
Formulation of the Electronic Money Law Gets Underway

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The work of formulating the “ Electronic Money Law ” (provisional name) for enactment at the regular Diet Session to be held in the spring of 1999 is getting underway.

“ The Informal Working Group on the Formation of an Environment for Electronic Money and Electronic Settlement ” (normally known as the Second Electronic Money Working Group) is a bureau of the Ministry of Finance, and in June 1998 it put together the results of its discussions and submitted a report to the Financial System Research Committee. Based on this report, the Financial Planning Bureau of the Ministry of Finance started the work of putting the Electronic Money Law into law.

Regarding electronic money, work is proceeding in areas such as economic and technical research and verification experiments, and commercial application and general use are not far away. However, measures to overcome legal problems have not been tackled. These include problems related to the issuance and circulation of electronic money.

In this report, we will study the creation of a legal framework for electronic money in Japan taking into account the Second Electronic Money Working Group.

1. What Are Electronic Money and Electronic Settlements?

How should electronic money and electronic settlements be recognized legally?

In a recently published report, this was defined in the following way.

1) The Report of the First Electronic Money Working Group

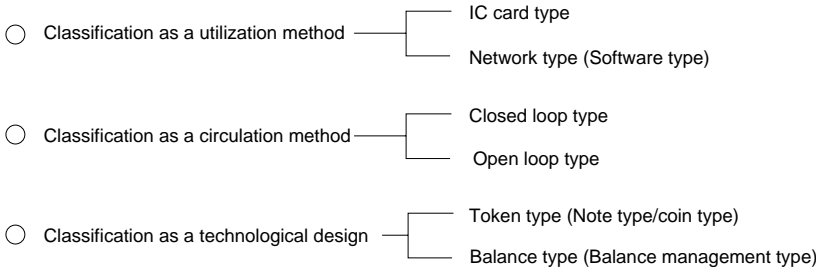
With the object of examining the discussion points in terms of the construction of an environment for electronic money and electronic settlements, “ The Informal Working Group on Electronic Money and Electronic Settlement ” (First Electronic Money Working Group) was formed under the Ministry of Finance. This Group undertook studies in the period from July 1996 to May 1997. As a result, according to the report published on May 23, 1997, electronic money can be categorized in the headings of utilization method, circulation method and technological design. (Figure 1.)

Regarding electronic settlement, the electronic money and electronic settlement systems cur-

rently operating can be broadly divided up into electronic settlement measures and electronic settlement methods. Electronic settlement measures involve the possibility of general convertibility. Electronic settlement methods involve cash or credit routes.

The first time that electronic money was recognized legally was in the revision of the Foreign Exchange and Foreign Trade Control Law of 1997. The definition of electronic money is laid down in (3) of the 7th section of the 1st item of the 6th article in this law. This states that electronic money is defined as asset values input by electromagnetic methods into vouchers, electronic equipment and other systems. Moreover, these instruments can be used for payment by unspecified persons. Electromagnetic methods are defined as electronic methods, magnetic methods and other methods which cannot be confirmed by the human senses. Electronic money used as a method of payment under the Foreign Exchange Law is limited to “the situation surrounding the use of electronic money similar to the use of currency as laid down by government ordinances.” However, the government ordinance definition on being similar to the use of currency has not yet been laid down. Thus, the use of electronic money as a method of payment under the Foreign Exchange Law does not currently exist.

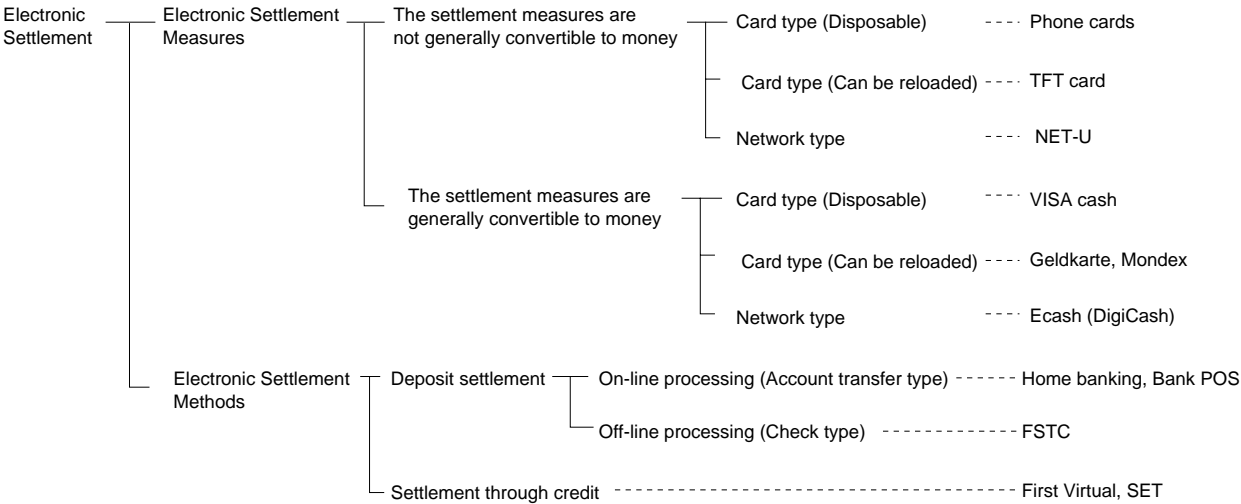
Figure 1. Method of Classifying Electronic Money



Note: The closed loop type is a closed configuration moving along the route of Issuer-User-Enterprise-Issuer. The open loop type can be used numerous times in commercial transactions.

Source: Report data of the First Electronic Money Working Group

Figure 2. Classification of Electronic Money and Electronic Settlement Projects



Source: Report data of the First Electronic Money Working Group

2) Report of the Electronic Money Realization Study Group

In the report “ Legal Considerations Toward the Realization of Electronic Money ” presented by Electronic Money Realization Study Group ¹ in April 1998, the following points were summarized on the subject of electronic money, various types of which have been issued on an experimental basis.

In the broad sense of electronic money, when seen from the viewpoint of utilization situations, two types can be pinpointed, the network transaction type (that is electronic commercial transactions) and face-to-face transaction type. Seen from the viewpoint of settlement, the following four types can be pinpointed.

- 1) The type in which a settlement using an existing credit card can be effected by sending credit card information and transaction information over a network.
- 2) The type in which a settlement using an existing deposit account can be effected by implementing transfer instructions over a network.
- 3) The type in which a settlement using an existing check type instrument can be effected by transmitting check information over a network.
- 4) The type in which a settlement similar to existing cash payments is implemented by the following method.

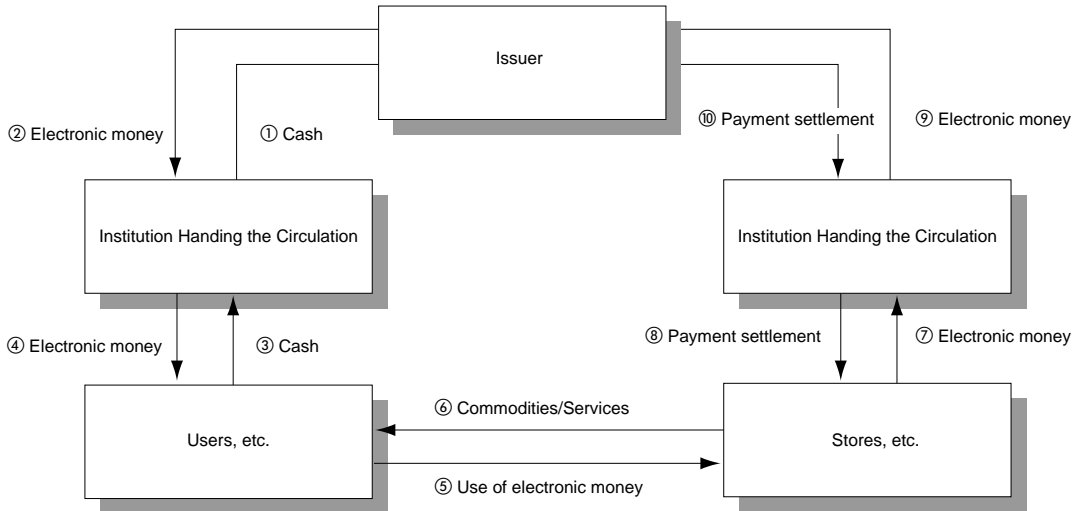
In exchange for prepayment of deposits placed with the issuer or cash, the user can receive the issuance of digital information in a portable memory device such as IC cards or hard discs from the issuer. The transaction is effected by transferring this information to the provider in exchange for the provision of commodities or services in network transactions or face-to-face transactions.

2. Typical Example of an Electronic Money/Electronic Settlement Scheme

When considering electronic money and electronic settlement schemes in terms of reality, the following types exist; joint issuer type, individual institute issue type, and settlement method provision type. A leading example of a joint issuer type is MONDEX. (Figure 3)

¹ Centering on businessmen such as law offices, legal studies were carried out on electronic money systems in commercial use or in the process of being tested from February to July 1997. Basic models for electronic money contracts were formulated.

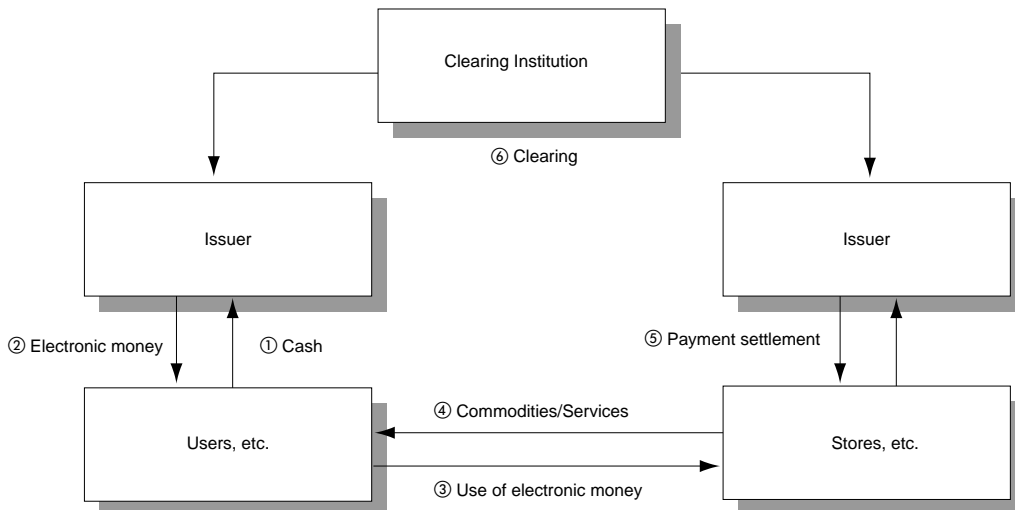
Figure 3. Joint Issuer Type



Source: Report data of the Second Electronic Money Working Group

Typical examples of an individual institution issuer type are VISA cash, Super Cash and Geldkarte. (Figure 4)

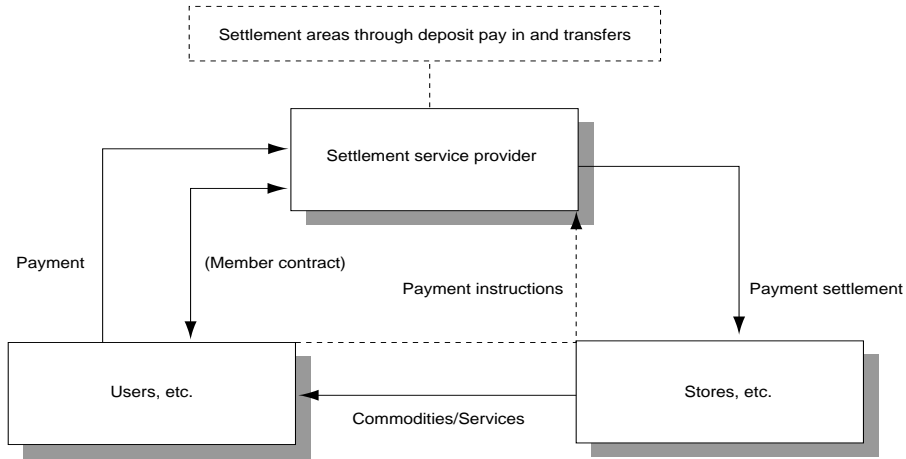
Figure 4. Individual Institution Issuer Type



Source: Report data of the Second Electronic Money Working Group

The settlement method provision type is used in payment settlement over a network. This can be classified into prepayment type, post payment type and interlocking settlement type depending on the difference in timing of payment, payment instructions and payment settlement. Typical examples of this include NET-U and Credit settlement. (Figure 5)

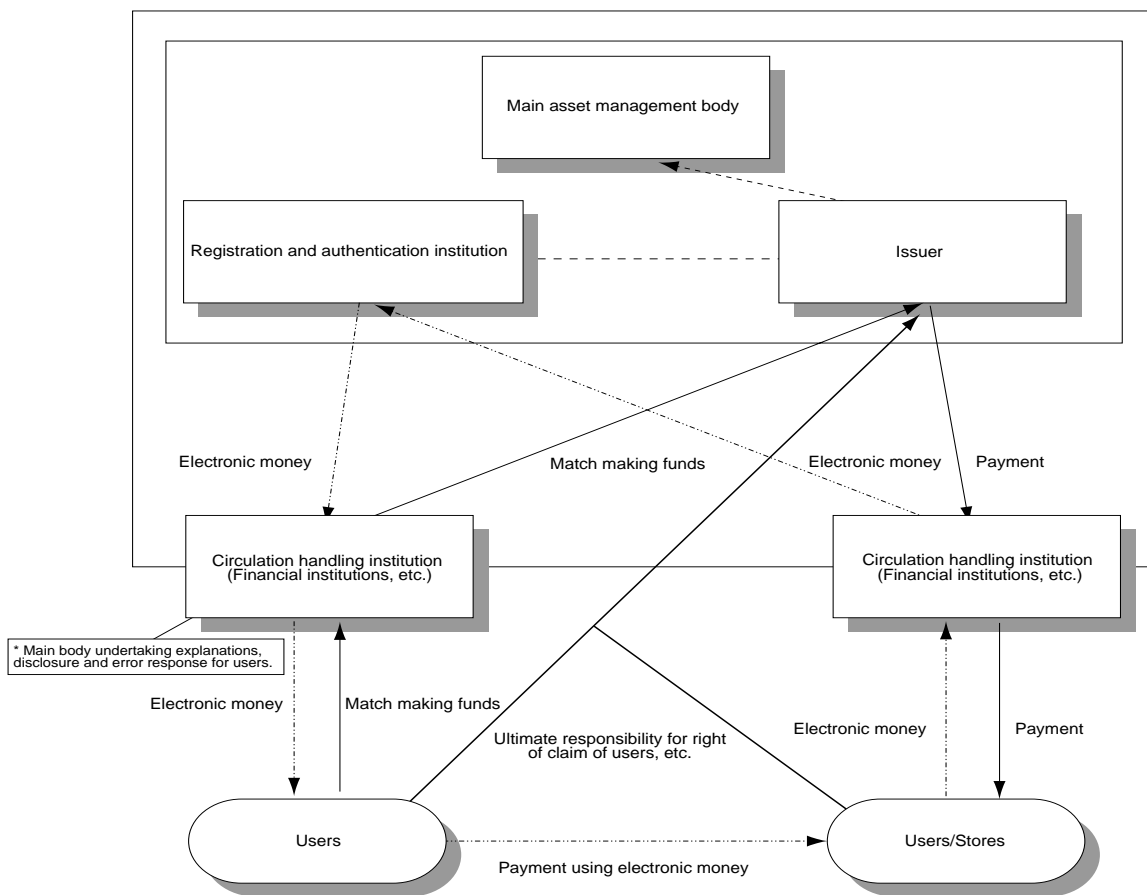
Figure 5. Settlement Method Provision Type



Source: Report data of the Second Electronic Money Working Group

Based on the above practical examples, Figure 6 gives an overall view of the electronic money and electronic settlement scheme.

Figure 6. Overall Structure of Typical Electronic Money System



Note: It is necessary to note that the duty of undertaking explanations, disclosure and error response and the taking of ultimate responsibility regarding the product details of electronic money to users are not necessarily the same.

Source: Report data of the Second Electronic Money Working Group

3. Outline of the Report of the Second Electronic Money Working Group

The First Electronic Money Working Group engaged in work on discussion points in terms of the construction of an environment for electronic money and electronic settlements over the period of about one year starting from July 1996. Following on from this, in June 1997 the Financial System Research Committee submitted a report as follows. “The construction of an environment for the development and promotion of electronic money and electronic settlements is an objective worthy of being taken up as one aspect of the reforms of the financial system towards the advent of the 21st century. The need is for rapid implementation of studies on concrete measures and the necessary measures.”

The Second Electronic Money Working Group was formed in October 1997 as a working group coming under the Financial System Research Committee. This working group carried out studies on concrete system building methods in the area of electronic money and electronic settlements. The results were incorporated into a report which was submitted to the Financial System Research Committee on June 17, 1998.

Based on this report, the Financial Planning Bureau of the Ministry of Finance commenced preparations for bringing these measures into law, the “Electronic Money Law” (provisional name). Here we will review of the report of the Second Electronic Money Working Group.

1) The Need for an Electronic Money Law

Regarding electronic money and electronic settlements, it is necessary to promote the entry into this sector of many diverse firms and to protect the users and ensure the stability of the settlement system. With this objective in mind, new legal measures are necessary such as laws including the Electronic Money Law. In the creation of new regulation frameworks, it is necessary to limit these to the absolute minimum needed to respond to the new types of services expected to emerge based on the following three items in terms of their functional aspects.

- (1) Information must be processed for settlement such as payment instructions issued using electromagnetic methods. There is no single body existing which takes responsibility for supervising the overall process. The problem is how to ensure the confidence of the users in such settlement services.
- (2) Preservation of funds received from users corresponding to electronic money
- (3) Ensuring the safety of settlements using electronic money with the nature of a settlement infrastructure.

When creating systems for electronic money and electronic settlements, it is necessary to consider international conformity and a review of systems in terms of a sound general usage of these systems and their development.

2) Definitions in the Electronic Money Law

The terms “electronic money”, “issue corresponding funds”, “issuer” of electronic money, “electronic money and electronic settlement” and “provider of settlement services” have been defined in the Electronic Money Law.

- (1) Electronic money: electromagnetic record issued for funds received from users (“issue corresponding funds”). This can be used among users for transfers or renewal, and in this way the settlement can be effected. Or this can refer to the electromagnetic record.
- (2) Issuer: the body which has the ultimate responsibility regarding the right of claim of the users concerned in the “issue corresponding funds.”
- (3) Electronic money and electronic settlement: Information relating to settlements including electronic money which are processed in an electromagnetic way. Moreover, a single body with responsibility for the overall management of the process does not exist.
- (4) Settlement service provider: the body which undertakes settlement mediation or the ultimate execution in the area of electronic money and electronic settlement.

Thus, electronic money and electronic settlement include IC cards using electronic money, Internet settlement services using credit or prepaid system, and Internet banking, etc.

3) Ensuring Safety of Trading and the Appropriateness of the Issuer

According to the report, in terms of the enactment of the Electronic Money Law, an approach from two standpoints has been adopted; ensuring safety of trading and the appropriateness of the issuer regarding electronic money and electronic settlement. Attention is focused on the role of the settlement service provider from the viewpoint of the safety of trading and the entry of electronic money issuers and the management of the issuer corresponding funds from the viewpoint of the appropriateness of the issuer.

(1) The Role of the Settlement Service Provider

(a) Provision of Information to Users

Electronic money and electronic settlement are settlement services using an open network or system. There is no single body which has responsibility for the overall process in terms of settlement information processing. In order to ensure proper processing of users settlements, the settlement service provider (when there is a body undertaking mediation, this is the provider) becomes the body undertaking the responsibility and should have the duty to provide information to the user.

The provision of information such as trading rules ² and the history of the user is used to protect the user in actual terms, and this should be used with flexibility.

(b) Formation of Fair Trading Rules

Regarding the allotment of responsibility between the user and the settlement provider, there are several rules which come to mind such as the transfer of legal responsibility or limitation of the balance held. However, for the time being it is thought appropriate to promote the efforts of the settlement service provider on a voluntary basis.

² Important items which should be disclosed to users are as follows:

1) The responsibility of the settlement service provider, 2) the responsibility of the user, 3) the entity to inform in the case of loss of cards, 4) method of providing user with a record of transactions, 5) procedures to deal with errors, 6) procedures when the card becomes unusable, 7) the convertibility of electronic money, 8) the security technology used, etc.

Regarding the responsibility of the settlement service provider when merchandise is purchased, uniform regulations should not be applied so as to avoid having an adverse effect on the high payment efficiency of electronic money and electronic settlement.

Regarding the collection of personal information on users through the use of electronic money and electronic settlement and the extent of utilization of such information, appropriate management and the permission of the user are needed. However, in terms of creating a concrete system, this will have repercussions on the overall handling of personal information in the areas of electronic commercial trading and general trading. Thus, it is necessary to study how these things will progress and work out as time progresses.

(2) The Role of the Government

(a) A Registration System for Settlement Service Providers

The basic stance regarding the framework for ensuring reliability of transactions in the area of electronic money and electronic settlement is that a central role should be performed by the settlement service providers who should make voluntary efforts and the organizations concerned which should impose voluntary regulations. Intervention by the supervising authorities should be kept to an absolute minimum. To ensure the system to protect users is effective and fulfils its role, the settlement service provider's location should be registered to ensure knowledge of their operations.

(b) Regulations Governing the Entry of Electronic Money Issuers

In addition to financial institutions, entry into the sector of issuing operations in the area of electronic money and electronic settlement should be made generally open to other organizations after ensuring the reliability of their trading operations. In view of the fact that electronic money operations have a major synergistic effect with other operations, it should be permitted for these firms to conduct business in other areas in addition to electronic money and electronic settlement as the participation in this sector by many entities will ensure the provision of a broad spectrum of services which are necessary for the development and wide spread use of electronic money and electronic settlement.

It is necessary for the issuers of electronic money to have reached a certain level of suitability in terms of possessing a sound financial foundation and the ability to conform to regulations to obtain the confidence of users. In addition, it is necessary for the governing authorities to conduct checks on appropriate operational methods and the internal control systems including the suitability of the issuer and the firm's technical abilities.

It is necessary to separate the operations of the issuer according to functions electronic money settlement in terms of whether the electronic money will form a settlement infrastructure or not. For example, electronic money for which the return of the principal is guaranteed and electronic money employed in general wide-ranging settlements using cash of deposits or electronic money of a very similar nature should be separated from other forms of electronic money as a condition for entry into the sector.

(c) Inspection and Supervision of Electronic Money Issuers

The supervisor authority must have the authority to conduct inspection and supervision in the area as of whether regulations are being conformed to on the part of the electronic money issuer.

This kind of inspection and supervision takes into account the burden imposed on the issuer and the personnel available for this work on the part of the supervisory authority. Thus, it is necessary to carry out these operations based on clearly defined standards and in a simple way

Regarding financial institutions such as banks, the systems governing electronic money issuers should also apply to them.

(3) The Administration and Management of Issuer Corresponding Funds

(a) Separate Administration

Regarding electronic money which has the nature of a settlement infrastructure, in order to ensure that issuer corresponding funds are repaid to the user, it is necessary to have separate administration for assets and debts of other operational areas through methods such as trust, individual guarantees and deposits. In the case of failure of the issuer, to avoid the risk of this having an effect on the issuer corresponding funds and to ensure the protection of the actual rights of the users, separate administration and preferential repayment are necessary.

(b) Three Conditions for Management

Regarding the administration and management of issuer corresponding funds, it is necessary to fulfil the follow the conditions: credit risk and price fluctuation risk must be small and these funds must have adequate liquidity. It is necessary to have an external check on the administration and management of issuer corresponding funds in terms of fulfilling these three conditions, and so the electronic money issuers must effect sufficient information disclosure regarding the administration and management of issuer corresponding funds such as the market value of the funds managed and the details of the individual guarantee.

(c) The Refunding of Issuer Corresponding Funds in the Event of Failure of the Issuer

When it becomes impossible for the issuer of electronic money to continue in business, it is necessary to set up a system in which the issuer corresponding funds held in separate custody are refunded to the users ahead of other creditors.

When an issuer goes bankrupt, in order to ensure that the issuer corresponding funds are smoothly refunded to the user, when the settlement service provider enters the sector, it is necessary to position a third entity as an representative administrator to ensure the rights of the user are preserved.

4) Other Objectives

Other objectives include the following: ensuring technical security, measures to prevent unauthorized usage and the positioning of electromagnetic records in civil law.

To ensure the realization of safe electronic money and electronic settlement, it will not be sufficient to rely only on the voluntary efforts of the settlement service provider to maintain security. In order to promote improved technical safety overall, it will be necessary to require information disclosure on the part of the issuer on their security measures.

Measures to prevent crime and unauthorized usage will require a technical response able to ensure the security of electronic money and electronic settlement and a system allowing tracing of forging and alterations on an individual basis. This will also require appropriate measures such as

setting an upper limit on the amount which can be used. In addition to these measures, it is necessary to consider criminal legal proceedings to combat forging and alterations.

In the Civil Code, it is necessary to consider how to position the transfer of electromagnetic records which are conceived to have asset value seen in terms of the relationship with third parties. In these studies it has been pointed out that it will be necessary to consider international trends in electronic signatures and electronic trading.

4. Expectations Placed on the Electronic Money Law

1) The Response of Japan's Financial Institutions

Let's look at how the Japanese financial sector is handling its engagement in electronic money and electronic settlements. From about 1995, the nationwide commercial banks have been engaged in experiments using IC card method electronic money in some limited areas such as with the campus of universities and in new office complexes in the coastal sub city centers. Interactive Internet banking which provides two-way links between banks and users was started by Sumitomo bank in January 1997. Since then, up the present time Sanwa Bank, Asahi Bank and some regional banks and trust banks have also been engaged in these operations. Tokyo-Mitsubishi Bank entered into a tie-up with Microsoft and started Internet banking from July 1998 using an original personal finance software system called "Money."

Recently on the 16th of July 1998, a project called "Shibuya Smart Card Society" got underway. This is a proving test for IC cards (VISA cash) in which 10 credit card firms, 10 financial institutions (including 8 nationwide commercial banks) are participating. In this experiment, services provided by credit card firms are taking the lead, and from September 7, the services of the financial institutions got underway. In addition to this, various bodies are engaged in diverse experiments in different areas.

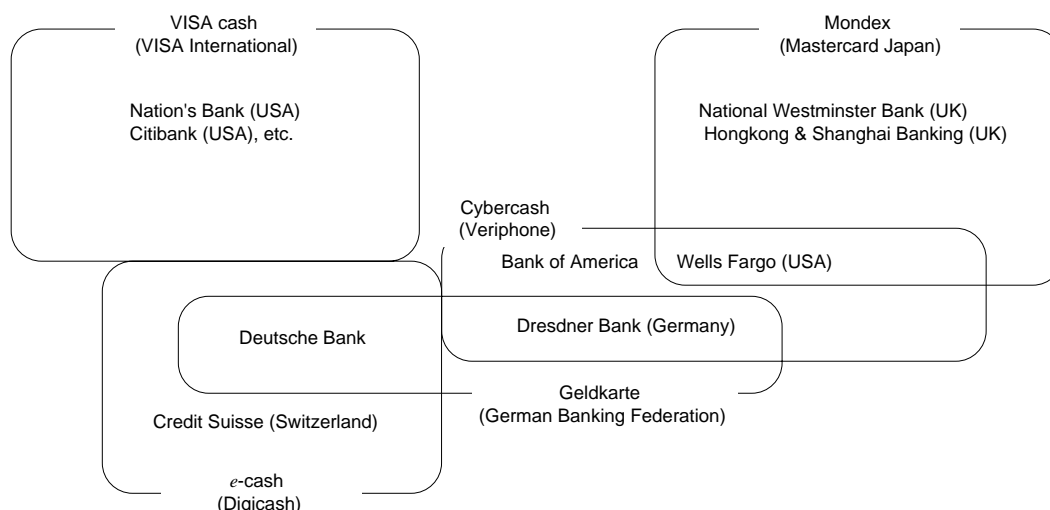
In Japan, great confidence is placed in the use of cash, and systems involving automatic deduction from account are firmly in place and widely used. Thus, there has been little interest in electronic money and electronic settlement systems. Finally in 1997, Internet banking and telephone banking services started to appear.

In the financial institutions and credit sectors of Europe and the US which are already way ahead in this area, the engagement in electronic money and electronic settlement systems is in the process of advancing still further. Thus, in this area, the distance between the West and Japan's financial sector is tending to widen still further due to increase in cross-border transactions and greater use of the Internet.

The VISA cash experiment that is being carried out in Shibuya (Tokyo) and has been under way since July 1998, is a move to introduce the systems in use in the US to Japan. There is also a possibility that the electronic money involved in the scheme developed in the UK will also flow into Japan. In the future, the focus will be fixed on which scheme used in which country will become the de facto standard. (Please refer to Figures 7 and 8)³

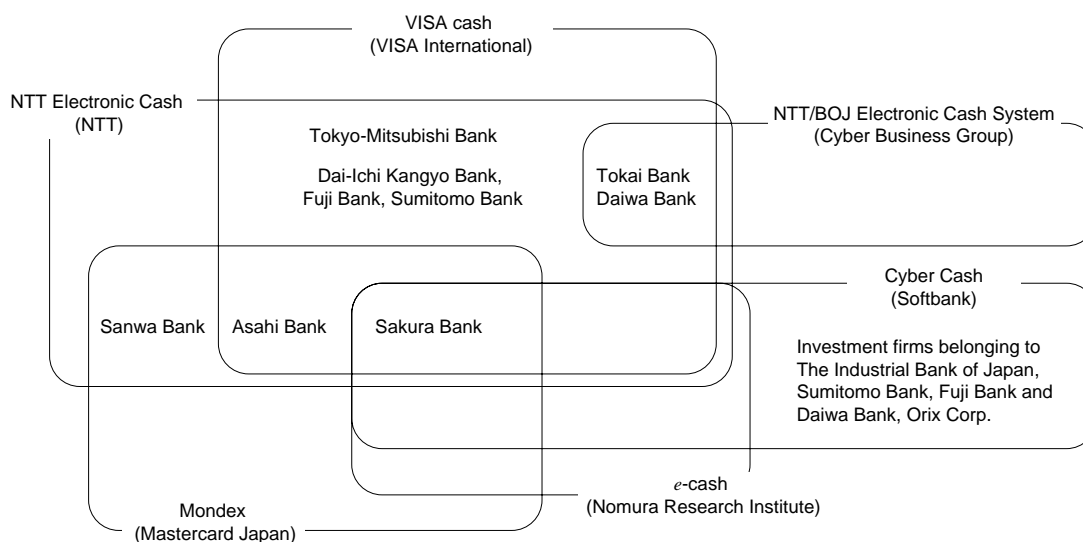
3 In addition, the Proton system in Belgium and the Chipper system in the Netherlands are rapidly coming into widespread use

Figure 7. Power Configuration of Overseas Electronic Money Systems



Source: Nomura Research Institute

Figure 8. Power Configuration of Japanese Electronic Money Systems



Source: Nomura Research Institute

2) Future Trends

The Financial Council (Chairman: Hajime Kaizuka, professor of Chuo University) made up of the Financial System Research Committee, the Insurance Council and the Securities and Exchange Council has been commissioned by Kiichi Miyazawa, Japan's Finance Minister to "Discuss improvements in the financial system and securities trading system towards the creation of a safe and dynamic financial system in the 21st century". The Financial Council held its first meeting on August 6, 1998, and future themes were pinpointed including the Financial Service Law as well as the subject of electronic money. The subject of electronic money is considered to be a key topic in the future of financial legal systems.

In the autumn of 1997, the US government announced that it would make the area of electronic transaction on the Internet free of tax. At that time it announced five basic policies for electronic

commercial trading. This included very interesting indications in the area of creating a legal framework for electronic commercial trading. According to these five basic policies, the US government stated the following. 1) electronic commercial trading should develop powered by market forces, and it should not be subjected to regulation. 2) The Internet is a media which features a high degree of interactivity and there is plenty of leeway for the users themselves to control the utilization environment. Rather than having the government intervene, it is better for the users themselves to control it. 3) The Internet and electronic commercial trading are basically global phenomena, and in the near future it will be necessary to achieve a global agreement on this realm.

It is expected that further experiments will be conducted in the area of electronic money and electronic settlement. Based on the results of these experiments, it may well be that a method can be used in which legal systems are only considered in the case of a high probability of problems emerging which are both important and unique to this area. Overseas, attempts in this area have been conducted prior to the formulation of legal regulation. It would be undesirable for Japan to create laws and systems based on these attempts. If it is not possible to respond to the changes in scheme, there is a fear that confusion would arise in the legal aspects.

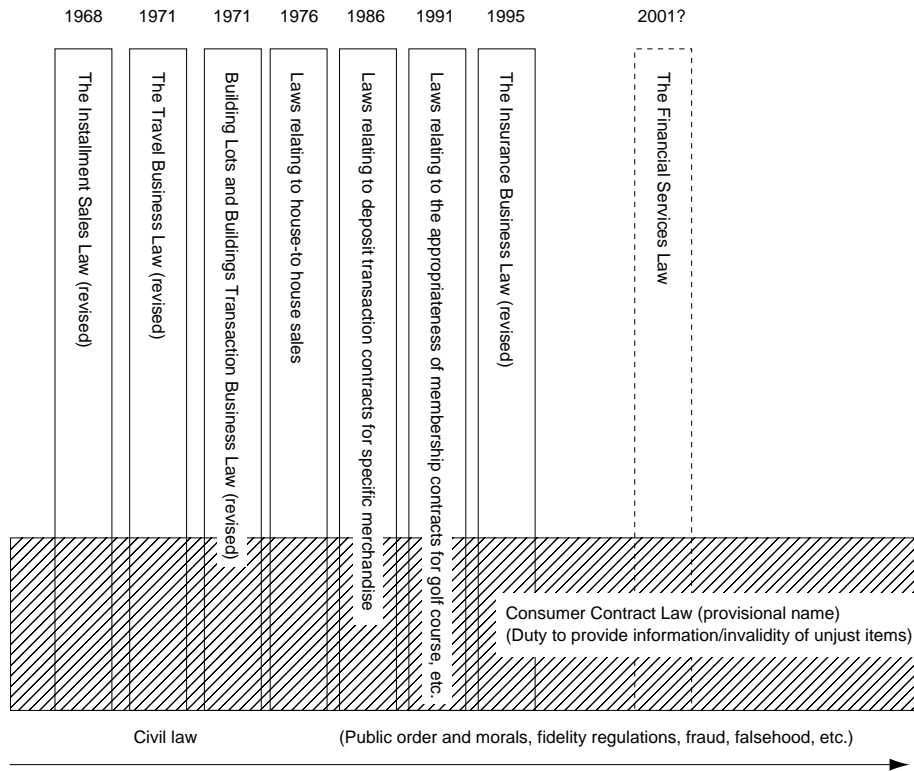
Studies are being conducted on a linked up application of the Electronic Money Law. Thus, it is necessary to conduct studies on the compatibility with existing laws. Regarding electronic money, these laws include the "Prepaid Type Forms Law" relating to the issuance of prepaid cards and the "The Installment Sales Law" a law relating to credit. Regarding the issuers of electronic money, "The Banking Law" and "The Law which regulates deposited money and interest rate (so-called the Shusshi-ho)" are applicable. Expectation is placed on the creation of comprehensive legal systems such as a Financial Services Law" and a "The Consumer Contract Law", and there are still questions remaining as to the necessity for individual laws in the electronic system sector. (Figure 9)

If compulsory separate management of corresponding funds when electronic money is issued is introduced, this is seen as being a major factor in terms of achieving convenience and reliability in the area of electronic money. In this case, it is necessary to clearly state that the issuer corresponding funds do not fall into the category of "money deposited" under the Investment Law.

At the earliest, the Electronic Money Law is expected to be enforced by the autumn of 1999.

In the legislation of electronic money, the main points will be ensuring safety of transactions without harming financial innovation in electronic commercial transactions as well as promoting participation in electronic money and electronic settlements over a broad area transcending boundaries.

Figure 9. Relationship between the “Financial Service Law” and a “Consumer Contract Law”



Source: Intermediate report “Regarding the Details of the Consumer Contract Law” (provision name) of the Consumer Policy Committee of the Social Policy Council used as reference material.