Interim Summary of Points of Discussion on Payment and Settlement

(Chairman's Notes)

[provisional and unofficial translation by the FRTC]

December 18th, 2007

Study Group on Payment and Settlement

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(Reference: Members of Study Group on Payment and Settlement

Meetings of Study Group on Payment and Settlement)

Interim Summary of Points of Discussion on Payment and Settlement (Study Group on Payment and Settlement)

I. Introduction

The Study Group on Payment and Settlement convenes at the Financial Research and Training Center (FRTC) of the Financial Services Agency (FSA).

Settlement means in general "an act that discharge obligations between parties." Everyday economic transactions generate debts and credits between parties. The termination of these debts and credits by delivering funds or other instruments is called settlement. Various instruments are delivered for the purpose of settlement, such as cash or securities. Among the various means of settlement, settlement made by delivering funds is called payment, and settlement made by delivering securities is called securities settlement.¹

Payment involving an actual delivery of cash is limited to cases where the payment of a small amount of money is made in a face-to-face meeting. In most cases, the payment is made by transferring deposits held by the parties to the transaction in their accounts at banks.² If the payer and the payee have their respective accounts at different banks, the transfer of deposits requires a payment between these banks. The payment is finally completed by booking the transfer of deposits in the current accounts held by the respective banks at the Bank of Japan (payment by deposits in BOJ accounts).³ The mechanism organized to ensure that these payment processes operate smoothly is called the "payment system." The payment system forms a sort of hierarchy structure consisting of payments made between parties to transactions, such as individuals and corporations (retail payment) and payments made between banks (wholesale payment⁴).

Concerning retail payment, a variety of new services have been developed recently, such as the fee collection services (services that delegated agents collect bills in cash over the counters of the agents or its affiliates on behalf of providers of goods and services ("recipients")) of convenience stores as well as electronic payment services like electronic money,⁵ thanks to innovations in information and communication technologies, widespread use of the internet and other reasons. Point services have also been growing rapidly. As such, new services are being developed and popularized.

Banks have played key roles in payment systems, including retail payment. They have also undertaken other important functions, such as money creation, which is performed through their acceptance of deposits and lending of money. For this reason, banks are controlled by the licensing system, and a deposit insurance system for bank deposits is adopted under the Deposit Insurance Act. As illustrated by these examples, an institutional arrangement for payment systems has been developed with the banks, as they are the core of such systems. At the same time, the institutional development of new payment services has not been well advanced, due to the limited utilization of electronic money (although discussions about electronic money were held⁶) and other reasons. Discussions were also held last year on electronic payment services, remittance services, etc. have increased. Therefore, it is necessary to conduct a comprehensive study on a whole range of new payment services. Some of the new services in the areas of retail payment involve payments through banks as their final settlement, which indicates that they constitute a part of the payment systems. Thus, in order to study the new payment services, it is necessary not only to take up each of the individual services but to look into payment systems in their entirety.

As for securities settlement systems, securities trades are usually made through financial instruments exchanges, and investors conduct such trades through financial instruments firms (traders). Therefore, securities trades accompany settlements between traders through financial instruments exchanges and settlements between traders and investors. Securities settlement used to require the delivery of securities, but nowadays it is made through the custody & book-entry transfer system⁸ or book-entry transfer system.⁹ In the book-entry transfer system, the transfer institutions, financial instruments firms and other market participants constitute a multiple structure, and the transfer of rights is made by transferring the book-entry in the accounts registered at each of the above-mentioned market participants. Prior to settlement in this way, the clearance of mutual obligations incurred by market participants through a number of securities trades (i.e. the netting) is made in the financial instruments clearing institutions. Thus, like the payment systems, a mechanism is provided through which the securities settlement is carried out in an organized manner, which is called a "securities settlement system."

Securities settlement requires the delivery of funds as well as the delivery of securities, and in this way, the securities settlement systems and payment systems are closely related. Therefore, we should consider both of these systems together, rather than consider either of them independently.

Today, here is a strong need to enhance the competitiveness of Japan's financial and capital markets in order to establish the country's position as an international financial center comparable to New York or London. In order to ensure the smooth conduct of financial and capital transactions, payment and settlement needs to be carried out smoothly and efficiently with legal certainty. Therefore, payment and settlement systems are an important social foundation (infrastructure) supporting the financial and capital markets. In this context, a number of points are raised for improving the payment and settlement systems, such as enhancing their convenience, strengthening their risk management, etc.¹⁰

On the basis of the situations mentioned above, this Study Group is organized to conduct a comprehensive study on a wide range of issues with respect to payment and settlement systems as well as new services, and to consolidate all relevant issues for future discussions. This report is prepared as an interim step to sum up all the points of the discussion on payment and settlement that have been raised and discussed in the Group's meetings so far.

II New Payment Services

1. Framework of study

If settlement merely means the termination of debt and credit, in the case of fee collection services, for example, the settlement would be deemed to be legally completed by the receipt of the payer's funds by the service provider (who is authorized to receive the payment). In this case, the subsequent transfer of funds by the service provider to the recipient can be considered as a separate settlement from the settlement mentioned above. However, since the debt and credit rightly exist between the payer and the recipient and they should terminate such debt and credit, the settlement may be considered to be effectively completed when the recipient has received the funds transferred by the fee collection service provider. Similarly, in the case of an third-party-type prepaid certificate (prepaid certificate which can be applied to payment for goods and services purchased by the users at member shops other than issuers), the settlement can be deemed to be completed either (i) by the user's use of the certificate against the delivery of goods or services made by a shop that is a member of prepaid certificate system or (ii) by the eventual collection of funds by the member shop from the issuer of said certificate.

As seen in these examples, it is insufficient for the study of new payment services to merely apply the existing legal framework to those new services. It is necessary to analyze the structure in which the funds are transferred, how the services are utilized by the users and what functions are provided by those services. On the basis of such analysis, the institutional arrangement of the new services should be studied, regardless of whatever the current arrangement is.

The new payment services in Japan can be categorized in many ways. One of the possible categorizations sorts the new services into the following two services¹¹:

(1) Fund transfer services

Services that mediate the transfer of funds from payer to payee, such as fee collection services, cash-on-delivery services, direct debit services (services that delegated agents collect bills through direct debit from purchasers' bank accounts on behalf of providers of goods and services ("recipients")), escrow services, remittance services, ¹² etc.

(2) Pre-payment services

Services in which users deposit prepaid funds with the service provider, which issues an prepaid certificate to the users or makes a booking in their accounts, with said prepaid funds being applied to payments for goods or services purchased by the users (in general, unrefundable).

In either of the services, users' funds are received and kept by the service providers. The purpose of fund transfer services is to mediate the transfer of funds, while pre-payment services intend to offer goods or services. However, third-party-type pre-payment services (pre-payment services which can be applied to payment for goods and services purchased by the users at member shops other than issuers) can be considered to possess the characteristics of fund transfer services, since the service provider mediates the fund transfer between users and the member shops that participate in the pre-payment service.¹³

In addition to fund transfer services and pre-payment services, there are point services, which do not fit into either category.

Based on the categorization mentioned above, it should be noted that the institutional arrangement (if necessary) should be designed so that services with similar characteristics are subject to similar arrangements. For example, the Prepaid certificate Act (Act on Regulation, etc. on Prepaid certificates) is currently applicable to some of pre-payment services, and imposes certain obligations on the issuers of prepaid certificates, such as a deposit at the Legal Affairs Bureau. However, the Act is not applicable to services for which record management is conducted only on the server. In order to prevent discrepancies like this, new services should be looked at from a broad perspective and an institutional arrangement that covers all of them is to be considered.¹⁴

The institutional arrangement should also be considered from the viewpoints of user protection and security of individual transactions. Furthermore, it should be studied from the viewpoint of the safety, efficiency and convenience of the payment and settlement systems. It should also be looked into from the viewpoint of promoting innovation, so that it will contribute to the development of new services and encourage competition with existing services.¹⁵ From the various viewpoints mentioned above, a harmonized and coordinated institutional arrangement should be prepared for the new payment services.

An additional point to be considered is, if it proves necessary to implement rules, whether any should be prepared by the service providers in the form of voluntary rules, or whether they should be provided by certain regulatory frameworks in the form of laws or regulations.

2. Protection of users and security of transactions

(1) Definite fulfillment of users' intentions

In fund transfer services, it is important from the viewpoint of user protection that the intention of

users (i.e. orders) should be definitely and adequately fulfilled by the intermediaries (i.e. service providers) and that there should be systems to secure such fulfillment. For example, if the provider of the fee collection service is explicitly given authority to collect payment by the recipient, the payer's intention is fulfilled and the payer is protected by its payment to the fee collection agent.¹⁶ On the other hand, it can also be considered that recipients can also be recognized as users of the fee collection services, and from this viewpoint, the protection of users means that the recipients are assured that they will definitely collect funds from the service providers whom they authorize to receive payment. It can also be considered that protection of the recipients must not be as high as that of the private users, since in most cases the recipients are business entities¹⁷ and choose the agents by themselves.

In remittance services, there should be a system to secure the transfer of funds from payers to payees as they intended. In particular, higher security may be required when the payers or payees are consumers. However, it may be permissible to lower the level of protection of users if, for example, the remittance services are restricted to deal only with small amounts. It can also be considered that users are sufficiently protected if the funds to be transferred are secured in such a manner as to prevent any damage to them. If users are limited to corporations dealing with large transactions, their protection can be deemed adequate if a rule is established on the timing of the transfer of funds from the payers to the business entities who receive them.

In fund transfer services, there may be cases where the funds cannot be transferred and therefore cannot be received as originally intended, due to the bankruptcy of the service provider, for example. The possibility exists that this situation may result in social disruption. In this respect, the protection of individual users of the services is merely one of the aspects to be considered, and the possible social impact should also be taken into account. In particular, cases where a network of payments is established among business entities have to be studied, since the problem of major social disruption¹⁸ may occur due to the bankruptcy of one of the business entities that constitutes a part of the network of payments. In such a case, strict regulatory control is to be imposed on the business entities within the network. On the other hand, it can also be considered that if the business entities constituting the network do not, unlike banks, perform any financial intermediation or money creation functions, and therefore do not exert the influence that banks do, they are not required to be regulated to the same degree of strictness as banks are. Furthermore, it can also be considered that if they are obliged to administer received funds distinctly and to invest them in risk-free assets with adequate liquidity, the impact they cause on society may be limited.

It is possible to consider that even though social disruption may be caused by the bankruptcy of the fund transfer service provider or other similar reasons, fund transfer services should not be regarded as identical to the transfer services carried out by banks, because the service providers do not play as significant a role as banks do, such as financial intermediation and money creation functions. In particular, it can also be considered that focusing on the amount of money or the number of transactions handled by service providers, the social impact can be regarded as smaller in cases where the amount they are dealing with per service is smaller but it may be bigger if the total value they are dealing with is larger, despite the smaller amount per service.

In pre-payment services, it should be secured that users who make pre-payments will receive delivery of goods or services from the service providers in the future. In addition, it can also be considered that in third-party-type pre-payment services, as the member shops are also users of the service, it is important that they should be able to securely collect funds from the issuer of the prepaid certificate. However, since the member shops are business entities and are responsible for their participation in the service system, their protection may not necessarily be as high as for the consumers.¹⁹

In either the fund transfer services or the pre-payment services, measures should be taken to prevent inappropriate use, such as the transfer of funds for money laundering.

In most of the new payment services, the important roles are undertaken by information systems, communication networks or similar means. The operations of these services are vulnerable to failures in the information systems. The risk of illegal actions through communication networks may also exist, as the services are provided without face-to-face interaction. An example may be when a third party pretends to be a service provider or user of the services (counterfeiting or falsification of payment instruments, etc. may be another example). In particular, there are possibilities in the new payment services that, due to system failures or illegal actions, the users' intentions are not fulfilled, and users may suffer damages or confusions may occur in the transactions as a result. Therefore, it is of great importance that the business entities engaging in the services take adequate measures to secure the stable operation of computer systems and ensure the security of information. The levels of technology and technical content required to achieve this are not always the same, but vary according to the diversification of technological innovation and business models. In order to ensure that appropriate steps are taken by the business entities of new services to keep pace with these changes, it is necessary to consider what voluntary actions should be taken by those business entities and what supervision should be given by the authorities.

(2) Security of deposited funds

Since both in the course of fund transfer services and pre-payment services, service providers usually accept funds from users, the purpose of the services, such as the transfer of funds, cannot be achieved if the service provider goes bankrupt while it retains the funds delivered by users.

The banks that accept funds from the general public perform, in addition to their payment function,

the functions of financial intermediary and money creation by investing the deposited funds in loans, etc., and they are under strict regulatory control as they may cause serious problems, such as a run on the bank or systemic risks. Service providers offering new services should be regulated under the same strict controls as banks if they perform the same functions in the payment and settlement systems as banks do. However, if they do not so, it can also be considered that they must not be subject to the same level of control as banks.

In fund transfer services, the service providers are assumed to accept funds each time they provide services, and the funds are not retained by the service providers in the accounts of either payers or payees. If this is the case, the service providers are not considered to perform a high level of payment functions. On the other hand, service providers engage in a higher level of payment functions if they accept funds in advance for making a number of remittances or if the funds are retained in the accounts of payers and payees.

With pre-payment services, it can be understood that the users of the services pay their funds in advance and purchase the right to receive delivery of goods or services in the future, bearing the risk of fluctuations in the value of such goods or services. If we understand the services in this way, it can be said that the protection of users is less necessary. On the other hand, if we consider the services as ones where the deposit at the service provider is made by users with their prepaid funds and that the payment is made with such funds when goods or services are delivered to them in the future, it can also be considered that the necessity to secure the prepaid funds should be higher. Especially if the prepaid funds are returnable (i.e. convertible into cash), it can also be considered that the risk of fluctuation in their value should not be shifted onto users, which indicates that greater protection of users is required.

There are concerns that a run on a service provider may happen if the service is refundable and a provider receiving pre-payments goes bankrupt. Furthermore, if the service provider makes loans using the deposited funds as capital, it can be deemed to be performing the financial intermediary functions that banks provide. If it records the deposited funds in the servicing accounts it establishes and such funds are offered as loans for payment, the service provider may possibly be seen as performing money creation functions like those of banks.

Some measures should be considered in order to prevent the bankruptcy of the providers of new services, such as establishing qualifications for entry into the new services, introducing inspections or supervision by the authorities, requiring separate administration of the deposited funds, investing only in risk-free assets (and liquid assets), or securing funds, e.g. putting them in trust.²⁰ In considering these measures, it is necessary not only to compare service providers to banks but also to think about the following questions: Whether the security requirement for the funds can be reduced if, for example, the period during which service providers retain the deposited funds is shorter and therefore the payers' or payees' risk of losing their funds is lower, even if the service provider goes

bankrupt.²¹ Whether the social impact of the services can be smaller if the maximum amount available in the services is fixed or if the area in which the service is provided is limited, e.g. only in a specific region.²² Can the level of protection of users be differentiated on the basis of differences in period, amount or area, as mentioned above?²³ Another point that is not forgotten is that the innovation of new services should be promoted. Furthermore, it is worth considering whether the protection of users is ensured by implementing legislation or by any other measures, such as voluntary rules for service providers, or disclosure of information (e.g. contractual relations) that allows users to make proper judgments.

(3) Involvement of a number of business entities

Most of the new payment services use information and communication technologies, and involve a number of business entities: not only service providers but also computer system providers, data processors, etc. In addition, third-party-type pre-payment services involve business entities that provide goods or services. In fee collection services, the services were initially provided directly between the recipient's agents (i.e. convenience stores) and the specific recipients (such as electric power companies). However, the services have been developed into multiple tiers of service providers, with, for example, credit card companies being entrusted by recipients and convenience stores being entrusted by credit card companies as recipient's agents. An institutional arrangement that it is able to properly handle the involvement of a number of business entities should be considered.

As multiple business entities are involved, the division of responsibilities between them should be clarified in order to prepare for possible trouble, such as system failures or impersonation fraud, otherwise users may be insufficiently protected. User protection may also be insufficient if the division of responsibilities (although it may exist) is not properly disclosed to them. Therefore, the type and extent of rules required concerning the division of responsibilities, etc. should be studied. It may be thought, for example, that these matters are left to the contracts between the relevant parties, or that special rules may be introduced in private law. In this respect, the issues discussed in section (2) above, such as functional comparison with banks, differentiation by the amount of money handled by service providers, etc., should also be taken into consideration.

3. Promotion of offering of new payment services

New payment services should be studied in relation to the "Kawase transaction" and "deposits"

provided in the Banking Act, the "deposits" provided in the Capital Subscription Act (Act on Regulation of Receiving of Capital Subscription, Deposits and Interest Rates, etc.) and the "prepaid certificates" provided in the Prepaid certificate Act. It is necessary to clarify what relevance the new services have to these existing laws. On this point, it is important to look into the issues not only from the viewpoint of regulating the new services but also encouraging business entities to offer new services while ensuring legal certainty and predictability.

As for "Kawase transaction," it is defined in case law²⁴ that "to carry out Kawase transactions' means to undertake the task of transferring funds requested by customers utilizing the systems of fund transfer without transporting cash between distant traders, or to carry out such a task." Fund transfer services should be studied in relation to the "Kawase transaction", as they intend to transfer funds between users of the services. Pre-payment services are also studied in relation to the Kawase transaction, as they perform fund transfer functions if they provide services to transfer the records of funds (pre-payments) between users, and especially if they convert or return funds as well.

It is said that the regulations under the Banking Act should be maintained, as banks play an important role in maintaining the security of the payment and settlement systems and in keeping orderly credit conditions, and also contribute to the prevention of illegal actions by, for example, detecting underground banks, etc. It is also said, on the other hand, that the current Banking Act covers the Kawase transaction too widely and that it therefore prevents business entities from being reassured to offer a variety of new payment services, for fear of conflicting with it. It may be thought that anybody who is not a bank can offer fund transfer services if the scheme of the services is not designed against the purpose of the Banking Act.²⁵ There may be another opinion that the provision of proper regulatory controls will promote an appropriate use of the services and encourage competition with banks, resulting in increased convenience for users.

However, the prevention of money laundering has become more and more important in fund transfer operations, including Kawase transaction. For example, in the case of fee collection services, if a number of people can participate as recipients and utilize the service for their claims and payments, the risk that the service could be abused for money laundering through billing fraud, etc. may increase. It is necessary that the institutional arrangement for the services is designed to properly address this kind of concern.

Under the Capital Subscription Act, "deposit" is defined, in order to protect the general public,²⁶ as something with an economic nature similar to that of deposits under the Banking Act or other similar deposits, and nobody other than banks or entities which are specifically provided under the other laws is allowed to deal with deposits (Article 2 of the Capital Subscription Act). With fund transfer services, there may be a conflict with the Capital Subscription Act, as the service providers temporarily retain the funds to be delivered to the payees.²⁷ It could also be considered that the funds in the fund transfer services do not fall within the definition of deposit provided under the Capital

Subscription Act, as they are deposited temporarily at the service provider solely for transfer purposes but not for investment. However, there may be some cases where the service provider retains the funds for a relatively long period or where it agrees with users to pay back a bigger amount (increased through investment) than the funds originally paid, and these cases may be in conflict with the Capital Subscription Act. In pre-payment services, the prepaid funds may be problematic. As the pre-payment is made under a contract with the intention of clearing a certain range of debts (debts incurred in relation to payment for goods or services), it can be considered to fall outside the definition of deposit under the Act. However, there may be some cases where an prepaid certificate is sold by the issuer for less than par value and is paid back at par value. This case can be recognized as conflicting with the Capital Subscription Act.

As mentioned above, it can be considered, on the one hand, that new services are less likely to be in conflict with the Capital Subscription Act, and on the other hand, that there may be some cases, depending on their schemes, that conflict with the Act. In this respect, an institutional arrangement to promote new services that conform with the purpose of the Capital Subscription Act should be studied.

Finally, it is possible that the new payment services are provided across national borders.²⁸ The point was made that it is unclear in what cases business entities other than banks are allowed to provide services across borders. There are various opinions on this point, one of which is that Japanese law should be applicable if the service offered can be utilized by people living in Japan. As we discussed in the other points above, the possible institutional arrangement in relation to this point should also be studied, taking the purpose of the current laws into account.

4. Electronic money

Although a variety of services that are called electronic money are currently offered, there is no legal definition of electronic money in Japan. Therefore, it is suggested that the institutional arrangement for electronic money should be started with its definition.²⁹ On the other hand, it can also be considered that the definition of electronic money is simply a matter of whatever is called electronic money, and no conclusion can be drawn from the defined concept of electronic money. This opinion suggests that a different institutional arrangement should be studied based on differences in function, as payment instruments or payment media.

Assuming that "electronic money" refers to payment instrument that are neither cash nor bank deposits but are issued electronically, there are two categories: (i) that for which the issuer receives funds, such as cash or bank deposits (backed by funds) and (ii) that which is issued without receipt of any funds (not backed by funds). New types of credit cards that are limited to a small amount of

money are often called electronic money. However, in this report, these are not included in the definition of "electronic money" because credit cards are used as the payment media or the means of payment instruction.

As for "electronic money" backed by funds, if it is recorded on paper or an IC chip, it is regulated by the Prepaid certificate Act. If it is recorded on a server on the internet ("server type"), the current Act is not applicable. Although it is agreeable that such a type of "electronic money" be covered by the Act as well, it should be further considered whether or not the regulation by the current Act is sufficient. It can also be considered that if the server type of "electronic money" is cashable and refundable without any restriction, or if it accompanies the fund transfer service, the regulatory control currently provided by the Prepaid certificate Act does not seem to be sufficient, as these functions are similar to those of payment instrument, such as bank deposits. In this case, if the service provider is obliged to invest all received funds into risk-free assets (and liquid assets), it can also be considered not to function like bank deposits or require as strict controls as bank deposits.

As for "electronic money" that is not backed by funds, the same consideration should be given as for the point services mentioned below, for which the protection as payment instrument should be studied.

5. Point services

There are various point services, in which award credits are granted to customers in proportion to a certain percentage of the price of goods or services sold, or a certain amount of points are issued each time facilities are entered or services are used. A wide range of goods are available through using points, such as giveaways obtained in exchange for points, goods purchased at discount, prepaid certificates, cash or depository claims obtained by points, etc. Furthermore, services are provided for exchanging points. As points are increasingly issued and administered electronically, they are not only used for receiving giveaways, etc. but also for payment. Therefore, point services should be studied in the context of payment and settlement systems.

Paying attention to whether the users pay for points, point services can be regarded as pre-payment services if the users pay the price of points. In this case, measures such as protection of users may be required. If the users do not pay for points and they are given as giveaways or free gifts, the protection of users and other measures may not necessarily be studied. However, it can also be considered that even if the points are given as giveaways or free gifts, the protection of users, while not as strict as for pre-payment services, may be necessary if the points are taken into account by users when they make their decisions on purchasing the goods or services with which the points are associated. Therefore, it is necessary first to clarify in which cases payment is deemed to be made by users to obtain points.³¹ In particular, there is the issue of how we should understand the exchange of points, which has become more and more popular. In the case where both point (a) and point (b) are issued without charge and point (a) is exchanged into point (b), if we recognize that the user pays point (a) for point (b), the issuer of point (b) can be deemed to have issued its point with the price paid by the users. Another way of thinking is that, even though point (a) can be converted into point (b), this does not change the nature of point (a) as a giveaway or a free gift, and point (b) can also be considered as a giveaway or a free gift.

The next point we should focus on is whether the points may function as payment instrument. Protection as payment instrument may be needed if the points are convertible into a wide range of other points, and thus have a circulative and versatile nature.³² In connection with this, the reality may be that overly circulative and versatile points are not issued by service providers, since the points are issued for the purpose of retaining customers. Since they may not issue excessive points in their reasonable business behavior, the point services may appropriately be left to the service providers' voluntary controls, so that convenience and innovation are not prevented. On the other hand, it is possible that the point services may develop themselves further than is expected by the issuers, and acquire an extremely circulative and versatile nature.³³ If the points have such versatility that they can be converted into anything at any time, this means that they have a similar nature to currencies. Or, even though they are not entirely similar to currencies, the necessity of protecting users and the arrangement of rules may increase in proportion to the similarity of their characteristics with those of payment instrument. In particular, if the points are highly cashable, the remittance of money by transferring points is possible. In this case, they may need to be studied like as fund transfer services.

In addition to the point services mentioned above, there is the question of how we should understand the points used for electronic games (game points). In particular, internet game points have come out in foreign countries that can be used not only for games but also for purchasing goods or services on a certain website, or that can be converted into cash. Although serious problems do not appear to have happened yet, these game points may be more likely to be used as payment instrument than for general point services. A wide variety of uses of game points exists. There are some services in which certain game points are given at the time of monthly billing or where a service provider offers the points through a real money trade.³⁴ In these cases, it can be seen that the game points are issued to users in return for their payment of a certain amount. Thus, it may be necessary to study them as a type of pre-payment service.³⁵

Finally, it is important that an appropriate accounting standard³⁶ is established for the issuance of

points, and the accounting process should follow such a standard. It would be studied whether the accounting standard may have an effect on the financial nature of point services and whether an institutional arrangement for the preservation of assets, etc. may be required independently from the issue of the accounting process.

6. Other points

There is another point of discussion regarding how we should understand the new payment services in relation to the currency system or monetary policy.

We do not think that the payment services currently offered in the market conflict with the currency system. However, if the payment instrument offered by the new services in the future function as currencies, we may need to study an institutional arrangement, such as application of the Act on Regulation on Bills Similar to Banknotes,³⁷ in order to maintain confidence in the currency system.³⁸

We would think that the monetary policy can appropriately handle the distribution of payment instrument offered by new services. This point should also be one of the points of the ongoing discussions.

III. Payment Systems

1. Current landscape

Inter-bank payment is made through payment systems operated by the private sector. The main payment systems are the Zengin Data Telecommunication System(Zengin System) which handles domestic funds transfers among individuals and corporations (i.e. customers), the Foreign Exchange Yen Clearing System, which deals with the clearing of Japanese yen payments for cross-border financial transactions, and the bill and check clearing system, which carries out the clearing of bills and checks. Settlement of the balance of debts and credits between financial institutions, computed together through these private sector payment systems, is usually made through fund transfers between the deposits held by the financial institutions at the Bank of Japan, together with the settlement of other financial and securities transactions between them. Such payment is processed through the Bank of Japan Financial Network System (BOJ-NET) operated by the BOJ.

Among the payment systems in the private sector, the Zengin system performs the core function of payment between customers. Online operations were introduced in 1973 through the Zengin System. Since then, use of the system has continuously expanded³⁹ while the system has improved

its functionality,⁴⁰ such as the introduction of a new risk management measures.⁴¹ The Zengin System is one of only a few in the world that provides payment services to process the course of actions from accepting transfer requests made by customers anywhere in Japan to transmitting remittance information to receiving banks in real time, and to complete the accompanying settlement between banks on the same day.⁴² This high level of efficiency must be appreciated as one of the advantages of our country's payment systems, along with its high level of availability.⁴³

In addition to the above, the recent plans to improve the safety and efficiency of the systems are also appreciated. For example, it is planned, in coordination with the private sector and the Bank of Japan, to establish next generation RTGS⁴⁴ (Real Time Gross Settlement), including the introduction of RTGS for Zengin large-value fund transactions.

However, it can be pointed out that the payment systems in Japan, due to their firm domestic customer base and the language difference, do not place importance on interoperability with the payment systems in foreign countries and with the information systems of foreign financial institutions that utilize such payment systems. It may also be pointed out that, as a result of strong emphasis on the stable operation and security of the systems, new information and communication technologies that may contribute to reducing the development cost of systems have not been actively sought to be utilized. The needs of the payment systems' users have changed in line with recent changes in the external environment, such as technological innovation and companies' increased demand for efficient operation. Taking into account the development of new payment services as well, actions have to be taken to increase the convenience of services in response to changes in users' needs and to reduce the costs and fees of the payment services. Furthermore, against a background of bank mergers, the outsourcing of settlement processing, etc., the tendency for settlement to be concentrated in a few banks or completed within a bank has increased recently. It is necessary to study how to deal with these changes.

Payment systems in the private sector are currently operated by non-profit corporations (such as the Tokyo Bankers Association, which is an incorporated association and whose members are banks). Taking the public nature of the payment systems into consideration, it may be reasonable that they are operated by non-profit corporations. However, we should study whether the current organization and operation of the payment systems is really suitable, because this operation should require highly sophisticated expertise, such as risk control ability, and governance systems that enable quick responses to users' needs.

2. Points of discussion to strengthen the payment systems

Many proposals have been made for the strengthening of Japan's payment systems from the

viewpoint of making the nation's financial and capital markets more competitive in the world. Although strengthening the payment systems (i.e. improving the safety, efficiency and convenience) will not necessarily lead to a rise in Japan's international competitive position, it is true that our nation's financial and capital markets cannot become competitive without strengthening the payment systems.

It is expected that all the people concerned will, referring to various examples in foreign countries,⁴⁵ make their utmost effort to strengthen Japan's payment systems in such a way that the systems may be utilized as a common infrastructure in the Asian region.

More specifically, the following points need to be studied:

(1) Internationalization and standardization

System development for the payment systems in Japan has focused on, so to say, domestic standardization, such as unique telecommunication protocols and telecommunication message formats that respond to domestic banks' needs. However, along with the recent ongoing internationalization of the financial and capital markets, the adoption of general and flexible telecommunication protocols and telecommunication message formats that conform to international standards has become increasingly important to our strategy of strengthening the systems, as it promotes the smooth access of a wide range of market participants to Japan's payment systems, including foreign customers.⁴⁶ Adoption of the international standards on top of the well-developed domestic standards may contribute to the smooth handling of new financial instruments and services and to the coordinated link with securities settlement.

In addition, as information and communication technologies have developed noticeably in recent years, a foundation is being prepared on which new fundamental technologies, primarily internet-related, are utilized to efficiently develop the computer systems for payment systems while maintaining the systems' security.

In order to enable the smooth access of a variety of market participants to Japan's payment systems and to promote the efficiency of those systems in line with the trend toward open system architecture, we should consider actively introducing standardized internet technology (TCP/IP, etc.) and international standards (ISO 20022, etc.) to satisfy diverse requirements while ensuring the safety of the systems.⁴⁷

(2) Response to diversified customers' needs

The payment systems in foreign countries offer advanced services in order to contribute to corporations' efforts in sophisticated financial management.⁴⁸ In Japan, it is advisable to study, on the basis of the current status of payment systems, whether it is possible to provide corporations with more value-added services using the network of payment systems in order to contribute to the corporations' efforts.⁴⁹

In addition, since, for example, internet banking has become more popular and the operating time of cash dispensers/ATMs have been extended, an investigation is expected, recognizing customers' needs, as to whether demand may exist to extend the operating time of current payment systems⁵⁰ or whether any value-added services, such as quick confirmation of receipt for customers,⁵¹ are demanded.

Besides, the Zengin System has been renewed approximately once every eight years. At the moment, plans are ongoing to develop the next generation system (the 6^{th} Zengin System), replacing the current system, which will cease operation in 2011. The development study is required to accommodate the international standards and diversified customers' needs mentioned above, in addition to the basic functionalities of stable and low-cost operations. It is also expected that the method of partial modification of the systems will be adopted and the system development cycles will be reduced in the future.

(3) Operations of payment systems

The Zengin System is operated by a non-profit corporation, and its substantial organizational controls are assumed by the managing banks. People ask various questions, such as whether these types of organizational controls⁵² may hinder the continuous and strategic development of the system, whether proper governance may not be implemented to enable quick responses to customers' needs, and whether it cannot be sufficiently verified whether the development and maintenance of the information system is carried out properly or if the system ensures a high level of development efficiency.⁵³ It is important to study, while responding to these questions, what the desirable organizations and controls should be to provide better operation of the payment systems.

The operating entities of the payment systems in the private sector perform the role of a clearing house, which undertakes debts and credits incurred by two or more banks in connection with settlements between customers. Since the payment risks incurred separately by each of the participants are accumulated by the clearing house, it is important that its rules and procedures should be legally enforceable and that their consequences should be predictable.⁵⁴ How to enhance the legal certainty further in order to secure the effect of clearing made by the clearing house should be studied.

As mentioned above, the operating entities of the private sector payment systems are performing extremely important functions. Therefore, the organizations and controls required for these entities should be studied, from the viewpoint of securing their public nature and supervising them properly, and taking the operating entities in foreign countries and those of the securities settlement systems as references.

Finally, risk management should also be studied in order to reduce the payment risk that may be caused by the recent tendency toward the concentration of settlement in a few banks and the internalization of settlements within banks.

(4) Business continuity management

Since the synchronized terrorist attacks in September 2001 in the United States, business continuity management has been repeatedly emphasized. It is important to make an arrangement for this. Internationally, the Joint Forum of the Basel Committee on Banking Supervision, whose members are the major countries' supervising organizations for banking, securities and insurance companies, published its report "High-level principles for business continuity," in which the importance of business continuity management is advocated by stating that the critical service providers of the financial systems (such as payment systems, etc.) are required to prepare high-level business continuity management against major disruptions of operations.⁵⁵

Although various actions⁵⁶ have been taken by the relevant persons in Japan, it is necessary to strengthen business continuity management further, with some people pointing out that measures should be taken to fix the target time to recover the major operations of banks and other institutions, to secure the human and other resources for recovery, to reinforce emergency drills, etc.⁵⁷

IV. Securities Settlement Systems

1. Current landscape

In securities transactions, a series of handling processes are involved, including the sales and purchase order, execution of the transaction, matching of transaction data, and payment and settlement (delivery of securities). In Japan, securities settlement is undertaken by the Bank of Japan for government bonds and by the Japan Securities Depository Center for stocks, general debentures (corporate bonds, local bonds, government guaranteed bonds, etc.), short-term corporate bonds (electronic CP), etc. Payment is undertaken by the financial instruments clearing houses, and different clearing houses carry out the payment for government bond transactions, stock transactions

through stock exchanges and stock transactions between the securities companies and customers.⁵⁸ Securities settlement, in principle accompanies the delivery of funds which is completed through the payment systems.

In addition, securities transactions involve the custody and administration of securities and the delivery of dividends, principals and interests, etc. These activities are carried out by the administrators of corporate bonds, the custodian banks⁵⁹ who are the standing proxy and other entities.

In the progressing globalization of securities transactions, the improvement of the security, efficiency and convenience of the securities settlement systems has been a critical issue to be resolved in order to increase the international competitiveness of Japan's financial and capital markets. The Report of the Financial System Council in 2000,etc, pointed out that the problems of Japan's securities settlement systems lie in the fragmented settlement systems, delay in implementing paperless operation, delay in computerization, non-implementation of DVP (Delivery Versus Payment),⁶⁰ etc.⁶¹ Concrete counter-measures against these problems are proposed, such as integrated legislation on securities settlement, implementation of STP (Straight Through Processing),⁶² shortening of the settlement period, implementation of DVP, smooth settlement of cross-border transactions, etc.⁶³

In response to these proposals, legislation on securities settlement has been developed since 2001. The Act on Transfer of Bonds, Stocks, etc. adopted in 2004 realized the integrated paperless operation of valuable securities including stocks, which is more advanced than those in other countries.⁶⁴ The range of DVP operations, which had already covered government bonds and registered corporate bonds, has been expanded to include short-term corporate bonds, general debentures, stocks and investment trusts; thus, the DVP covers all main valuable securities.⁶⁵

However, other subjects, such as the implementation of STP, shortening of the settlement period and smooth settlement of cross-border transactions, have yet to be achieved.

2. Points of discussion to strengthen the securities settlement systems

Taking into account the further progress of information and communication technologies and changes of circumstances, such as the planned implementation of completely paperless stock transactions in January 2009, it is worth identifying the points of discussion to strengthen the securities settlement systems as follows:

(1) Implementation of STP

It is important to implement STP, which provides efficient processing of a series of securities transactions, in order to reduce the risks and costs inherent in securities settlement. For the promotion of STP, the business entities engaging in securities settlement, such as financial instruments firms, would be required to review their business flows and modify their computer systems. In order to motivate the business entities to take proactive actions for the promotion of STP, interoperability and standardization are of critical importance to avoid double investments and achieve cost reductions in the medium and long-term.

As securities settlement involves more cross-border transactions than in payment, it is more important to secure the interoperability and standardization of the securities settlement systems with the systems of overseas countries and the information systems of foreign financial institutions. For this reason, in the private sector, international standardization has been enforced at an early stage, such as the standardization of the coding system and the telecommunication message formats used in securities transactions.⁶⁶ Use of these international standards in the securities settlement systems has been recommended by the national and international securities supervisory authorities.⁶⁷

In the process of securities transactions, large amounts of a variety of attribute data pertaining to securities are exchanged between the parties to the transaction. Such attribute data should be managed consistently not only for the whole process of securities settlement but also over the entire life cycle of the securities, from their issue to their redemption. For this reason, it is indispensable for the implementation of STP that the internationally-standardized coding system and telecommunication message format are used, and thus the securities-related data including the attribute data is utilized efficiently.⁶⁸ Particularly in Japan, there is the possibility that the implementation of STP may significantly increase the efficiency of the processing of transactions, as paperless transactions, which has already been implemented for a whole range of securities under the unified legislation of securities settlement, can contribute to promoting the efficient use of securities-related data.

The development of international standardization of coding systems and telecommunication message formats has recently been moving beyond the domain of securities and banking businesses. For example, ISO 20022, the standard designed to increase the interoperability of information systems between financial companies and their customers, etc., can provide an integrated telecommunication message format framework covering a whole range of financial businesses.⁶⁹ Appropriate use of these international standards not only contributes to the increased efficiency of the securities settlement systems, but may also bring further efficiency to the entire payment and settlement systems as they may effect high level coordination between the securities settlement systems.

If STP is implemented, ensuring interoperability and adopting standards, it will not only

strengthen the securities settlement systems but also provide financial instruments firms and other entities with efficiency in a wide range of their businesses, as well as possible cost reductions. All persons involved should tackle the issue of STP, recognizing its potential as mentioned above.

An international telecommunication message format standard has recently been established to cover derivative transactions. If STP is implemented by securing interoperability and adopting standards and covers a wide range of financial and capital transaction settlements, including derivative transactions, it will contribute to the development of Japan's finance and capital markets.

(2) Shortening of settlement period

By implementing DVP, situations where payment is not made despite the delivery of securities, or securities are not delivered despite payment for the securities, can be prevented. However, even if DVP is implemented, the settlement may not be completed if either the securities or the funds are not presented on the settlement date, and the parties to the transaction may suffer damages as a result.⁷⁰ The longer the period between the transaction and the settlement (i.e. the settlement period), the more outstanding transactions remain, and the greater the risk of damages. Therefore, the safety of securities transactions can effectively be ensured by shortening the settlement period. In addition, the shortening of the settlement period can satisfy the parties' needs for earlier capitalization and securitization transactions, and can contribute to activating short-term finance using government bonds, etc.

Contrary to the above, the shortening of the settlement period may increase the operational risk incurred in the handling process or enhance the possibility of a fail.⁷¹ Furthermore, the factors preventing the shortening of the settlement period may differ according to the kinds of securities, the types of transactions, etc.⁷²

Having studied the accumulated results of past discussions,⁷³ the points of discussion for shortening the settlement period of stocks and of government bonds can be presented separately as follows:

a. Settlement of stocks

Stock transactions are generally made through the brokerage of financial instruments traders who participate in the transactions through stock exchanges. Therefore, in considering the shortening of the settlement period, we should study the settlement of stock exchange transactions between traders and the settlement of transactions between traders and customers (investors) separately.

In transactions between traders through the stock exchanges, as the STP process has been developed from order to settlement, there are not so many issues to be overcome for shortening the settlement period. However, transaction correction is currently allowed to be completed by T+2 days, and volume fixing of standardized margin trading is done on T+1 day. In order to shorten the settlement period, it may be necessary to review the flow of these business processes and to modify the computer systems.⁷⁴

In transactions between traders and customers, although transactions with residents, such as corporate investors, are generally STP-enabled from trade matching to settlement,⁷⁵ STP has not been well developed for transactions with non-residents.⁷⁶ Therefore, the promotion of STP in transactions with non-residents, which constitute a major part of stock transactions,⁷⁷ is the main issue in shortening the settlement period.⁷⁸

It is pointed out that the market participants are not positive toward shortening the settlement period, as it may increase the possibility of a fail. For transactions between traders through the exchanges, rules that take fails into account are being developed. However, for transactions between traders and customers, rules on how to deal with fails have not made much progress. Thus, the establishment of rules to handle fails may be the basis on which the shortening of the settlement period progresses. Development of a general lending stock market may need to be studied as it could be utilized as one of the tools to cover fails.

T+3 day settlement is the mainstream of stock transaction settlement not only in Japan but also in major foreign countries such as the UK and the US. Efforts had been made to achieve T+1 day settlement in the US.⁷⁹ However, the development of T+1 day settlement has been slowed down because of the synchronized terrorist attacks in September 2001, which reminded people to take into account the operational risks that accompany the shortening of the settlement period. Another reason for slowing down the discussion is that investment in computer systems has reduced against the background of a downturn in the market environment.

Many issues remain to be solved for the shortening of the settlement period for stock transactions. All the relevant people would be required to exert their utmost effort to achieve this, taking the developments in foreign countries into careful consideration.

b. Settlement of government bonds

Most government bond transactions are done through negotiated transactions, mainly by financial instruments traders and corporate investors such as banks. As for transactions between residents, the processes of matching and netting are interconnected and the STP process is implemented up to the settlement between participants in the government bonds clearing house.⁸⁰ However, STP is not available for transactions with non-participants.⁸¹ The same applies to transactions with non-residents.

The issue in transactions between residents is that STP should be promoted for transactions with non-participants in the government bonds clearing house and that the handling process from trade matching to settlement should thereby be made quicker. To achieve this, measures such as to promote market players' participation in the government bonds clearing house should be studied. The implementation of STP for transactions with non-residents should also be studied, even though the amount of non-residents' government bond transactions is relatively small.⁸²

Like stock transactions, the shortening of the settlement period in government bond transactions may result in the increased possibility of fails. Therefore, it is necessary to study the fail rule or fail practice or to develop the repo market,⁸³ which can be utilized as one of the tools of cover for fails.⁸⁴

In government bond transactions, T+1 day settlement is the standard in the UK and the US, and T+2 day settlement in Germany. The persons involved should make their utmost effort to overcome the difficulties in shortening the settlement period for government bonds in Japan as soon as possible.

(3) Operation of securities settlement systems

It is important to attract foreign investment in Japan and to promote overseas investment from Japan for the development of the country's financial and capital markets, and to expand the base of market participants. The exchanges in Japan are trying to broaden the tradable financial instruments and coordination with foreign exchanges in order to activate cross-border transactions further. In addition, they are making efforts to deal with more sophisticated transactions, such as algorithmic trading.⁸⁵ To improve the exchanges' functions further, it is necessary to enhance the functions of clearing and settlement simultaneously.

International coordination with clearing and settlement institutions, which is raised as an issue to ensure the smooth settlement of cross-border transactions, can be considered as one of the measures for improving the clearing and settlement functions in this country. By mutually opening the accounts in Japan's clearing and settlement institutions and in those of foreign countries, the clearing and settlement can proceed smoothly for cross-border transactions of a wide range of financial instruments. Continuous efforts are currently required to enhance international coordination with the clearing and settlement institutions in foreign countries.⁸⁶

Other points to be studied concerning clearing and settlement institutions are that the customers' needs have to be properly recognized and that appropriate operation and administration should be implemented from the viewpoint of risk management in order to increase functionality. For example, some of the foreign clearing and settlement institutions can handle not only the custody and transfer of securities but also a wide range of businesses associated with securities transactions, including payment of dividends, principals and interests, lending of securities, loans on securities collateral,

asset management, etc.⁸⁷ If Japan's clearing and settlement institutions are able to handle these businesses⁸⁸ and thereby increase their convenience, they will be able to respond to users' various needs and to promote efficient coordination with foreign clearing and settlement institutions.⁸⁹ The custodian banks in Japan perform the role of storing the domestic stocks owned by foreign investors. The operation and administration of custodian banks as well as that of clearing and settlement institutions may need to be reviewed.⁹⁰

V Closing Remarks

In this Study Group, we started with a discussion on new payment services, which have been growing rapidly recently, and continued our discussion on payment systems and securities settlement systems, of which the need to enhance international competitiveness has repeatedly been raised.

This Interim Summary is intended to present the focal points of our discussion so that the discussions and studies by the people concerned can be accelerated in order to promote safe and convenient new payment services and to improve the security, efficiency and convenience of the payment and settlement systems. Our discussion did not go into details on all the focal points nor cover all the related issues. We hope, nonetheless, that this report will contribute in a concrete manner to the studies of the people concerned with each of the points presented herein.

Our discussion did not cover some settlements, such as those using factoring or netting, which are widely utilized between corporations. It may be necessary to stimulate discussion on such settlements. As an electronically recorded monetary claim system will be established and settlement using electronically recorded monetary claim will become possible in the near future, discussion on this new media of settlement should also be initiated.⁹¹ In addition, J-Debit has recently started to be used for electronic fund transfers between banks. Thus, there are many issues we should continue to study. This report merely presents an interim summary of the relevant points, and we would like to continue comprehensive discussions on the wide range of issues related to payment and settlement when the necessity arises.

² "Banks" in this report does not mean what is provided under the Banking Act, but is meant to include deposit-handling financial institutions that accept demand deposits from a wide range of customers and provide customers with commercial loans and fund transfer services ("Kawase transactions").

³ Ways of completing payment other than by booking the transfer of deposits in BOJ accounts can be, for example, payment made between banks in relation to bill clearing by the transfer of deposits in current accounts at the managing banks of the bill clearing house.

⁴ Wholesale payment other than payment between banks includes, for example, payment by deposits in BOJ accounts between financial instruments traders following their securities transactions.

⁵ "Settlement" is made by delivery of cash, transfer of deposits, setoff, etc. The objects delivered for settlement are called "payment media." Bills, checks, prepaid certificates etc. used for the transfer of payment media are called "payment instruments." In general, "payment" means to pay and deliver money (the Japanese language dictionary (Kojien)). In this report, however, "payment" means the delivery or offer of "payment media" or "payment instruments." When payment is made using electronic methods, this is called "electronic payment service." One of the examples of electronic payment services is a service in which monetary value electronically recorded on a server is transferred using the IC chip installed in an prepaid certificate or through the internet when the issuer of such a certificate (or its member shop) delivers goods or services.

⁶ For example, the former Ministry of Finance set up the "Council on Electronic Money and Electronic Payment" on July 10th, 1996 and the "Council for Development of Electronic Money and Electronic Payment" on October 7th, 1997, and the issues of electronic money and electronic payment were discussed in these groups. Meanwhile, the Foreign Exchange and Foreign Trade Act was amended in 1998 to stipulate provisions for means of electronic payment (Article 6 of that Act).

⁷ The report "Issues for Development of New Electronic Payment Services (Chairman's Notes)" of April 26th, 2006 (Working Group on Innovation of Information Technologies and Financial System ("ITWG"), Sectional Committee on Financial System, Financial System Council) has listed the "points to be noted concerning the service providers of electronic payment services, from the viewpoint of protection of users." The report has also sorted out the "subjects to be studied by the government in the next few years in order that a variety of services are developed by service providers in the private sector in response to users' needs and that users are secure in using such services."

⁸ "Custody & book-entry transfer systems" are the mechanism where securities are held centrally by the depositary organization and the delivery of securities does not take place physically, but is processed by a book-entry transfer in the accounts at such a depository organization or of the participants in such an organization.

⁹ With the implementation of the "book-entry transfer system," the issuance of securities certificates is not required. In this system, the transfer of rights is made electronically by recording increases and decreases of the balance in the transfer account books held by the book-entry transfer institutions, financial instruments firms, etc.

¹ For example, the "Payment and Settlement Systems Report 2005" (issued by the Bank of Japan in March 2006) mentions that "most of the economic transactions carried out every day can be regarded as an agreement made by the parties to the transaction to make an exchange of 'money', 'goods' or 'services'. 'Settlement' means that the debts and credits generated through the economic transaction are terminated by actual delivery of 'money', 'goods' or 'services'. Among these, settlement made by the delivery of 'money' is referred to as payment, and settlement made by the delivery of securities that is accompanied by the sale or purchase of stocks, bonds, etc. is referred to as securities settlement. 'Payment and settlement systems' are the arrangement that enables these 'settlements' to take place in an organized manner, in accordance with certain standardized procedures followed by a number of relevant parties."

¹⁰ "Council on Economic and Fiscal Policy: The First Report of the Expert Committee on Reforms Addressing Globalization" (May 8th, 2007)

"1.(4) Strategically strengthening payment and settlement systems

- (i) By efficiently functioning as a way of integrating the settlements of funds and securities, payment and settlement systems play an important infrastructure role that contributes to the reliability and stability of the economy as a whole. They also have latent possibilities as a financial business. The presence of stable and efficient settlement systems that also allow smooth access to foreign markets are one of the most basic requisite[s] for any international financial center. The strategic strengthening of payment and settlement systems should be carried out swiftly: moves must be made towards the international harmonization of payment and settlement systems with responses to English language notation and SWIFT; the settlement times must be reduced (the time for settlement of government bonds and securities transactions, which is currently three days after the day of business, to one day after the day of business); ease of use must be improved (with the realization of financial EDI); and crisis management should be strengthened (by developing backup systems and BCPs).
- (ii) The ideal way of collaboration among the responsible parties should be clarified in order to appropriately monitor payment and settlement systems, from the point of view of boosting the risk management of payment and settlement systems. In terms of securing decision-making and appropriate governance at the entities managing payment and settlement systems, their autonomy and responsibility should be strengthened (by, for example, making them joint stock corporations).
- (iii) In order to ensure smooth transactions with overseas countries, international collaboration between payment and settlement bodies should be improved."

"(The First) Interim Summary of the Points of Discussion on the Internationalization of Japan's Financial and Capital Markets," Financial System Council (June 13th, 2007)

"II. Points to be studied

2. Infrastructure including institutional systems

(2) Other institutional infrastructure

• Payment and settlement systems

Payment and settlement systems are the important infrastructure supporting the financial and capital markets. Their security, efficiency and convenience are one of the most crucial factors to determine the international competitiveness of the financial and capital markets.

Actions have been taken to improve the payment and settlement systems, such as the implementation of next generation RTGS (Real Time Gross Settlement) in the BOJ-NET to improve the payment systems, paperless operation (such as without stock certificates) in securities settlement, etc. In order to raise the international competitiveness of Japan's financial and capital markets, it is important to further improve the security, efficiency and convenience of the systems that respond to the development of sophisticated information & communication technologies, increase cross-border financial and capital transactions, etc.

It is expected that the relevant people will take proactive and positive action to strengthen the payment and settlement systems. It is also necessary to continue technical studies from a wide range of viewpoints with respect to the various issues of the payment and settlement systems."

"Economic and Fiscal Reform 2007 - Basic Policies 2007 - Scenario toward the "Beautiful Country"" Council on Economic and Fiscal Policy (June 19th, 2007)

"Chapter 2. Enhancing Growth Potential

2. Reforms Addressing Globalization

For building an open country, promote the 'Asian gateway program.' Taking maximum advantage of globalization, bring the vitality of Asian countries into our country's growth. For this purpose, take comprehensive action, including strengthening of economic cooperation, promoting reform of the financial and capital markets, liberalization of aviation, etc. [Points of reform]

2. For strengthening the financial and capital market, establish a comprehensive reform plan including reforms in (i) market infrastructure, such as exchanges (reform of the 'field'), (ii) financial institutions and corporate investors (reform of the 'players') and (iii) market surveillance (reform of the 'referee'). In addition, promote the sophisticated urban functions required for an international financial center."

¹¹ Payment services with deferred payment have recently been developed up to a certain small amount of payment. This Study Group does not cover this kind of services, as they are not different from existing credit card services.

 12 Although the "remittance" is not always used for the purpose of payment – for example, a remittance made by a parent to transfer money to his or her child – in most cases it is used for payment, and therefore remittance services are included in this report as a type of payment service. Under Japanese law, remittance services fall under the category of "Kawase transaction," which only banks are permitted to offer. In this report, remittance services are meant to include the kinds of remittance services that are provided in foreign countries, even though such services are offered only by banks in Japan.

¹³ In the "Report of the Study Group on Prepaid Cards, etc." (February 17th, 1989), it is determined that third-party-type prepaid cards "have a function very similar to that of payment through current accounts" and that "the issuers of third-party-type prepaid cards resemble financial institutions in this respect."

¹⁴ When the new institutional arrangement is to be implemented, the existing arrangement should also be reviewed properly.

¹⁵ On this point, the Chairman of the ITWG's notes state that "it is necessary to develop an appropriate environment where users can enjoy the convenience and security of the new services and where private sector service providers can develop a variety of services through their own originality and ingenuity in response to users' needs." It is further stated, from this viewpoint, that the government should proceed with its studies on the institutional arrangement, "keeping in mind that it should not hinder the development of services that may originate from the innovation of information technologies." Also, in the First Report of the Expert Committee on Reforms Addressing Globalization of the Council on Economic and Fiscal Policy, it is pointed out that "[a]s financial transactions and corporate activities become more diverse and sophisticated, there are stronger needs for new financial services, such as a narrow bank (a bank specializing in payment operations) and a captive insurance company, that were not foreseen under existing industry laws. Measures should be taken to establish special simplified licenses, distinct from full licenses, to engage in banking and insurance, thereby enabling new financial activities to take place."

¹⁶ It is normal practice in the contract of an fee collection service between an fee collection agent and a recipient that the users of the service are not necessarily protected from the risk of double-payment in case the agent goes bankrupt.

¹⁷ Fee collection services were initially limited to services, such as receiving the payment of fees for public utilities. The services have now been developed to include such services as accepting various payments on behalf of an unspecified number of recipients.

¹⁸ The "systemic risk" for banks is defined as "the possibility that problems in a payment and settlement system or at one financial institution participating in a payment and settlement system pose risks to other systems, to the nation's payment and settlement system as a whole, or to the financial system, through a chain of settlement failures or loss of confidence." ("Functions and Operations of the Bank of Japan (Supplement)," edited by Institute for Monetary and Economic Studies, Bank of Japan.)

¹⁹ No protection is provided for the member shops under the current Prepaid Certificate Act .

 20 If the transportation of cash is entrusted with the company and is carried out in a manner where the cash is identified, preventing any mixture with other claims of the company, then the security of funds in case of the company's bankruptcy cannot be an issue. This is the reason why the Banking Act is deemed inapplicable to the direct transportation of cash.

²¹ For example, in fee collection services, there are actual cases where the funds received by the delegated agents are paid to the recipients considerably late after the delegated agents' receipt, e.g. more than a

month later (in other words, the delegated agents retain the funds for more than a month).

²² According to the Chairman of the ITWG's notes, "an opinion is presented that if the service deals only with a small amount of funds and is offered to such an extent that it does not cause any serious impact on the stability of payment systems, such a service may be differentiated from other payment services and handled separately." At the moment, Edy, for example, fixes the maximum amount of services.

²³ The Prepaid Certificate Act provides different requirements depending on whether the certificates are own-issue-type or third-party-type and whether the credit balance is more than 10 million yen or not.

²⁴ Decision of the Third Petty Bench of the Supreme Court of Japan on March 12th, 2001

²⁵ The tenor of the "Kawase transaction" under the Banking Act is explained as follows: "The reason why the Banking Act defines 'banking business' only as business operations that carry out Kawase transaction is mainly because of the historical reason that the banking systems originated from the exchange. Another reason may be that the Kawase transaction is economically important in mediating the delivery of funds in long-distance trades and also in the accompanying relationship of trust. Taking these factors into account, the Kawase transaction is defined as constituting banking business." "A relationship of trust develops with customers when making Kawase transactions with them. If the entity carrying out the Kawase transaction as its business does not provide sufficient confidence, the users of the Kawase transactions are placed on shaky ground and may be insufficiently protected." "The reason why the Banking Act restricts the business of Kawase transaction only to banks is that it relies on the banks' credit functions, and thus decides to leave the Kawase transaction only with them." (Page 152 of "Detailed Commentary on the Banking Act" by Yoshiaki Koyama)

²⁶ The purpose of Article 2 of the Capital Subscription Act is interpreted as follows: "Credit operations, such as accepting deposits, are of a strong public nature if they are open to and receive funds from the general public. Therefore, the operators require firm security for the fulfillment of contracts. Once the credit operations go bankrupt, not only the general public as creditors may suffer unpredictable damages, but also the credit systems in society and the economic order may be exposed to risk of confusion due to the expansion of damages from the general public to those who have transactions with them. If such operations are left open to everybody, it is against the protection of the general public, who make the deposits, and is not compatible with the maintenance and development of social credit systems and economic order. Therefore, these operations can only be carried out by the financial institutions and other entities that are licensed or approved under the Banking Act or other laws, and it is prohibited that other entities perform such operations." (Judgment of the Grand Bench of the Supreme Court of Japan on April 26th, 1961) In addition, "the monies are deemed as deposits under the same Article if they are accepted from an unspecified number of people with the promise that an amount of money equal to or exceeding the amount of principal be paid back on maturity, regardless of whether they are called capital subscriptions, loans, etc." (Judgment of the First Petty Bench of the Supreme Court of Japan on August 30th, 1956)

²⁷ Depending on the authorization to the service providers to receive funds or on the timing of the transfer of funds, a depositary relationship may occur not only between the service providers and the payers but also between the service providers and the payees.

²⁸ One example is fund transfer services provided by a foreign operator through the internet in which fund transfers are made between users in Japan and foreign users, or between users who are both in Japan. Another example is when a domestic operator provides a fund transfer service in which the funds are transferred between users who are both outside Japan. As for pre-payment services, examples may be when prepaid certificates issued by a foreign entity are used in Japan or used at member shops through the internet, or when prepaid certificates issued by a domestic provider are used in foreign member shops.

²⁹ The following is a list of definitions of electronic money:

• "Digital data that has monetary value in computerized payment systems." (Report of the Committee on Electronic Money and Electronic Payment, dated May 23rd, 1997)

- "Electronic money refers to "stored value" or prepaid payment mechanisms for executing payments via point of sale terminals, direct transfers between two devices, or over open computer networks such as the Internet." ("Risk management for erectronic banking and electronic money activities", Basel Committee on Banking Supervision, the original text)
- "System in which the payment is made by exchanging or renewing between users the electromagnetic records that are issued in accordance with the amount of funds provided by the users, or such electromagnetic records themselves." (Report of the Committee on Improvement of Electronic Money and Electronic Payment, dated June 17th, 1998)
 - "electronic money' shall mean monetary value as represented by a claim on the issuer which is: (i) stored on an electronic device;
 - (ii) issued on receipt of funds of an amount not less in value than the monetary value issued;
 - (iii) accepted as means of payment by undertakings other than the issuer."
 - (Paragraph 3(b) of Article 1 of the Electronic Money Directive of the EC, the original text)
- "Proprietary nature inputted in vouchers, electronic equipment or other objects by electromagnetic devices, which may be used for mutual payment among unspecified or many persons (limited to those of which the status of use is specified by Cabinet Order as approximate to that of a currency)." (Item 7(c) of Paragraph 1 of Article 6 of the Foreign Exchange and Foreign Trade Act. The Cabinet Order has not been enacted yet.)

³⁰ Banks can be divided by function into two categories, one of which offer payment services only and the other of which make loans as well (a loan company). The former can be called a narrow bank (a bank in the narrow meaning), and is also often called a core bank. Narrow banks are restricted to owning only risk-free assets (and liquid assets), and are subject to other strict controls, such as their assets being covered by deposit insurance. The advocates of narrow banks stress that, with the strict controls on these banks, the protection of the payment and settlement systems is secured. At the same time, they promote the deregulation and liberalization of loan companies. The concept of narrow banks was actively discussed and proposed in the 1930s after the Great Depression. A number of bankruptcies of banks in the 1980s revived the discussion on narrow banks, and it is asserted from time to time by supporters that they contribute to the stability of payment and settlement. In the Financial System Council's report "Measures for Ensuring the Stability of the Payment and Settlement Functions of Financial Institutions" (September 5th, 2002), it is pointed out that in order to provide an alternative to secure a safe means of payment and settlement, "the narrow bank account, based on the so-called narrow bank theory that is a scheme to protect 'payment and settlement deposits,' may be worth studying."

³¹ For example, if service provider (A) issues point (a) to service provider (B) in return for payment and service provider (B) distributes point (a) to users free of charge, the users are deemed to receive point (a) free of charge. It is the practice that the Advance Payment Certificate Act is not applicable to this kind of case.

 32 If the points are convertible, like securities or cash vouchers, without involving the issuer of such points, the service provider handling such conversion can be seen as a trader selling and purchasing them with charge. However, at the moment the electronic points offered in the market are converted with the issuers' involvement. For example, when the consumer exchanges point (a) for point (b), the issuer of point (b) obtains point (a) from such consumer and delivers him or her point (b), and is paid compensation equal to the value of point (a) by the issuer of point (a).

³³ Whether the point services are circulative or versatile can be decided by the range of goods or services offered, the ease of use of points, etc. The size of the services can also be the criteria, such as the number of users, amount of outstanding points, etc.

³⁴ Real money trade means to exchange virtual currencies and items obtained in online games for real currencies (such as Yen or Dollar). Online games in which the participant lives in a three-dimensional virtual space similar to the real world using an alter ego are provided on the internet across borders. In such games, the game currencies are used as if they were real currencies.

³⁵ Coins used for games are exempted from the current Prepaid certificate Act because they are used in

limited places, and for other reasons. If the Act is to be applicable to game points used on the internet, its applicability to current services may need to be reviewed as well.

³⁶ If a product is sold at the price of 100,000 Japanese Yen and points are given for 10% of that price (i.e. equivalent to 10,000 Japanese Yen), the following accountings are possible, among others: (i) 100,000 Yen is booked as sales and the amount (of points) expected to be used is booked as expenses, or (ii) 90,000 Yen is booked as sales and 10,000 Yen is booked as debt.

³⁷ Under the Act on Regulation on Bills Similar to Banknotes, the Minister of Finance may prohibit the issuance and circulation of "bills that have a fixed value not based on individual transactions, that have been issued in a large quantity in the same form and that have been deemed to have a similar use as banknotes" (Article 1 of the Act). The application of the Act is discussed in the "Report of the Study Group on Prepaid Cards, etc.," in which the old Ministry of Finance declared its opinion that the Ministry's control is exercised "on the basis of the concept of the function of currency (or banknotes), that in general they can be used as a means of payment or settlement wherever, by whoever and against whatever, and that any bills are not deemed similar to banknotes if they lack one of these three elements." The current Ministry of Finance has submitted an opinion similar to the above to the Headquarters for the Regional Revitalization on July 23rd, 2004.

³⁸ The "Report of the Committee on Electronic Money and Electronic Payment" mentions that "it is necessary to respond rigidly when the orderly monetary system is at risk because of the wide spread of electronic money."

³⁹ Domestic exchange transactions handled by the Zengin System totaled 67,512 thousand transactions when the system started in 1973, amounting to 63,369.1 billion yen. These had increased to 1,326,157 thousand transactions (an approximately 20-fold increase), amounting to 2,492,169.2 billion yen (an approximately 40-fold increase), in 2006. (Reported by the Japanese Bankers Association)

⁴⁰ Other improvements are as follows: In the Foreign Exchange Yen Clearing System, PVP (payment versus payment: conditional settlement between two currencies) is enabled and promoted by the establishment of the CLS (Continuous Linked Settlement) bank. In the bill and check clearing system, the electronically recorded credit system is introduced as a credit asset between corporations, which replaces bills.

⁴¹ The system has been changed in some respects. For example, based on the defaulters-pay principle, in case of a failure of settlement, the Tokyo Bankers Association, which obtains funds from the liquidity-supplying bank with the collateral of the defaulting bank, completes the settlement on the same day and repays the liquidity-supplying bank with the funds collected from the defaulting bank through the sale of collateral of that bank, etc. One of the other changes is that the central counter-party of the Zengin System has changed from the Bank of Japan to the Tokyo Bankers Association.

⁴² Very few countries provide similar payment systems, one example being Belgium.

⁴³ There has been no single case since the Zengin System began operation in 1973 where system trouble has made transfers or remittances unavailable.

⁴⁴ One of the plans that is being taken to establish next generation RTGS is that RTGS through current deposits at the BOJ will be enabled for FX yen transactions and large domestic transactions (more than 100 million yen per transaction as a criterion), which are currently handled in the accumulated settlement through payment systems operated by the private sector. In addition, it is also planned to introduce a liquidity saving function in RTGS settlement through current deposits at the BOJ.

⁴⁵ In Europe, for example, the SWIFT (Society for Worldwide Interbank Financial Telecommunication) network is utilized for payment systems, performing as the node of each country's payment systems in the European integration and supporting the European financial and capital markets.

⁴⁷ "TCP/IP" is a telecommunication protocol commonly used on the internet. It has become popular since it was adopted as the standard protocol for UNIX systems. It is widely used in the world as one of the protocols of computer networks.

"ISO 20022" is an international telecommunication message format standard used in financial operations. It is adopted by the Technical Committee of Financial Services of the International Organization for Standardization (ISO/TC68), in which the financial industries of many countries participate. The format is developed based on XML, which is superior in its generality and extensibility and is able to handle multiple languages. It also adopts other advanced fundamental technologies, enabling various improvements to increase the usability of communication messages for users.

⁴⁸ In the United States, for example, CHIPS and ACH (Automated Clearing House) have introduced the format in which remittance-related information including information on commercial distribution process can be sent. This can be used by corporations for their financial supply chain management.

⁴⁹ In the Zengin System, it is possible to carry a 20-digit matching key with the remittance data to verify the commercial data. However, it is pointed out that the matching key provided by the Zengin System is not fully utilized at the moment for verification in corporate payment practice. It is also pointed out that it is worth studying whether a variety of payment services can be provided through the existing CD/ATM networks.

⁵⁰ Although the Zengin System has the functionality to run 24 hours, under the current operation, it finishes sending and receiving electronic messages for transfers requested by customers in principle at 15:30. Based on the data transmitted by the Zengin System, the accumulated settlement is made through the BOJ-NET at 16:15. Therefore, the payments of customers' transfer requests made after 15:30 are processed on the next business day.

⁵¹ In addition, it is pointed out that cash cannot be withdrawn using debit cards issued in foreign countries at most CD/ATM in Japan, as Japanese banks have not adopted the specifications of the international debit card networks (Cirrus, PLUS, etc.) for their cash cards.

⁵² Although the supreme decision-making body of the non-profit corporation is the general assembly consisting of all members of the corporation, the operating entities of the payment systems in the private sector actually make their decisions on operational issues in their Operating Committees or Steering Committees, which consist of representatives elected by each business category.

⁵³ The Japanese Bankers Association has adopted a policy for the development and maintenance of the 6th Zengin System to introduce third-party evaluation, in order to ensure sufficient verification of the development and maintenance of the new system.

⁴⁶ In Europe, for example, efforts are being made to achieve the SEPA (Single Euro Payment Area) in order to fill the gaps of divergent retail payments (transfer, withdrawal from accounts, etc.) between the member states of the European Union. As a part of such efforts, the systems of retail payment, which have been divided into systems for the domestic market and for overseas, are being integrated. In addition, a policy has been adopted to introduce fundamental technologies with superior generality and flexibility, such as introducing standardized internet technology into the telecommunication protocol, and adopting international standards in the areas of telecommunication message format (ISO 20022), bank account numbers (IBAN (International Bank Account Number) ISO 13616) and the bank coding system (BIC (Bank Identifier Code) ISO 9362). In North America, ISO 20022 has been introduced in CLS, the multi-currency settlement system, which was established for the purpose of reducing the risk of FX settlement. The same standard is being considered for adoption in CHIPS (Clearing House Interbank Payments System), the payment system for large transactions operated by the private sector. Europeans and Americans, while actively adopting the international standards in their systems, contribute to standardization activities in which their domestic financial practices are reflected in international standards. It is expected in Japan that the people with practical knowledge should actively participate in and contribute to international standardization activities.

⁵⁴ The Report "Core Principles for Systemically Important Payment Systems" issued by the CPSS (Committee of Payment and Settlement Systems), consisting of the central banks of G10 countries, states that the systemically important payment systems "should have a well founded legal basis under all relevant jurisdictions" and that "the rules and procedures of a system should be enforceable and their consequences predictable." (the original text)

⁵⁵ Joint Forum "High-level principles for business continuity" in August 2006(the original text)

"Large value payment processing and securities settlement are examples of *critical services* in a financial system. A disruption of the services provided by these participants, for which there are no viable immediate substitutes in many cases, would have a cascading effect on the financial system. In addition, in some markets there may be *financial industry participants* whose inability to continue normal operations could, because of the significance of their role in those markets, affect other participants in those markets and thereby have a cascading effect on the financial system. For these *financial industry participants*, there is an inevitable step-up in their obligation to ensure a high degree of *resilience* in the event of a *major operational disruption*"

⁵⁶ Central Disaster Management Council, "Outline of measures against a possible inland earthquake in the Tokyo metropolitan district" (October 2005)

"Core economic function: Financial and settlement functions that have international importance are concentrated in the Tokyo metropolitan district. Therefore, if an earthquake occurs, measures should be taken to recover at least the important financial and settlement functions within a day by collecting the necessary number of people, changing over to backup systems and taking other necessary actions. Important announcements concerning finance and settlement must be sent out domestically and internationally so that the credit insecurity of Japan's financial and settlement functions can be eliminated or reduced."

Financial Services Agency, "Guideline on comprehensive supervision of major banks and other financial institutions (Main book)" (October 2007)

"III-6 Business Continuity Management (BCM)

III-6-1 Purposes

As the risks to which banks are exposed have recently diversified and become more complex and the management environment of the banks has been changing, including the development of computerization, the importance of crisis management has increased more and more, since a crisis may occur that cannot be dealt with by the usual risk management systems. It is especially important that the main banks and other financial institutions, which are concentrated in a limited area and which perform a fundamental role in Japan's financial systems, should take quick recovery measures when a crisis occurs and secure the continuation of minimum operations so that people's lives and the economy can be maintained with as little disturbance as possible. In order to achieve this, it is necessary for the main banks and other financial institutions to establish business continuity management (BCM) and to formulate a manual for crisis management (CM) and a business continuity plan (BCP) at a normal time.

It is noted that the main points of supervision concerning crisis management against reputations and systemic risks are provided separately, as they may have significant impact on the banks' cash management and on society."

Financial Services Agency, "Guideline on comprehensive supervision of financial institutions of small and medium size and local financial institutions (Main book)" (October 2007)

"II-3-7 Crisis management system

II-3-7-1 Purpose

As the risks to which banks are exposed have diversified and become more complex recently and the management environment of the banks has been changing, including the development of computerization, the importance of crisis management has increased more and more, since a crisis may occur that cannot be dealt with by the usual risk management systems. It is especially important that the banks, which operate community-based management, should react swiftly when a crisis occurs and send information to the local community. In order to achieve this, it is necessary for local banks to establish a crisis management system, including business continuity management (BCM), a manual for crisis management (CM) and a business continuity plan (BCP), at a normal time.

It is noted that the main points of supervision concerning crisis management against reputations and systemic risks are provided separately, as they may have significant impact on the banks' cash management and on society."

Financial Services Agency, "Guideline on comprehensive supervision of financial instruments traders" (August 2007)

"IV-3-1-5 Business Continuity Management (BCM)

(1) Purposes and measures

It is important that securities companies and other financial instruments traders, which perform an important role as intermediaries in the financial instruments market, should take quick recovery measures when a crisis occurs and secure the continuation of minimum operations so that people's lives and the economy can be maintained with as little disturbance as possible. In order to achieve this, it is necessary for the securities companies, etc. to establish business continuity management (BCM) and to formulate a manual for crisis management (CM) at a normal time."

⁵⁷ Bank of Japan "Payment and Settlement Systems Report 2006"

"In order to maintain financial and economic activities smoothly or with as little interruption as possible in case of a crisis, such as a disaster, it is important to maintain the stable operation of the payment and settlement systems and the networks of market participants ensuring the necessary market transactions, and thus to secure the functions of the financial market. Every market participant in the short-term finance, securities and foreign exchange markets has been strengthening their organization and operation to increase their business continuity ability at the time of a disaster. The matters they are tackling are, for example, how to share information among market participants at the time of a disaster, how to change the market practice into one suitable to a disaster situation (i.e. the change of transaction and settlement method, etc.), how to take decisions on such changes, how to inform each other of such changes, etc. The Bank of Japan participates in these activities from the viewpoint of maintaining smooth market transactions and efficient and safe payment and settlement systems at the time of a disaster, and supports the actions taken by participants in the respective markets. In addition to the above, business continuity management of financial institutions has steadily developed recently. They are identifying the important processes to be recovered quickly, prioritizing them, establishing backup facilities (such as a computer center and office), conducting periodic emergency training, etc. However, there is still no small number of issues to be addressed, such as fixing the target time to recover major operations, securing the human and other resources for recovery, reinforcing emergency drills, etc. The BOJ, from the viewpoint of strengthening the ability of entire financial systems to respond to disasters, will continue to discuss business continuity management with the financial institutions on the occasion of inspections, offsite monitoring, etc., and to enhance cooperation with them."

⁵⁸ In Japan, the payment processes are undertaken by the Japan Government Bond Clearing Corporation for government bond transactions, by the Japan Securities Clearing Corporation for stock transactions through stock exchanges and for future and option transactions listed in the Tokyo Stock Exchange, and by the JASDEC DVP Clearing Corporation for stock transactions between customers and securities companies. In addition, the Osaka Securities Exchange undertakes the settlement of future and option transactions listed in that Exchange, and the Tokyo Financial Exchange Inc. undertakes the settlement of transactions of market derivatives, such as interest rate futures transactions, etc.

⁵⁹ "Custodian bank" means banks and trust banks that take custody of securities and other financial instruments and administer them on behalf of others.

⁶⁰ DVP is the mechanism for securities settlement, in which the delivery of securities is made only if the corresponding transfer of funds is made.

⁶¹ Working Group on Reform of Securities Settlement Systems, First Subcommittee, Sectional Committee on Financial System, Financial System Council, "Reform of securities settlement systems toward the 21st century" (June 2000)

"2. Problems of current securities settlement systems

Current securities settlement systems in Japan have the following fundamental problems: First of all,

the operations of securities settlement are divided according to different kinds of securities under different legislation, and there are no unified regulatory rules. As a result, securities settlement institutions exist for each of the different securities, and they conduct settlement in accordance with their own rules and procedures. This is one of the reasons why securities settlement is very complex and inefficient (fragmented securities settlement systems).

Secondly, there are delays in implementing paperless operation in the distribution of securities, and in most cases, the transfer of claims requires the delivery of security certificates. Existing both paperless operation mechanisms, such as the book-entry transfer system for stock and government bonds (book-entry transferable JGB) and the registration system for corporate bonds, etc., have the problems mentioned below (delay in paperless operation from the viewpoint of efficient settlement).

Thirdly, there are delays in the computerization of various business processes, particularly STP operations, which inhibits the efficiency of businesses and the shortening of the settlement period (delay in computerization).

Fourthly, DVP, which is an effective means of reducing settlement risk, has not been implemented for some securities (non-implementation of DVP).

Due to these fundamental problems, Japan has failed to fully satisfy the G30/ISSA recommendations, which are recognized as the international standards of securities settlement."

The Securities Settlement Systems Reform Promotion Working Group, Committee for Reform of Securities Clearing and Settlement System, "Toward Japan's Securities Settlement Systems and Infrastructure Reform" (November 2002)

"Securities settlement in Japan currently has several problems: paperless settlement by the central securities depository (CSD) has not been fully implemented except for government bonds, and DVP settlement, which is implemented for every kind of securities in major European countries and the United States, has not been utilized for all financial instruments and transactions. Thus, there remain serious risks in securities settlement. Furthermore, with respect to the infrastructure for adopting STP in securities settlement – a precondition for shortening the settlement period – the accumulated matching system including matching of transactions and matching of settlements, which is indispensable for the implementation of STP, has been introduced only for transactions of stocks and some other securities. In addition, this matching infrastructure has not been fully utilized by corporate investors and asset management companies, and neither the matching of transactions for financial instruments other than stocks, etc. nor the computerized interconnection of the series of transactions from orders to settlement has yet been implemented."

⁶² "STP" is the seamless processing of a series of transactional steps starting with orders and ending at settlement, without involving human handling.

⁶³ Working Group on Reform of Securities Settlement Systems, First Subcommittee, Sectional Committee on Financial System, Financial System Council, "Reform of securities settlement systems toward the 21st century" (June 2000)

"4. Concrete measures for reform

In order to solve the current problems in the securities settlement systems and to achieve the purposes of the reform, the following concrete measures have to be taken:

(1) Introduction of integrated legislation on securities settlement

- (2) Implementation of STP
- (3) Implementation of DVP, etc.
- (4) Promotion of smooth settlement of cross-border transactions"

The Securities Settlement Systems Reform Promotion Working Group, Committee for Reform of Securities Clearing and Settlement System, "Toward Japan's Securities Settlement Systems and Infrastructure Reform" (November 2002)

"3.2 Concrete targets for reform of the securities settlement systems

The following three points are the concrete targets for reform of the securities settlement systems:

- (1) To implement paperless DVP settlement that is internationally competitive and the most advanced in the world
- (2) To implement STP that improves the efficiency of entire systems and enhances competitiveness

(3) To shorten the settlement period"

⁶⁴ Paperless operation has been implemented for short-term corporate bonds (CP) under the "Act on Transfer of Short-Term Bonds, etc." in 2001. Implementation for government bonds, general debentures, investment trusts, etc. has been made under the "Act on Transfer of Bonds, etc." in 2002 and, for stocks, under the "Act on Transfer of Bonds, Stocks, etc." in 2004.

⁶⁵ DVP was implemented first for government bonds in 1994, followed by general debentures (registered bonds) in 1998, stocks (transacted through the exchanges) in 2001, short-term corporate bonds in 2003, stocks (general book-entry transfer) in 2004, general debentures (transfer bonds) in 2006 and investment trusts in 2007.

⁶⁶ The international coding system standards are, for example, ISIN (International Securities Identification Number: ISO 6166), CFI (Classification of Financial Instruments: ISO 10962), etc. As for the international telecommunication message format standard, ISO 7775 was established in 1984 as the uniform format used for the cross-border delivery of securities, which was replaced by ISO 15022 (established in 1999) and then by the newest ISO 20022 (established in 2004), in line with technological innovations. In addition, there are several international standards concerning the formats of orders and execution of securities, one of which is formulated by FIX Protocol, an organization for standardization established by the financial institutions of Europe and America.

⁶⁷ CPSS/IOSCO (International Organization of Securities Commissions), "Recommendations for securities settlement systems" (November 2001, the original text)

"Recommendation 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."

G30 (Group of Thirty) recommendation in "Clearance and Settlement Systems in the World's Securities Markets" (the original text) (March 1989)

"9. Each country should adopt the standard for securities message developed by the International Organization for Standardization(ISO Standard 7775). In particular, countries should adopt the ISIN numbering system for securities issues as defined in the ISO Standard 6166, at least for cross border transactions. These standards should be universally applied by 1992."

G30 recommendation in "Global Clearing and Settlement: A plan of action" (the original text) (January 2003)

"2. Harmonize messaging standards and communication protocols."

 68 The computerization of business processes has recently become widespread in companies in the field of corporate actions – such as the execution of shareholders' voting rights, payment of dividends, etc., which used to be handled manually – in order to increase the efficiency of business processing. In this respect, the efficient use of securities-related data has become more and more important.

⁶⁹ Under the framework of ISO 20022, international standardization of financial businesses is ongoing in four areas: payment, securities, foreign exchange and trade services. In addition, international standardization is being expanded to business areas in which computerization has not been well advanced.

⁷⁰ Damages referred to in this context are the total replacement costs of the unsettled transaction and the unrealized profits that would have been anticipated from the transaction.

⁷¹ "Fail" means an incident in the settlement of securities transactions where the delivery of the securities is not made on the scheduled settlement date for reasons other than the credibility of the party to the transaction.

 72 While the settlement of government bonds and stocks is made on T+3 days, there are some cases where the settlement of short-term bonds is made on T+0 day.

The Securities Settlement Systems Reform Promotion Working Group, Committee for Reform of Securities Clearing and Settlement System, "Toward Japan's Securities Settlement Systems and Infrastructure Reform" (November 2002)

 74 Examples of measures for shortening the settlement period are as follows: In the standardized margin trading of stocks, securities finance companies currently accept the offers of debt and credit transactions late afternoon on T day, and volume fixing is done on the morning of T+1 day. It may be possible to complete this processing within the T day. Transaction correction due to system failures or ordering mistakes, which is allowed to be completed on or before T+2 days, could be separated as an exception processing. Thus, the settlement period of normal businesses could be shortened.

⁷⁵ However, STP processing has not been well developed in investment management companies compared to other categories of business, such as financial instruments firms, trust banks, custodian banks, etc.

 76 In transactions with non-residents, the processing up to the matching of executed transactions is done abroad, settlement instructions are done cross-border, and the processing after the matching for settlement is done in Japan. The domestic processing after the matching for settlement can be done quickly through STP. However, the foreign processing of matching of executed transactions and the cross-border settlement instructions have not been expedited due to certain factors, such as time difference. Measures could be taken for speedy processing – for example, by utilizing global electronic matching systems, etc. – which may contribute to shortening the settlement period.

⁷⁷ More than half of the total amount of agency stock transactions listed in the stock exchanges in Tokyo, Osaka and Nagoya are made by foreign investors (54.2% in 2006, reported by the Tokyo Stock Exchange).

⁷⁸ About 10% of the matching for settlement in transactions with non-residents is done on T+0 day. The total ratio of completed matching by T+1 day is about 60% and it comes to no more than 80% on or before T+2 days. (Reported by the Japan Securities Depository Center)

 79 In the United States, when the reform program to achieve T+1 day settlement was started, the target was to complete it before June 2002. The target date was then delayed until June 2004, based on the cost benefit analysis of investment made by the SIA (Securities Industry Association) in 2002, and the program proceeded. However, it was postponed until June 2005 owing to the impact of the synchronized terrorist attacks, and is currently suspended.

⁸⁰ The Japan Government Bond Clearing Corporation is the government bonds clearing house in Japan. The majority of the participants in the Corporation are financial instruments firms. It is pointed out that a few trust banks participate in the Corporation as they have less need for netting.

⁸¹ STP has not been implemented for transactions with non-participants in the government bonds clearing house in the handling process after the matching of executed transactions until the netting and settlement.

⁸² Looking at the total transaction value of government bonds by investor, the foreign investors' ratio is less than 10% (8.5%, reported by the Japan Securities Dealers Association in 2006).

⁸³ "Repo market" means the market in which bonds are lent on cash security and the market of future transactions with money lent.

⁷³ The Committee for Reform of Securities Clearing and Settlement System, "Interim Report for Reform of the Securities Clearing and Settlement System" (March 2000)

Working Group on Reform of Securities Settlement Systems, First Subcommittee, Sectional Committee on Financial System, Financial System Council, "Reform of securities settlement systems toward the 21st century" (June 2000)

⁸⁴ In the United States, a repo market with T+0 day settlement is established. In Japan, it is exceptional for settlements of repo transactions to be made on T+0 or T+1 day. T+2 day settlement is usual.

⁸⁵ "Algorithmic trading" means stock transactions in which the computer system continuously places sales and purchase orders by judging their timing and volume automatically on the basis of updated information on stock prices and trading volume in the market.

⁸⁶ For international coordination between clearing and settlement institutions, it is important to improve the efficiency of the handling process mentioned earlier in the main text of this document. If standardization of the coding systems and telecommunication message format is enhanced, it will make coordination between different computer systems easier. It will also contribute to improving the functions of clearing and settlement institutions by strengthening cooperation with domestic and foreign clearing and settlement institutions. In addition, standardization can also contribute to the solution of problems that some people have pointed out concerning the existence of two or more clearing and settlement institutions in one country. To promote international coordination between clearing and settlement institutions, issues in the areas of legislation and taxation should be tackled as well as standardization.

⁸⁷ The DTCC (Depository Trust & Clearing Corporation) in the United States or Euroclear or Clearstream in Europe, for example, undertake payment of dividends, principals and interests, lending of securities, securities management, provision of information on corporate actions, etc.

⁸⁸ Transfer institutions in Japan are restricted in their businesses under Japanese law. Japanese institutions are not allowed to engage in some of the businesses carried out by clearing and settlement organizations in Europe and the US.

⁸⁹ In addition, if Japan's clearing and settlement institutions can deal with the lending of securities, for example, it will contribute to smoothening stock lending transactions with foreign clearing and settlement institutions, which will be helpful for avoiding fails and improving investment efficiency.

⁹⁰ Banks are allowed to carry out servicing activities associated with securities transactions, such as safe custody of securities and lending of securities. However, the brokerage of stock lending transactions for foreign investors, for example, is not permitted.

⁹¹ For example, in the report "Toward the Establishment of an Act on Electronically Registered Monetary Claims Act (provisional title)" issued by the ITWG of the Second Subcommittee of the Sectional Committee on Financial System of the Financial System Council (December 21st, 2006), it is stated that "appropriate measures should be studied concerning the netting of electronically recorded credit from the viewpoint of securing the advantages of practical handling, ensuring the security of settlement and protecting users."

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Meetings of Study Group on Payment and Settlement

First meeting: Second meeting: Third meeting: Fourth meeting: Fifth meeting: Sixth meeting: Seventh meeting: Eighth meeting: Ninth meeting: Tenth meeting: Eleventh meeting: Twelfth meeting: July 4^{th} , 2007 (Wed) July 23^{rd} , 2007 (Mon) August 6^{th} , 2007 (Mon) August 22^{nd} , 2007 (Wed) September 11^{th} , 2007 (Tue) September 26^{th} , 2007 (Wed) October 5^{th} , 2007 (Fri) October 26^{th} , 2007 (Fri) November 7^{th} , 2007 (Wed) November 21^{st} , 2007 (Wed) December 5^{th} , 2007 (Wed)

Current landscape of settlement, etc. Edy, etc. Point services Fee collection services, etc. Remittance services, etc. New payment services Payment system Payment system Securities settlement system Securities settlement system Consolidation of discussion points Consolidation of discussion points