REPORT TO THE COUNCIL OF THE EUROPEAN MONETARY INSTITUTE

on

PREPAID CARDS

by the

Working Group on EU Payment Systems

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PART A: INTRODUCTION, SUMMARY AND POLICY CONCLUSIONS

INTRODUCTION

- 1. Recently a new payment instrument has emerged: the multi-purpose prepaid card or "electronic purse". It is a plastic card which contains real purchasing power, for which the customer has paid in advance. Although developments in the field of electronic purses are only at an early stage, the possibility of proliferation of such cards is a real one. In the future, if electronic purses were used in a great number of retail outlets, they would become a direct competitor not only to cashless payment instruments already in existence, but also to banknotes and coins issued by central banks and national authorities.
- 2. Given the potential of electronic purse schemes to attain widespread acceptance, central banks need to formulate their views on the issues raised by this payment instrument. Once such schemes have been introduced and are widely used, redressing undesired situations might be much more difficult. Furthermore, some of the schemes already in preparation provide for the use of electronic purses in several currencies and countries. Therefore, in the context of the Single Market and of the responsibilities of the future European System of Central Banks in relation to the functioning of payment systems, the Committee of Governors of the EC central banks requested, in February 1993, the Working Group on EC Payment Systems to study the issues involved.
- 3. This report aims at improving central banks' understanding of the functioning of this instrument and at assessing the consequences that its wide spread use may have for their activities and their statutory duties. The report is being published now, as a way of informing interested parties of EU central banks policy conclusions and as a contribution to private sector discussions of this new payment instrument.

SUMMARY OF ANALYSIS

- 4. Prepaid cards have developed first as a single-purpose payment instrument for which the card issuer and the goods or service provider have been one and the same (e.g. telephone cards). Such cards have not raised central banks' concerns because the value embedded in them did not have a wide range of uses and, therefore, did not have the characteristics of money. Drawing on the experience of single-purpose prepaid cards, and on recent technical developments (in particular the invention of the chip card), a new payment instrument is under development in many countries: the multi-purpose prepaid card, also known as the "electronic purse".
- 5. For all parties involved, the use of electronic purses may theoretically have advantages: consumers would need to carry less loose change; shopkeepers would have fewer cash handling activities and would have the assurance that their payment claims would not be dishonoured for the card holder's lack of funds (they might also use the chip card for promotional activities), and issuers would benefit from the float involved. Nevertheless, the development of electronic purses is still embryonic and the extent to which they will develop is not easily predictable. Their acceptability as a

payment instrument by the general public will depend on the distribution of costs and benefits between the parties involved (i.e. consumers, shopkeepers, and issuers). Although their primary purpose is to provide an alternative to notes and coins, electronic purses also have the potential to be developed further and to be used for retail payments of greater amounts. In such a case, they would also compete with bank deposits and with instruments that are used to transfer them (such as cheques, credit cards and debit cards).

- 6. The possible development of electronic purses merits special attention from central banks for at least three reasons. First, central banks are concerned that the introduction of the new payment instrument should have no adverse effect on public confidence in the payment system and payment media. This preoccupation would increase if non-regulated institutions were allowed to issue electronic purses, or if the latter were designed in such a way that counterfeiting would be both easy to achieve and difficult to detect.
- 7. Second, although the substitution of "prepaid card money" for other forms of money should not theoretically hamper central banks' ability to control the money supply, it might, however, have practical implications, at least in the long run, which need to be carefully examined. This concerns in particular the use of existing monetary policy instruments and the availability of the necessary statistics.
- 8. Third, because electronic purses may be used for payments of very small value, they have the potential, more than any other cashless instrument, to take over the role of notes and coins in the economy and, therefore, have implications for central banks' activities and revenues. Moreover, although electronic purses are not, in legal terms, infringing on the banknote monopoly, their general use may reduce the use of legal tender to a fairly large extent.
- 9. The purchasing power loaded in a multi-purpose prepaid card represents, for the issuer, a source of funds equivalent in their economic effect to deposit-taking. Therefore the right to issue electronic purses needs to be restricted to credit institutions¹ in order to: 1) protect the integrity of the retail payment system; 2) protect consumers against the consequence of the failure of the issuers; 3) facilitate the conduct of monetary policy; and 4) ensure fair competition between issuing institutions.
- 10. Whilst no EU central bank envisages issuing prepaid cards for the moment, the degree of their involvement in the development of electronic purses is different: some of them consider that it is exclusively a matter for private operators; others may wish to be involved in interbank settlements, if appropriate; some, but not all, EU central banks may also wish to encourage market participants to develop a common technical infrastructure with a view to promoting the inter-operability of competing card schemes.
- 11. EU central banks feel that, at least in the short run, the introduction of the electronic purse as a new payment instrument does not pose insurmountable problems and that, since it could

A limited exception to this principle is mentioned in paragraph 32.

contribute to making payment systems more efficient, they will not unduly hamper its development. They should be alert, however, to the possible problems which may arise in the future and they should continue to monitor carefully such developments at the national level, and also in co-operation with other central banks, in the EU and elsewhere.

POLICY CONCLUSIONS

- 12. Only credit institutions should be allowed to issue electronic purses².
- EU central banks should continue to monitor developments in the field of prepaid cards, possibly in co-operation with other central banks outside the EU.
- In this context, EU central banks should be kept informed, if possible at an early stage, of any major prepaid cards schemes involving more than one good or service provider, and decide whether they should be considered as "limited-purpose" or as "multi-purpose"; in the latter case, the provisions of this report will apply.
- Central banks may wish to examine carefully the security features of proposed prepaid cards schemes. In some cases, they may wish to discourage some initiatives in order to protect the integrity of the retail payment system.

A limited exception to this principle is mentioned in paragraph 32.

PART B: ANALYSIS

CHAPTER 1: A NEW PAYMENT INSTRUMENT: THE ELECTRONIC PURSE

1.1. The scope of the study

- 13. The awareness of central banks of their overall responsibility for the functioning of payment systems leads them to consider the planned introduction of the multi-purpose prepaid card, as a new cashless payment instrument in the years to come, and to take an explicit decision on the role they want to play in this respect.
- This report focuses only on prepaid cards which can be used for a very wide range of purposes, i.e. multi-purpose prepaid cards, which have the potential to be implemented on a national scale but may sometimes be restricted to a certain area. Single-purpose cards where the card issuer and service provider are identical, like those for use in public telephones, remain outside the scope of the investigation. However, in real life the distinction between multi and single-purpose cards is not always fully clear, as cards already exist which, though not universally accepted, offer access to more than one application and/or involve separate legal entities as card issuers and service providers. Whenever these cards can be used in a small number of well identified points of sale within a well identified location (a building, a corporation, a university...) they can be considered as "limited purpose" prepaid cards which also remain outside the scope of this study. If necessary, EU central banks should decide whether a specific scheme should be considered as "limited-purpose" or "multi-purpose".
- 15. Multi-purpose cards where the funds are provided by a credit line granted by the card issuer to the cardholder are, in effect, pre-authorised rather than pre-paid, and are more closely analogous to conventional credit and charge cards. They are not included in the scope of this study. From now on, the report will only consider cards which, strictly speaking, are pre-paid and multi-purpose; they will be often referred to as "electronic purses".
- 16. Electronic purses differ from other cashless payment instruments in that they are supplied in advance with generally accepted purchasing power. They can be loaded at bank counters, through Automated Teller Machines (ATMs) or through specifically equipped telephones, against a debit entry in a credit institution account, or against banknotes and coins. The embedded purchasing power is drawn down at the point of sale by an electronic device that can suitably adjust the information on the card.
- 17. Electronic purses are new cashless payment instruments which will be used primarily to settle face to face transactions. Their potential to reduce significantly the use of notes and coins is even greater than that of other debit instruments since they are the first cashless instrument which would be used for very small amounts. Their potential to replace other cashless instruments will depend: 1) on the level of fees and other costs levied by the issuer on those who use or accept these new instruments; 2) on the technical possibility, and the issuer's willingness, to remunerate the purchasing power embedded in electronic purses; and 3) on solutions adopted to compensate users in case of the loss, theft or malfunction of the card.

1.2. Incentives for the use of the electronic purse

Technological developments

- 18. Over the years, payment with cards has become common practice in most EU countries, as a method of gaining access to funds held in a bank account or to an agreed credit line. For security reasons, on-line systems are now often used for authorisation of the transaction and, sometimes, on-line transaction processing also takes place. Usually the information that is needed to enable the transactions to be made is contained in a magnetic stripe on the back of the cards.
- Technological developments have enabled further improvements in the use of plastic cards. In this respect the introduction of the chip or "smart" card was an important development. A chip card contains a microcomputer, consisting of a processor and a memory component, which is embedded in the card, thereby allowing remote verification and, accordingly purchases at a local level which previously could only be executed, for security reasons, after on-line reference to a central computer. Apart from offering the advantage of independence of on-line data communications, with their attendant costs, this microcomputer also allows for multi-purpose applications. This means that the use of such a card need not be restricted to payment transactions, but could be extended to, for instance, the registering of retailers' promotional activities or even to totally unrelated functions like the storage of medical information. In such a way the typically higher initial cost of the chip card could be shared between several market participants. Many of the features that chip cards offer are optional. In particular, while it is possible to install PIN (Personal Identification Number) authorisation for payment transactions, such a facility need not be implemented in systems developed for off-line low-value applications.
- 20. Protection against counterfeiting will be a very important element on which the future of electronic purses will depend. Forgery will probably be more difficult to detect with this instrument, particularly if the card can be used anonymously, and is not personalised in any way. By virtue of their higher degree of built-in security, chip cards have a far greater potential than traditional cashless payment technologies and, although it is not the only option available, recent experience suggests that the chip card seems to be the most probable choice in this context; for security reasons, an electronic purse system implemented on the basis of cards containing magnetic stripes does not seem very realistic. There is no certainty however, that chip cards will provide an absolute protection against forgeries.

Market developments

21. For electronic purses to become a success, a distinct business case must exist for cardholders, for shopkeepers and for issuers. Electronic purses can have various advantages for cardholders. The most important aspect relates to convenience as there would be less need to carry loose change for low-value transactions. An additional advantage might be that, compared with banknotes and coins, the risk of robbery might diminish if the use of the electronic purses included a security feature such as a PIN code. Furthermore, prepaid cards would have the advantage that non-

cash payment transactions could be made without necessarily being linked to a bank account. On the other hand, there are disadvantages as well: first, transaction costs may apply; and second, the electronic purse has to be supplied with value in advance, which may give rise to a transfer of float income from consumers to card issuers.

- 22. Some but not all prepaid card schemes envisage to offer the possibility for cardholders to transfer purchasing power from one electronic purse to another; such payment transactions would eliminate the need for clearing procedures and would further increase the possibility for electronic purse money to substitute for banknotes and coins.
- For suppliers of goods and services the use of electronic purses could have the advantage of reducing cash handling costs and, possibly, some financial benefits as a result of a lower need for till money. Also, an important characteristic vis-à-vis other face to face cashless instruments would be that, as the card would be supplied with value in advance, there would be no risk of payment being refused for the cardholder's lack of funds. On the other hand, additional costs might arise if several non-compatible electronic purse systems were to evolve and also if the terminals for electronic purse systems were not compatible with those in use for other card schemes. In addition, potential financial benefits might be smaller than expected if the card-providing institutions were to introduce additional fees for electronic purse transactions. Nevertheless, surveys conducted in a number of countries indicate that some categories of shopkeepers are in favour of electronic purses and want to encourage their introduction, not just for their payments functionality but also, and perhaps even more important, for the additional opportunities for promotional activities based on the memory capacity of these cards.
- 24. For issuing institutions, in general, the most important reason to take part in the development of electronic purse schemes is, perhaps, the gain of float income that would otherwise accrue to other parties (private individuals, business enterprises or, in the case of banknotes, central banks). If issuers were forced by competitive pressures to pay market interest rates on electronic purses, the advantages of issuing electronic purses would of course decline.
- 25. For credit and financial institutions, the advantage of issuing or promoting electronic purses would be that they could be designed in such a way that they are a relatively cheap, off-line, substitute for other non-cash payment instruments with no risk of overdrawing bank accounts. Furthermore, the substitution of electronic purse payments for banknotes and coins would reduce cash handling costs and the need to hold non-interest-bearing cash balances. If the issuing institution is also the account holder, an additional incentive to persuade consumers to use electronic purses instead of notes and coins would be the fact that the issuing institution would only lose reserves when the funds embedded in the card are spent and merchants demand payment, whereas, by contrast, when notes and coins are withdrawn by an account holder there is an immediate drain on reserves.

- 26. Other companies may also try to introduce such instruments, or to upgrade existing forms of prepayment. An example of such upgrading could be the issuance by PTTs of universally applicable cards based on those which are now solely used to operate public telephones.
- 27. To a certain extent, the advantages of electronic purses for some economic agents are disadvantages for others. Therefore, the overall acceptance of this new payment instrument is as yet uncertain. In any case, a key factor will be its actual acceptance by consumers which will depend on many factors, such as the reliability of the system, its user-friendliness and the financial conditions which will apply in terms of costs and fees.

CHAPTER 2. CONSEQUENCES OF THE ELECTRONIC PURSE FOR CENTRAL BANKS

28. EU central banks are of the opinion that the market should decide which payment instruments can best serve customer needs. Therefore, they do not wish to interfere unnecessarily in the development of prepaid cards schemes. Moreover they do not feel that, in general, they need to be heavily involved in retail payment systems. Nevertheless, the creation of the electronic purse must be evaluated carefully, because if it develops this payment instrument will affect central banks in the long run: a) as overseers of their countries' payment system; b) as the authorities in charge of monetary policy and c) as issuers of banknotes.

2.1. Implications for the oversight of payment systems

29. All EU central banks are concerned with the integrity, stability and efficiency of their country's payment system. Even if central banks generally concentrate their attention on large-value payment systems, because of the systemic risks involved, they cannot neglect the implications which the inappropriate functioning of a payment instrument may have for the public confidence in the currency, the retail payment systems and the payment media in general. In this respect, electronic purses raise at least two kinds of problems: one relating to the soundness of the issuer, and the other relating to the soundness of the instrument.

The soundness of the issuer

- 30. In the schemes which the Working Group on EU Payment Systems has been able to examine, the "issuer" of an electronic purse has three functions: 1) it makes the card available to the customer; 2) it is the beneficiary of the payment made by the card-holder to "load" its card and; 3) it is the institution which has the contractual liability to pay the merchants for goods or services purchased by the card-holder and, possibly, to reimburse the unused funds to the cardholder.
- In economic terms, it is clear that the money received by the issuer of an electronic purse is a bank deposit. It is indeed a claim which the card-holder (or account holder) has on a third party and which can be used to make cashless payments to a wide range of providers of goods and services. Such deposits contrast with deposits which are payments in advance for which the range of goods or services to be purchased is well defined and limited in scope. Therefore, in economic terms, the

reasons which led public authorities to reserve deposit-taking to a specific category of institutions should also apply to the issuers of electronic purses. These reasons relate both to the protection of the consumer and to the protection of the money transmission system. If corporations other than credit institutions were to issue electronic purses, banking regulations which, in the end, seek to protect customers deposits, would not apply. Moreover, deposit guarantee schemes would not apply either. As far as the money transmission system is concerned, its stability could be threatened by the failure of one or several issuers; public confidence in other retail payment instruments (e.g. debit cards) may also be affected. Therefore, it is very important that the liquidity regime which applies to credit institutions serves to ensure that the issuers of prepaid cards are able to meet their liabilities to retailers in the settlement of transactions made with the cards. Moreover, there would be an additional concern for central banks and banking supervisors if banks which were subject to prudential regulations (and in some countries to reserve requirements) were not able to compete on equal terms with other issuers of electronic purses.

- 32. In some circumstances (e.g. in the case of schemes already in operation before the policy conclusions of this report were drawn up), the local central bank may agree that electronic purse issuers do not have to be fully fledged credit institutions provided that:
 - i they provide only domestic payment services;
 - ii they are subject to appropriate regulations, in particular, with respect to liquidity requirements;
 - iii they are supervised by the institution which supervises credit institutions.

The soundness of the instrument

- Irrespective of the issuing institution, EU central banks have an additional concern which relates to the risk of counterfeiting. Other cashless payment instruments are, indeed, already sometimes counterfeited. However, because they are linked to a bank account, the fraud can be usually quickly identified. This may no longer be the case for electronic purses if the proceeds of their use are cleared anonymously, a possibility which is in fact likely to occur if transaction costs for low-value transactions are to be kept at a low level. The risk of someone introducing forged money into the system could increase further in the future if, as already envisaged by some promoters of electronic purse schemes, card holders can by-pass the clearing process and exchange purchasing power directly from one card to another. Central banks may wish to encourage measures which may limit the risk of fraud. These measures may, for example, consist of introducing limits to the amounts loaded on the cards, of setting the maximum size of individual payments, or of monitoring the use of individual cards.
- 34. EU central banks would be concerned if the security features of any electronic purse scheme did not prove adequate to maintain public confidence in the retail payment system. This danger should not be ruled out, although it is not, of course, likely to materialise in the near future, when the use of electronic purses will still be relatively marginal. Given the potential, however, of a

truly multi-purpose prepaid card to be a significant substitute for other payment media in the long run, a potential danger does exist. EU central banks are alert to this problem and they expect the issuers of electronic purses to devote enough resources to it. Should the latter not address the issue in a satisfactory manner in the future, EU central banks will need to reconsider their general appreciation of the problem.

2.2. Implications for monetary policy

- 35. For monetary policy purposes, central banks need to control (or at least know) the amount of money which is available to non-bank economic agents as a means of payment. Since the introduction of prepaid cards involves only a substitution of one form of money for another one, the impact on monetary policy will be limited. However, a more widespread use of prepaid cards in the future is likely to have at least three implications for the conduct of monetary policy.
- 36. First, the new form of money contained in multi-purpose prepaid cards will have to be included in narrow money aggregates since it will be close to a perfect substitute for notes and coins and, up to a certain extent, for sight deposits. The inclusion of multi-purpose prepaid card money in monetary statistics is not likely to be particularly difficult since, according to para. 31, it is to be held by credit institutions only.
- 37. Second, the extent to which the velocity of prepaid card money will be identical to forms of money which already exist will have to be assessed and, if necessary, taken into account by monetary policy experts.
- 38. Third, the decrease in notes and coins is likely to contract the size of central banks' balance sheets and, therefore, at least in some countries, may diminish their ability to influence rates of interest through their market operations. This effect however is not exclusively linked to the introduction of electronic purses. The progressive substitution of banknotes and coins for cashless money has had the same result and, over time, it can be expected that central banks that wish to control the monetary base will be able to find ways of doing so, for example by introducing or increasing the use of required reserves.

2.3. Consequences of a reduced use of banknotes

With the introduction of electronic purses, for the first time a viable cashless alternative for small amounts will become available. In the extreme this could mean that the role of central banks as suppliers of banknotes could theoretically disappear. Studies made by the Econometric Research and Special Studies Department of the Nederlandsche Bank suggest that the coin circulation may be affected much more strongly than the banknote circulation, the ultimate percentage effect on the coin circulation depending strongly, however, on the degree to which coin is hoarded. In addition, the

effect on the banknote circulation is, according to the study, stronger in terms of numbers than in terms of value.

Legal tender

40. A negative aspect of the large-scale use of electronic purses, in combination with widespread use of debit and credit cards, might be that, in the long run, the use of banknotes could be limited mainly to transactions in the underground economy, for which purposes central banks may wish to avoid providing the means. In any case, money embedded in electronic purses does not have legal tender status. Theoretically, the use of electronic purses could develop up to a point where the ability of customers to pay with notes and coins could be threatened. This would be in contradiction with the legal tender regulations in some (but not all) EU countries. Before this stage is reached, it will be necessary to assess whether legal tender regulations need to be changed or if the use of this instrument needs to be restricted so that the possibility to pay with notes and coins is maintained.

Central banks' activities and revenues

- 41. If the widespread use of electronic purses were to lead to a marked reduction in the value of banknotes in circulation, central banks' note printing (for those central banks which print their banknotes), handling and sorting activities could be affected. As these influences (and others resulting from changes in payment behaviour) gradually develop over time, central banks will be able to monitor them and to adjust their banknote printing and handling activities accordingly.
- 42. Because banknotes represent non-interest bearing liabilities for central banks, any reduction of their use in the economy also affects central banks' revenues. However, maximising profits is not the objective of central banks and, therefore, they will not base their policies with regard to prepaid cards, or to any payment instrument, on their profit expectations.

CHAPTER 3: PROPOSALS FOR CENTRAL BANK ACTION

3.1. Five scenarios for central bank action

- 43. Five scenarios for central bank action have been discussed. They were based upon the fact that current legal opinion in most European countries holds the view that, under existing legislation, the banknote monopoly does not extend to electronic purses. This implies that: 1) the issuance of electronic purses by parties other than central banks is possible; and 2) that central banks' statutory obligations do not create any legal obligation for them to issue electronic purses themselves, thus leaving them the choice as to what extent they wish to be involved. This is all the more so as legal tender will continue to coexist with electronic purses and will thus remain available to those who prefer to use banknotes and coins.
- The five scenarios are, in order from minimum to maximum central bank involvement:
 - a) no central bank intervention at all;

- b) no restriction on the issuing institution but with central banks exercising oversight;
- the issuing of electronic purses to be restricted only to credit institutions (as defined by the First and Second Banking Co-ordination Directives) or to institutions covered by paragraph 32 of this report;
- d) central banks issue electronic purses themselves in competition with similar private sector schemes, using the existing banking infrastructure for the distribution of their electronic purses;
- e) central banks decide that the issue of electronic purses is exclusively a central bank activity and create a distribution infrastructure of their own. Under this scenario electronic purses could be given the status of legal tender.

3.2. Evaluation of the scenarios

- 45. The longer term consequences of electronic purse developments are such that scenario a) is not compatible with fundamental central bank responsibilities for maintaining the integrity, stability and efficiency of its country's payment system and for the conduct of monetary policy.
- 46. Scenario d) would be in contradiction with the long term trends which have led central banks to withdraw from competition with the banking sector and to concentrate on the oversight of payment systems and on the provision of interbank services. It could also be argued that central banks would have an unfair advantage over other issuers because of the zero credit risk nature of an electronic purse issued by the central bank.
- As far as scenario e) is concerned no EU central bank intends to issue such cards for the moment since they feel that the consequences of the introduction of electronic purses may not be so different in nature from the emergence of other cashless instruments in the past. However, in the long run, it can not be excluded that circumstances might develop which could lead EU central banks to issue prepaid cards themselves³.
- 48. For the reasons which have been explained in para. 31, EU central banks are convinced that the funds representing the value of the purchasing power "loaded" in the electronic purses need to be considered as banking deposits which can only be held by credit institutions. As a result, they consider that scenario b) is not adequate, and conclude that scenario c) is the most appropriate of the five scenarios mentioned in para. 44.
- 49. The central banks' desire to prevent non-banks issuing prepaid cards primarily relates to the need to preserve the integrity of the retail payment system. Moreover, since information channels between banks and central banks are now well developed, they could also be used to obtain

Thus, in Finland, the central bank has decided to issue prepaid cards itself as a way of preventing the proliferation of non-compatible systems.

information needed in order to monitor the development of this new payment instrument. In addition, the conduct of monetary policy would be relatively unaffected since the funds associated with prepaid cards would not be fundamentally different from ordinary deposits.

50. For clearing and settlement purposes, electronic purse schemes could, probably, make use of already existing infrastructures for cashless retail payment instruments, in which central banks usually are only involved in providing final settlement. Some EU central banks hold the view that they should encourage interbank co-operation in order to increase the efficiency of the competing systems through standardisation and the use of common infrastructures. Other central banks are of the opinion that the efficiency of retail payment systems is a matter for issuers and users of payment instruments. In any case, co-operation at the technical level, should not be used to restrict competition when setting customer conditions.

PART C: CONCLUSION AND FOLLOW-UP TO THE REPORT

- Multi-purpose prepaid cards schemes are still at an early stage of development. However, EU central banks should not adopt a "wait and see" approach to this problem because heavy investments are likely to be made in this field, and it would be very difficult in the future to modify developments which were later found to be inappropriate. EU central banks should endeavour to be informed, if possible at an early stage of development, of any scheme being developed in their own country.
- The most important conclusion of this report concerns the need to restrict the issuance of electronic purses to credit institutions and, by exception, to institutions covered by paragraph 32. While the analysis of the nature of the funds related to electronic purse schemes is straightforward in economic terms, it is not necessarily clear in legal terms, probably because electronic purses did not exist (and were not even envisaged), when existing banking regulations were drawn up. If necessary, EU central banks will address this problem in their own country individually, and possibly at the EU level.
- Apart from this important policy conclusion, EU central banks feel that, at this early stage of development of prepaid cards schemes, they should remain flexible and leave technology and market forces to play their appropriate roles. They may wish, however, to satisfy themselves that the security features of proposed electronic purse schemes are adequate. If and when this new payment instrument develops, EU central banks will have to reassess its effects on the integrity of the payment system and, they may have to define new policy conclusions, including, if really necessary, that they themselves issue electronic purses. Under the aegis of the EMI, EU central banks will continue to exchange information in this field and to monitor the development of this new payment instrument.
- Moreover, the development of multi-purpose prepaid cards is not a phenomenon limited to the EU. In a global banking market, it will be beneficial for central banks to endeavour to reach a common position on electronic purse developments on a world wide basis.

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^{*} The underlying analysis of this report was prepared by a sub-group, called the Task Force on Prepaid Cards, which held three meetings between April and September 1993, under the Chairmanship of Mrs van der Wielen, De Nederlandsche Bank.