. Therefore if one participant in a system fails to settle its payment obligations, it could lead to a chain of settlement failures involving other participants. Also if the smooth operation of a payment and settlement system is interrupted by computer malfunctions, settlement will be disrupted for all system participants. This could possibly have a negative impact on the settlements of other market participants or payment and settlement systems.

In this policy statement, as described above, "systemic risk" is defined as "the risk that a failure to settle by one financial institution or malfunctions in payment and settlement system could cause subsequent settlement failures by other financial institutions or system participants."

#### D. Ensuring the Safety and Efficiency of Payment and Settlement Systems

Should systemic disruptions or a chain of settlement failures occur, the overall financial system is quite likely to undergo immediate deterioration because the major players in payment systems are in many cases financial institutions. This could have a negative impact on the payments of customer individuals and corporations, and eventually lead to disruption in the overall economy.

For this reason, it is important that individual systems ensure the safety of settlement in their design, operations, and systems development, so as to avoid becoming the source of a negative impact on the overall financial system or economy.

It is also essential that payment and settlement systems ensure efficiency together with safety. If it is inconvenient to use a system or the cost of using the system is too high, the use of the system will decrease, possibly resulting in inefficiencies in economic activities.

### III. Central Bank's Role in Payment and Settlement Systems and Oversight

#### A. Provider of Settlement Assets and Operator of Payment and Settlement Systems

A central bank issues banknotes and provides current deposits to financial institutions. "Central bank money," which comprises banknotes and deposit money, is the settlement asset with the highest liquidity and lowest credit risk provided by a neutral institution. Most central banks operate payment systems that process the transfer of central bank deposit money.<sup>3</sup> In addition, several central banks also operate securities settlement systems.

In many cases, central bank current deposits, one form of central bank money, are used in settling interbank and large-value payments of transactions, such as financial market transactions. This is because the use of central bank current deposits with the highest liquidity and lowest credit risk for payments helps achieve safe and efficient settlement, thereby contributing to the reduction of systemic risk. On the other hand, banknotes and commercial bank deposit money are typically used for settling relatively small-value payments of transactions between individuals and corporations. Commercial bank money is used widely as a settlement asset for payments because everyone is confident in its convertibility into central bank money.

Settlement takes place at different tiers of institutions using different types of monies. Individuals and corporations settle their obligations either face-to-face using banknotes or using deposit money at commercial banks, while commercial banks settle their obligations at the central bank using central bank deposit money. Banknotes and central bank deposit money are used as the fundamental means to complete the discharge of obligations ("ultimate settlement<sup>4</sup>"), thereby supporting the safety and efficiency of the national settlement arrangements.

#### B. What Is Oversight?

In addition to providing settlement assets and operating payment and settlement systems, central banks oversee payment and settlement systems.

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<sup>3</sup> A very small number of central banks are not pure operators of payment systems. But even in such cases, central banks are closely involved in the design and operations of the payment systems using central bank deposit money as settlement assets.

<sup>4</sup> Final settlement in central bank money.



Oversight is a central bank function whereby the objectives of safety and efficiency are promoted by monitoring existing and planned systems operated by the private sector,<sup>5</sup> assessing them against these objectives and, where necessary, inducing changes. In its oversight of payment and settlement systems, the Bank seeks to establish a common understanding with system operators and other stakeholders and supports the systems' efforts to improve their functions. By doing so, the Bank aims to ensure safety and efficiency not only in individual systems but also those in the overall payment and settlement arrangements in Japan. Central banks in other countries also oversee payment and settlement systems in a similar way.<sup>6</sup>

### C. Why Oversight?

#### 1. Prevention of systemic risk

A central bank provides the means for "ultimate settlement" and plays a role in ensuring safety and efficiency in the overall payment and settlement arrangements. It is therefore crucial for central banks to prevent systemic risk.

If there is a risk of systemic disruptions taking place, a central bank acting as the lender of last resort may have to provide short-term liquidity to a financial institution playing a key role in payments and settlements. In such a case, a central bank acts as the lender of last resort solely to prevent systemic risk, not to protect or rescue the institution experiencing liquidity shortage. However, the provision of central bank liquidity to a system participant runs the risk of undermining the self-disciplinary efforts by stakeholders aiming to ensure the safety of payment and settlement systems. This course of action can also impair the financial soundness of a central bank and eventually undermine confidence in it.

On the other hand, it may be possible to prevent systemic disruption in the event of failure to settle by a system participant if the counterparty is able to perform onwards settlement on

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<sup>5</sup> In addition to payment and settlement systems, many types of financial market infrastructures support the process from trade execution to settlement. Trade matching systems and trade repositories are typical examples. Because some of these infrastructures have a significant impact on payment and settlement systems, central banks around the world closely monitor developments in these infrastructures and pay special attention to ensure that they take adequate actions to address any problems.

<sup>6</sup> Methodologies for oversight differ from central bank to central bank depending on various factors, such as the financial and central bank system of respective countries.

time using its own liquidity or the liquidity obtained from external sources, or if the system itself is equipped with mechanisms to prevent the "knock-on" effects of a participant's failure to settle. Such risk management mechanisms include the development of contingency liquidity arrangements and loss sharing arrangements,<sup>7</sup> for example. Given that deficient risk management mechanisms within the systems could lead to systemic disruptions, central banks oversee payment and settlement systems to ensure the safety of the systems.

## 2. Linkages with the private-sector payment and settlement systems

Many private-sector payment and settlement systems are closely linked with the central bank systems both physically, through the interconnection of computer systems, and operationally. In such cases, the safety and efficiency of private-sector systems could have a direct impact on the safety and efficiency of the central bank systems. For this reason, central banks oversee the private-sector systems that are closely linked with their own systems.

## 3. Ensuring the underpinning of smooth implementation of monetary policy

The effects of a central bank's monetary policy are transmitted to the overall economy via financial market transactions and via settlements conducted by financial institutions and payment and settlement systems. Safe and efficient systems prevent situations where settlement risks and costs have disruptive impacts on market rates, and support the proper functioning of the signaling effects of market rates. In this way, the maintenance of safe and efficient payment and settlement through central bank oversight is fundamental to the smooth implementation of monetary policy.

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<sup>7</sup> "Contingency liquidity arrangements" is a mechanism activated in the event of failure-to-settle by a system participant in which the system operator obtains funds, either through borrowing from banks or through liquidation of collateral securities, and makes payments instead of the participant in default, thereby preventing the chain of settlement failures among other participants. "Loss-sharing arrangements" is a mechanism to prevent the default of a system operator in the event of participants' failure-to-settle by covering the loss suffered by the system operator with the collateral pledged in advance by the failing participants or through contributions from other participants.

#### IV. The Bank's Role in Payment and Settlement Systems and Oversight

##### A. Provider of Settlement Assets and Operator of Payment and Settlement Systems

The Bank provides central bank money by issuing bank notes and by providing financial institutions with deposit money in its current accounts. The Bank also provides payment and settlement systems for transferring deposit money and JGBs across its books, and operates the Bank of Japan Financial Network System (BOJ-NET), a computer network system for smooth processing of funds and JGBs settlement. Many private-sector payment and securities settlement systems, including central counterparties, have access to BOJ-NET and use the Bank's deposit money for "ultimate settlement" of payments among its participants. Among these systems, securities settlement systems and central counterparties for securities have established a mechanism for linking the delivery of securities in their systems with the transfer of funds in BOJ-NET to ensure that delivery occurs if and only if payment occurs, i.e. delivery versus payment (DVP), and have in this way increased the safety of settlement in their systems.

##### B. The Bank's Objectives and Oversight

The Bank's oversight is conducted to pursue the Bank's objective to "ensure smooth settlement of funds among banks and other financial institutions" (Article 1, Paragraph 2 of the Bank of Japan Act). The Bank's oversight is a function of importance to ensuring the safety and efficiency of payment and settlement systems and to reducing systemic risk. Since some private-sector systems have links with the payment and settlement systems operated by the Bank, the Bank's oversight also contributes to the safety and efficiency of its own systems.<sup>8</sup>

The Bank's oversight also plays an important role in pursuing the Bank's other objective "to carry out currency and monetary control" (Article 1, Paragraph 1 of the Bank of Japan Act). The Bank's oversight, through ensuring smooth settlement of funds and securities, provides a foundation for the effective implementation of monetary policy.

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<sup>8</sup> Apart from oversight, in order to perform the Bank's business properly, the Bank conducts on-site examination and off-site monitoring of the payment and settlement systems that hold current accounts with the Bank. The Bank examines and gives advice regarding the system's operations and financial condition where necessary.

## C. Cooperation with Private-Sector Payment and Settlement Systems

The Bank, in cooperation with private-sector payment and settlement systems, ensures the safety and efficiency of payment and settlement arrangements in Japan. Encouraged by dialogues that took place as a part of the Bank's oversight activities, private-sector payment and settlement systems have made considerable efforts over the years to strengthen risk management. Owing to these efforts, payment and settlement systems in Japan have functioned in a stable manner in the wake of the September 2008 bankruptcy of Lehman Brothers Holdings and Lehman Brothers Japan. In its oversight activities, the Bank encourages and supports these efforts by private-sector systems.

## D. Cooperation with Other Central Banks

In cooperation with other central banks, the Bank oversees payment and settlement systems that operate with a cross-border aspect (see section VII). At the international forum for central banks, such as the Committee on Payment and Settlement Systems (CPSS),<sup>9</sup> member central banks monitor and analyze developments in payment and settlement systems and formulate international standards to be used in their oversight activities. The Bank as a member of CPSS is actively involved in the Committee's activities.

## V. Scope of Oversight

### A. Scope

The Bank's oversight focuses on the following types of private-sector payment and settlement systems:

1. Payment systems
2. Securities settlement systems
3. Central counterparties

As stated earlier, payment systems potentially pose systemic risk. The Bank oversees payment systems to ensure safety and efficiency, because the reduction of systemic risk

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<sup>9</sup> CPSS serves as a forum for central banks to monitor and analyze developments in payment and settlement systems, and consider related policy issues. The Committee consists of central banks from 24 countries and regions.

posed by payment systems is important to the stability of the financial system and the overall economy.

The Bank also oversees securities settlement systems and central counterparties on the grounds that these systems also have systemic risk similar to payment systems. These systems are closely interrelated with payment systems, as their arrangements are used not only to transfer and/or clear securities and other financial products, but also include related rules and contracts for the transfer of funds that are provided against securities and other financial products.<sup>10</sup> Although payment arrangements are needed to increase the safety and efficiency of those systems, such arrangements give rise to the systemic risk whereby disruptions in any one system can cause subsequent failures to settle in other interrelated payment systems.

Some settlement services provided by individual financial institutions have similar functions as payment and settlement systems. The services of the correspondent bank or the clearing bank, which provide accounts for customers and settle their transactions by transferring funds or securities across those accounts, are typical examples. These services differ from a payment and settlement system, which processes transactions based on common agreements among all participants and the operator of the system, as these services are based on individual bilateral agreements between individual customers and the service provider. Depending on the content of the agreements or the value of settlement, however, it is sometimes necessary for the Bank to monitor the settlement services provided by individual financial institutions, including risk management measures, from the same perspective as payment and settlement systems. Although the Bank's oversight does not directly focus on settlement services provided by individual financial institutions, the Bank does examine their services and provides advice through on-site examination and off-site monitoring if necessary with an aim to maintain the sound business operations of these financial institutions.

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<sup>10</sup> There are two types of interrelation between a payment system and a securities settlement system, and between a payment system and a central counterparty: (i) the securities settlement system or the central counterparty provides cash accounts or computer systems to transfer funds corresponding to settlement of securities and other financial products; and (ii) the securities settlement system or the central counterparty uses other payment systems or financial institutions to transfer funds.

## B. Foreign Currency Payment and Settlement Systems Located in Japan

The scope of the Bank's oversight described in A. above also includes domestically located payment and settlement systems that settle foreign currency-denominated transactions. This is because a disruption occurring in the foreign currency systems in Japan could have an unexpected impact on related foreign exchange transactions. As a result, the disruption of these systems may have a negative impact on the yen funding of domestic financial institutions participating in these systems, and eventually may give rise to systemic risk in overall yen payment and settlement systems. Moreover, it may also have a negative impact on the payment and settlement systems of the country where the foreign currency used in the system is issued. For this reason, the Bank oversees foreign currency payment and settlement systems located in Japan, and cooperates with central banks of issue and other related authorities when necessary (see section VII).

## C. Systemically Important Payment and Settlement Systems

The intensity of the Bank's oversight is commensurate with the size and characteristics of risk posed by individual payment and settlement systems subject to the Bank's oversight.

Specifically, the Bank places particular focus on "systemically important payment and settlement system," a system that could potentially have a significant impact not only on payment and settlement systems, but also on the wider financial system and the economy as a whole, should it fail to perform as expected.

Whether a payment and settlement system is systemically important or not is determined based on the combination of the following factors:

1. Value and number of transactions settled
2. Number and types of system participants (e.g. shares of transactions settled by financial institutions)
3. Characteristics of transactions settled (e.g. extent of relevance to the financial and capital markets)
4. Availability of alternative systems or payment instruments
5. Interdependencies with other systems (e.g. extent of linkages with the other systems, and commonality of the system participants)
6. Relationship with the Bank (e.g. extent of linkages between the system and BOJ-NET, and operational relationship between the system and the Bank)

For the systems which are determined to be systemically important, the Bank conducts oversight by monitoring the systems, assessing them against the safety and efficiency objectives and, where necessary, inducing changes (see section VI). For the systems that are determined to be less systemically important, the Bank conducts oversight mainly by monitoring the systems in order to gain an overview of the overall payment and settlement arrangements in Japan.

## VI. Oversight Activities

Oversight is carried out in three phases, namely (i) monitoring the performance and characteristics of payment and settlement systems ("monitoring"), (ii) assessing the systems against the safety and efficiency objectives ("assessment"), and (iii) inducing changes for improvements where necessary ("inducing changes").

In every phase of its oversight activities, the Bank focuses on risks posed by payment and settlement systems. These risks include legal risk, credit risk, liquidity risk, and operational risk. In its oversight of individual systems, the Bank determines the types of risk that require the closest attention and the intensity of oversight activities based on the characteristics and size of risks posed by the respective systems. At the same time, the Bank takes into account the administrative burdens borne by the system operators and participants.

### (i) Monitoring

The foundation of oversight is to understand the performance and characteristics of the payment and settlement system subject to oversight. To do so, the Bank analyzes and monitors the system design, risk management, operations and other aspects based on the public and confidential information provided by systems as well as through regular and ad-hoc dialogues with the system operators.

### (ii) Assessment

The Bank determines the systemic importance of individual payment and settlement systems based on the information and the results of analysis obtained from the monitoring of respective systems.

For the systemically important systems, the Bank uses internationally accepted standards ("international standards") as the benchmark for oversight, evaluates whether these systems meet the requirements set out in the international standards, and makes its own assessment of the systems.<sup>11</sup>

The international standards currently comprise the following standards<sup>12</sup>:

- CPSS *Core Principles for Systemically Important Payment Systems* (see Annex I)
- CPSS-Technical Committee of International Organization of Securities Commissions (IOSCO) *Recommendations for Securities Settlement Systems* (see Annex II)
- CPSS-IOSCO *Recommendations for Central Counterparties* (see Annex III)

(iii) Inducing changes

When issues requiring improvement in system design, risk management and operations are identified as a result of assessment, the Bank confirms whether the system operators and participants have previously identified these issues and made efforts to address them. If they have not identified the issues, or if they have been discussing how to address the issues without taking any concrete action, the Bank conveys the issues and encourages them to take action.<sup>13</sup>

The Bank believes it is important to have regular dialogues with the system operators and participants with respect to the issues for improvement and possible solutions that have a significant bearing on the design and operations of payment and settlement systems. Through these intensive dialogues, the Bank seeks to establish a common understanding with them on these issues and solutions, and encourages them to take actions that will contribute to the safe and efficient payment and settlement systems, making use of the expertise gained from international discussions on payment and settlement systems as well

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<sup>11</sup> The Bank may ask the systems with significant systemic importance or those with advanced risk management controls to meet higher requirements for risk management that exceed the current international standards, depending on the characteristics and size of risks posed by the systems.

<sup>12</sup> A comprehensive review of the international standards on payment and settlement systems is currently underway, taking into account the lessons learned from the recent global financial crisis. See CPSS-IOSCO press release "Standards for payment, clearing and settlement systems: review by CPSS-IOSCO" (February 2010).

<sup>13</sup> For payment systems that could have significant impact on the Bank's payment system, the Bank is consulted or approves the changes to settlement mechanism or risk management, if necessary.



as from the operation of its own systems.

## VII. International Cooperative Oversight

In recent years, with the globalization of financial markets, there has been an emergence of yen payment systems that are operated by entities located outside Japan ("offshore yen payment systems"). While offshore yen payment systems are mainly used to settle yen-denominated transactions executed in offshore markets or on a cross-border basis, the settlement processes in those systems usually involve a transfer of yen funds using payment systems in Japan or across accounts held with financial institutions in Japan. As such, depending on the size and characteristics of the system, offshore yen payment systems could have a significant negative impact on the safety and efficiency of payment arrangements in Japan. Therefore, in principle, the scope of the Bank's oversight covers offshore yen payment systems.

At the same time, oversight of offshore payment systems entails issues that do not arise in the oversight of domestic payment systems. These include the issue of jurisdictional authority, as well as difficulties in obtaining information due to time differences and/or geographical distance between the Bank and the system operator. With this in mind, oversight of offshore payment systems is, in principle, conducted in the form of cooperative efforts involving the relevant central banks (the central bank where the system is located or the central bank of issue of eligible currencies), which is called "international cooperative oversight." The relevant central banks conduct international cooperative oversight of some offshore payment systems, and the Bank also takes part in such oversight.

The Bank will continue to oversee offshore yen payment systems adequately, in close cooperation with the relevant central banks.<sup>14</sup>

## VIII. Publication of Oversight Activities

Based on its oversight activities, the Bank will regularly publish a document describing the assessment of and the challenges to the overall payment and settlement arrangements in

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<sup>14</sup> For oversight of off-shore yen payment systems, the Bank releases "Policy on Oversight of Offshore Yen Payment Systems" (May 2010) to complement this policy statement.

Japan.<sup>15</sup> It also describes the possible challenges to individual systems that could have significant relevance to the overall payment and settlement arrangements in Japan. The Bank also plans to provide, from time-to-time, the information contributing to the safe and efficient payment and settlement systems, including the developments in overseas systems and the trends in discussions on risk management issues.<sup>16</sup>

Apart from the Bank's publication of its oversight activities, the Bank expects the operators of systemically important systems to conduct self-assessment of the safety and efficiency of their respective systems against international standards and to disclose publicly the results of assessment. The publication of self-assessment results is expected to help strengthen the market's confidence in these systems by enhancing transparency. Increased confidence in the systems facilitates the use of the systems and eventually brings further benefits to the system operators and participants. The publication of self-assessment results also helps create a common understanding of risks among the stakeholders, which is expected to create synergy in efforts aimed at enhancing the risk management measures used by these systems.<sup>17</sup> The Bank cooperates with the private-sector systems to make sure that self-assessment is conducted based on a common understanding and interpretation of the international standards.

## IX. Closing Remarks

The scope and methodologies for oversight of payment and settlement systems change from time to time, in response to the evolution and structural changes in systems, developments

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<sup>15</sup> While some central banks assess the individual systems' compliance with international standards and publish the assessment results, the Bank does not intend to publish the results of assessment of individual systems at this stage. The Bank expects the operators of individual systems to assess their compliance with international standards and publish the results of self-assessment.

<sup>16</sup> The Bank has been publishing the "Payment and Settlement Systems Report" since March 2006, in which it explains the trends in and challenges to payment and settlement arrangements in Japan as well as the international discussions surrounding payment and settlement systems.

<sup>17</sup> The Bank has assessed its payment system and JGB settlement system against international standards and published the assessment results. For the details of current self-assessments by the Bank, see "Self-Assessment of Compliance with the Core Principles for Systemically Important Payment Systems: The BOJ-NET Funds Transfer System" (Bank of Japan, July 2003) and "Assessment of the Settlement System for Japanese Government Securities against the Recommendations for Securities Settlement Systems" (Bank of Japan, November 2007).

in financial markets, and advances in risk management measures. The Bank seeks to reinforce the effectiveness of oversight by supporting the system operators and participants to gain a deeper understanding of oversight and by maintaining cooperative relations with them. In doing so, the Bank also takes into account studies on new settlement mechanisms and trends in settlement services, international discussions concerning settlement services, and the analysis and study of advanced risk management measures. At the same time, the Bank seeks to strengthen the efforts to increase the safety and efficiency of the means of payment it provides and the payment and settlement systems it operates. Through these activities, the Bank will make continued efforts to ensure the safety and efficiency of payment and settlement arrangements in Japan in cooperation with the system operators and participants as well as other stakeholders, including the relevant governmental agencies.

## **Core Principles for Systemically Important Payment Systems**

An extract from the CPSS report *Core Principles for Systemically Important Payment Systems* (BIS, January 2001)

### **Core Principles for systemically important payment systems**

#### **Core Principle I: Legal basis**

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

#### **Core Principle II: Understanding financial risks**

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.

#### **Core Principle III: Management of financial risks**

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.

#### **Core Principle IV\*: Prompt final settlement**

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.

#### **Core Principle V\*: Settlement in multilateral netting systems**

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.

#### **Core Principle VI: Settlement assets**

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.

#### **Core Principle VII: Security and operational reliability**

The system should ensure a high degree of security and operational reliability and should have contingency arrangements for timely completion of daily processing.

**Core Principle VIII: Efficiency**

The system should provide a means of making payments which is practical for its users and efficient for the economy.

**Core Principle IX: Access criteria**

The system should have objective and publicly disclosed criteria for participation, which permit fair and open access.

**Core Principle X: Governance**

The system's governance arrangements should be effective, accountable and transparent.

\* Systems should seek to exceed the minima included in these two Core Principles.

**Responsibilities of the central bank in applying the Core Principles****Responsibility A: Disclosure of objectives, role and major policies**

The central bank should define clearly its payment system objectives and should disclose publicly its role and major policies with respect to systemically important payment systems.

**Responsibility B: Compliance of central bank systems**

The central bank should ensure that the systems it operates comply with the Core Principles.

**Responsibility C: Oversight of non-central bank systems**

The central bank should oversee compliance with the Core Principles by systems it does not operate and it should have the ability to carry out this oversight.

**Responsibility D: Cooperation with other authorities**

The central bank, in promoting payment system safety and efficiency through the Core Principles, should cooperate with other central banks and with any other relevant domestic or foreign authorities.

## **Recommendations for Securities Settlement Systems**

An extract from the CPSS/IOSCO Technical Committee report

*Recommendations for Securities Settlement Systems (BIS/IOSCO, November 2001)*

### **1. Legal framework**

Securities settlement systems should have a well founded, clear and transparent legal basis in the relevant jurisdictions.

### **2. Trade confirmation**

Confirmation of trades between direct market participants should occur as soon as possible after trade execution, but no later than 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 trade execution, preferably on T+0, but no later than T+1.

### **3. Settlement cycles**

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. Central counterparties (CCPs)**

The benefits and costs of a CCP should be evaluated. Where such a mechanism is introduced, the CCP should rigorously control the risks it assumes.

### **5. Securities lending**

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. Central securities depositories (CSDs)**

Securities should be immobilized or dematerialized and transferred by book entry in CSDs to the greatest extent possible.

## **7. Delivery versus payment (DVP)**

CSDs should eliminate principal risk by linking securities transfers to funds transfers in a way that achieves delivery versus payment.

## **8. Timing of settlement finality**

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. CSD risk controls to address participants' failures to settle**

CSDs that extend intraday credit to participants, including CSDs 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. Cash settlement assets**

Assets used to settle the ultimate payment obligations arising from securities transactions should carry little or no credit or liquidity risk. If central bank money is not used, steps must be taken to protect CSD members from potential losses and liquidity pressures arising from the failure of the cash settlement agent whose assets are used for that purpose.

## **11. Operational reliability**

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 timely recovery of operations and completion of the settlement process.

## **12. Protection of customers' securities**

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**

Governance arrangements for CSDs and CCPs should be designed to fulfill public interest requirements and to promote the objectives of owners and users.

#### **14. Access**

CSDs and CCPs should have objective and publicly disclosed criteria for participation that permit fair and open access.

#### **15. Efficiency**

While maintaining safe and secure operations, securities settlement systems should be cost-effective in meeting the requirements of users.

#### **16. Communication procedures and standards**

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. Transparency**

CSDs and CCPs should provide market participants with sufficient information for them to identify and evaluate accurately the risks and costs associated with using the CSD or CCP services.

#### **18. Regulation and oversight**

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. Risks in cross-border links**

CSDs that establish links to settle cross-border trades should design and operate such links to reduce effectively the risks associated with cross-border settlements.



## **Recommendations for Central Counterparties**

An extract from the CPSS/IOSCO Technical Committee report  
*Recommendations for Central Counterparties (BIS/IOSCO, November 2004)*

### **1. Legal risk**

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

### **2. Participation requirements**

A CCP should require participants to have sufficient financial resources and robust operational capacity to meet obligations arising from participation in the CCP. A CCP should have procedures in place to monitor that participation requirements are met on an ongoing basis. A CCP's participation requirements should be objective, publicly disclosed, and permit fair and open access.

### **3. Measurement and management of credit exposures**

A CCP 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 CCP should limit its exposures to potential losses from defaults by its participants in normal market conditions so that the operations of the CCP would not be disrupted and non-defaulting participants would not be exposed to losses that they cannot anticipate or control.

### **4. Margin requirements**

If a CCP 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. Financial resources**

A CCP 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. Default procedures**

A CCP's default procedures should be clearly stated, and they should ensure that the CCP 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. Custody and investment risks**

A CCP should hold assets in a manner whereby risk of loss or of delay in its access to them is minimized. Assets invested by a CCP should be held in instruments with minimal credit, market and liquidity risks.

## **8. Operational risk**

A CCP 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 CCP's obligations.

## **9. Money settlements**

A CCP 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 CCP should be final when effected.

## **10. Physical deliveries**

A CCP should clearly state its obligations with respect to physical deliveries. The risks from these obligations should be identified and managed.

## **11. Risks in links between CCPs**

CCPs 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. Efficiency**

While maintaining safe and secure operations, CCPs should be cost-effective in meeting the requirements of participants.

### **13. Governance**

Governance arrangements for a CCP 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 CCP's risk management procedures.

### **14. Transparency**

A CCP should provide market participants with sufficient information for them to identify and evaluate accurately the risks and costs associated with using its services.

### **15. Regulation and oversight**

A CCP 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.