
COMMITTEE ON PAYMENT AND SETTLEMENT SYSTEMS

Consultative Report

**CORE PRINCIPLES FOR SYSTEMICALLY
IMPORTANT PAYMENT SYSTEMS**

Part 1 - The Core Principles

**Report of the Task Force on
Payment System Principles and Practices**

BANK FOR INTERNATIONAL SETTLEMENTS
Basel, Switzerland

Foreword to Part 1

There are a number of international initiatives underway to maintain financial stability by strengthening financial infrastructure. The Committee on Payment and Settlement Systems (CPSS) of the central banks of the Group of Ten countries is contributing to this process through its work on developing core principles for systemically important payment systems.

The CPSS established a Task Force on Payment System Principles and Practices in May 1998 to consider what principles should govern the design and operation of payment systems in all countries. The Task Force is seeking to develop an international consensus on such principles. It comprises representatives not only from G10 central banks and the European Central Bank, but also from 11 other national central banks of countries in different stages of economic development from all over the world and representatives from the International Monetary Fund and the World Bank. In undertaking its work it has also consulted groups of central banks in Africa, the Americas, Asia, Pacific rim and Europe.

In December 1999 the Bank for International Settlements (BIS) published a draft of these Core Principles for comment from the wider financial community. Some 50 written responses were received, making nearly 300 individual comments; there were also many oral responses. It is apparent that there is widespread international support for the Core Principles and only minor, mostly clarificatory, changes were necessary to the text. It was clear, however, from both written and oral comments that many readers would value more detail on how to interpret and implement the Core Principles. Accordingly, the BIS is publishing for comment a second part of this report, which seeks to provide such guidance.

The Core Principles are expressed in a deliberately general way to help ensure that they can be useful in all countries and that they will be durable. They do not represent a blueprint for the design or operation of any individual system, but suggest the key characteristics that all systemically important payment systems should satisfy. The second part of the report therefore discusses in more detail the interpretation of the Core Principles, by giving examples of detailed issues to be addressed in complying with the Core Principles and of ways in which these issues have been tackled in some particular contexts. It does not and can not provide a single model for every practical application of the Core Principles.

The CPSS is grateful to the members of the Task Force and its Chairman, John Trundle of the Bank of England, for their hard work in preparing this report and to the CPSS Secretariat at the BIS for their able support. The CPSS is also grateful to its former Chairman, Mr Wendelin Hartmann, for his constant encouragement and support to this endeavour.

Tommaso Padoa-Schioppa, Chairman
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Table of contents

Section 1: Introduction	1
Summary of public policy objectives, Core Principles and central bank responsibilities	3
Section 2: The public policy objectives	4
Section 3: Core Principles for systemically important payment systems	5
Section 4: Responsibilities of the central bank in applying the Core Principles	11
Annex: Members of the Task Force on Payment System Principles and Practices	13

Section 1: Introduction

1.1 Safe and efficient payment systems are critical to the effective functioning of the financial system. Payment systems are the means by which funds are transferred between banks, and the most significant payment systems, which this report refers to as systemically important payment systems,¹ are a major channel by which shocks can be transmitted across domestic and international financial systems and markets. Robust payment systems are, therefore, a key requirement in maintaining and promoting financial stability. Over the past few years, a broad international consensus has developed on the need to strengthen payment systems by promoting internationally accepted standards and practices for their design and operation.

1.2 The Core Principles in this report are intended for use as universal guidelines to encourage the design and operation of safer and more efficient systemically important payment systems worldwide. In emerging market economies they are likely to be of particular relevance, because of the efforts in train in these countries to improve systems or to build new ones in order to handle better the growing payment flows from national and international financial markets.

1.3 The report is addressed to all central banks and other interested public sector agencies, as well as to all private sector owners and operators of payment systems. The Core Principles may also be of use to advisers providing international technical assistance on how to achieve safety and efficiency in payment systems in the specific circumstances of individual countries.

1.4 These Core Principles for payment systems are intended to be sufficiently broad in scope to apply to a wide range of circumstances and to be useful over time. All systemically important payment systems should comply with all ten Core Principles. Two of the Core Principles (IV and V) also include specific minima, but, in most cases, systems should aim for standards higher than these minima. The report also explains the key role of central banks and sets out their responsibilities in applying the Core Principles. These responsibilities include assessing existing payment systems against the Core Principles and initiating or promoting action to ensure that they are implemented.

1.5 This report draws extensively on previous work of the CPSS and related groups,² most importantly on the Report to G10 Governors of the Committee on Interbank Netting Schemes (“the Lamfalussy Report”). That report, published in 1990,³ analysed issues affecting cross-border and multi-currency netting schemes and established minimum standards and more general goals for the design and operation of such schemes as well as principles for their cooperative oversight by central banks. The “Lamfalussy Standards” have been accepted and applied increasingly widely, not only in the specific field for which they were developed, but also to payment, clearing and settlement systems of many other types. The Core Principles in this report extend the Lamfalussy Standards by adding several new core principles and apply more broadly to systemically important payment systems of all types. This report’s discussion of central banks’ responsibilities in applying the Core Principles similarly adds to the principles for cooperative central bank oversight contained in the Lamfalussy Report and extends them to domestic systems. The Lamfalussy Standards were instrumental in encouraging designers, operators and overseers of netting systems to consider and address risks and to achieve certain minimum standards. Best practice, however, is more demanding and an increasing

¹ For a fuller definition of systemically important payment systems, see paragraph 3.2.

² The past work of the CPSS and related groups has included detailed analysis of payment and settlement system infrastructure in both developed and emerging economies. Although most of the earlier work has been analytical rather than prescriptive, in some areas – notably in its work on cross-border and multi-currency netting and on foreign exchange settlement risk – more specific guidelines and strategies have been developed to reduce risk, particularly systemic risk.

³ “*Report of the Committee on Interbank Netting Schemes of the Central Banks of the Group of Ten countries*”, BIS, November 1990. Copies can be obtained from the CPSS Secretariat, Bank for International Settlements or on the BIS web site (<http://www.bis.org>).

number of systems have recognised the benefits of, for example, being able to withstand the failure of more than the single largest net debtor to the system.

1.6 At the same time there has been extensive progress in payment system design in the course of the past ten years, notably in the development and widespread adoption of systems involving real-time gross settlement (RTGS), which can very effectively address the financial risks highlighted by the Core Principles.⁴ More recent innovations in system design offer additional techniques for addressing financial risks and reducing liquidity costs for participants.

1.7 The focus of this report is on payment systems, that is systems that comprise instruments, banking procedures and rules for the transfer of funds among system participants. The most direct application is for systems which involve only funds transfers, but the Core Principles can also apply to the payments aspects of systemically important systems in which transfers of other financial assets, such as securities, and related transfers of funds are both settled. Such systems can raise financial stability issues in their own right, so it is important too that their overall design and operation should be safe and efficient. The Core Principles in this report may also provide some help in evaluating the arrangements for settling other types of financial assets, but a full consideration lies outside the scope of this report. The CPSS and IOSCO have established a separate task force to examine the specific issues involved in securities settlement.⁵

1.8 The Core Principles apply to systemically important payment systems, whether they involve credit or debit transfers, whether they involve electronic or manual processing, and whether they process electronic or paper-based instruments. In practice, however, for a system that uses paper-based debit instruments (e.g. cheques), there are particular difficulties involved in satisfying some of the Core Principles. In countries where an existing systemically important payment system uses cheques, it may be necessary to give careful consideration to the other options available. Further consideration is given to this issue in Part 2.

1.9 A summary of the ten Core Principles and the four responsibilities of central banks in applying them follows this introduction. After that there is a more detailed description of the public policy objectives of safety and efficiency (Section 2), the Core Principles (Section 3) and the responsibilities of central banks in applying the Core Principles (Section 4).

⁴ There are a number of variants in the design and operation of RTGS systems, notably in respect of operating arrangements and the use of intraday credit to provide liquidity, and these and other issues are discussed in the 1997 CPSS report on Real-Time Gross Settlement Systems, BIS, March 1997. Copies can be obtained from the CPSS Secretariat, Bank for International Settlements or on the BIS website (<http://www.bis.org>).

⁵ The task force was established in December 1999. The results of the exercise will be available on the BIS website (<http://www.bis.org>).

The Core Principles and central bank responsibilities

Public policy objectives: safety and efficiency in systemically important payment systems

Core Principles for systemically important payment systems

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

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

Responsibilities of the central bank in applying the Core Principles

- A. The central bank should define clearly its payment system objectives and should disclose publicly its role and major policies with respect to systemically important payment systems.
- B. The central bank should ensure that the systems it operates comply with the Core Principles.
- C. The central bank should oversee compliance with the Core Principles by systems it does not operate and it should have the ability to carry out this oversight.
- D. The central bank, in promoting payment system safety and efficiency through the Core Principles, should cooperate with other central banks and with any other relevant domestic or foreign authorities.

Section 2: The public policy objectives

2.1 Systemically important payment systems are an essential mechanism supporting the effectiveness of financial markets. They can also transmit financial shocks. Poorly designed systems can contribute to systemic crises if risks are not adequately contained, with the result that financial shocks are passed from one participant to another. The effects of such disruption could extend beyond the system and its participants, threatening the stability of money markets and of other domestic and international financial markets. Systemically important payment systems are therefore crucial for the economy, and their safety and efficiency should be objectives of public policy.

2.2 Market forces alone, however, will not necessarily achieve the objectives of safety and efficiency sufficiently, since operators and participants do not necessarily bear all the risks and costs. They may not have adequate incentives to minimise the risk of their own failure or the failure of a participant or the costs they impose on other participants. In addition, the institutional structure of the payment system may not provide strong incentives or mechanisms for efficient design and operation. Economic factors such as economies of scale and barriers to entry may limit competition in the provision of payment systems and services. In practice, in many countries there is a very limited number of payment system providers or a single provider, usually the central bank.

2.3 To pursue the objective of safety in a payment system, it is necessary first to identify and understand how risks of various types may arise or be transmitted within the system and to determine where they are borne. Once these risks are properly analysed and assessed, appropriate and effective mechanisms must be devised to monitor, manage and control them.

2.4 Payment systems consume substantial resources. Accordingly, it is important that the designers and operators of payment systems are conscious of the resource costs of their systems and the charges they will need to pass on to users if resources are to be used efficiently. Cost constraints are likely to require choices to be made about a system's design which will have an impact on the system's functionality and safety. The functionality required will vary from one system to another according to the demands of participants and users. Systemically important payment systems must always achieve a high level of safety appropriate to their potential for triggering or transmitting systemic risk. Little, however, would be gained if a payment system were designed with such extensive safety features that it became so difficult, slow or costly to use that no-one was prepared to do so. System operators should keep their choices under review, as financial markets and the local economy develop and as technological and economic advances improve the range of solutions available.

2.5 Safety and efficiency are not the only public policy objectives for payment system design and operation. Other objectives, however, such as crime prevention, competition policy and consumer protection, can play a role in the design of systemically important payment systems, but these issues are beyond the scope of this report.

2.6 Different aspects of the safety and efficiency objectives may be pursued by a variety of different public sector agencies. Central banks have a leading role, particularly because of their strong interest in financial stability, their role in providing settlement accounts for payment system participants, and their concerns with the functioning of money markets for the implementation of monetary policy and with maintaining confidence in the domestic currency both in normal circumstances and in a crisis. The expertise they have developed through carrying out these functions means that central banks have a leading role to play in respect of systemically important payment systems; in many cases they have been given explicit responsibilities in this area.

Section 3: Core Principles for systemically important payment systems

3.1 Payment systems can be subject to a range of risks, including:

credit risk: the risk that a party within the system will be unable fully to meet its financial obligations within the system currently or at any time in the future;

liquidity risk: the risk that a party within the system will have insufficient funds to meet financial obligations within the system as and when expected, although it may be able to do so at some time in the future;

legal risk: the risk that a poor legal framework or legal uncertainties will cause or exacerbate credit or liquidity risks;

operational risk: the risk that operational factors such as technical malfunctions or operational mistakes will cause or exacerbate credit or liquidity risks; and

systemic risk: in the context of payment systems this is the risk that the inability of one of the participants to meet its obligations, or a disruption in the system itself, could result in the inability of other system participants or of financial institutions in other parts of the financial system to meet their obligations as they become due. Such a failure could cause widespread liquidity or credit problems and, as a result, could threaten the stability of the system or of financial markets.

3.2 The Core Principles apply to systemically important payment systems. A payment system is systemically important where, if the system were insufficiently protected against risk, disruption within it could trigger or transmit further disruptions amongst participants or systemic disruptions in the financial area more widely. The initial disruption might, for example, be caused by the insolvency of a participant. Systemic importance is determined mainly by the size or nature of the individual payments or their aggregate value. Systems handling specifically large-value payments would normally be considered systemically important. A systemically important system does not necessarily handle only high-value payments; the term can include a system which handles payments of various values, but which has the capacity to trigger or transmit systemic disruption by virtue of certain segments of its traffic. In practice the boundary between payment systems which are systemically important and those which are not is not always clear-cut and the central bank needs to consider carefully where that boundary should be drawn. (Part 2 discusses this judgement in more detail.) The Core Principles may also be useful in assessing and understanding the characteristics of systems which pose relatively little systemic risk and it may be desirable for such systems to comply with some or all of the Core Principles.

3.3 Systemically important payment systems may be owned and operated by central banks or by private sector institutions. There are also cases where they are owned and operated jointly by public and private agencies. The Core Principles are intended to be relevant to all institutional and ownership structures. They address primarily the design and operation of payment systems, but are intended also to influence the actions of participants and of agencies that supervise participants. The role and responsibilities of the operator and the participants should be clearly defined and understood. The central bank has key responsibilities in applying the Core Principles, which are described more fully in Section 4.

3.4 Although the Core Principles are expressed in terms of payment systems in a single country, they are equally applicable where the payment system arrangements extend over a broader economic area, such as where a single payment system or a collection of inter-connected payment systems cover a region broader than a country. The Core Principles also apply to cross-border or multi-currency payment systems.

Core Principles

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

- 3.1.1 The rules and procedures of a system should be enforceable and their consequences predictable. A system which is not legally robust or in which the legal issues are poorly understood could endanger its participants. Poor understanding can give participants a false sense of security, leading them, for example, to underestimate their credit or liquidity exposures.
- 3.1.2 The legal environment relevant to Core Principle I includes the general legal infrastructure in the relevant jurisdictions (such as the law relating to contracts, payments, securities, banking, debtor/creditor relationships, and insolvency) as well as specific statutes, case law, contracts (for example, payment system rules) or other relevant material.
- 3.1.3 The jurisdiction under whose law the system's rules and procedures are to be interpreted should be specified clearly. In most cases, the most important legal environment will be the domestic one, although, in particular where the system involves cross-border elements such as foreign bank participation or the use of multiple currencies, it will also be necessary to consider whether there are any material legal risks stemming from other relevant jurisdictions.

II. The system's rules and procedures should enable participants to have a clear understanding of the system's impact on each of the financial risks they incur through participation in it.

- 3.2.1 Participants, the system operator, and other involved parties - in some cases including customers - should understand clearly the financial risks in the system and where they are borne. An important determinant of where the risks are borne will be the rules and procedures of the system. These should define clearly the rights and obligations of all the parties involved and all such parties should be provided with up-to-date explanatory material. In particular, the relationship between the system rules and the other components of the legal environment should be clearly understood and explained. In addition, key rules relating to financial risks should be made publicly available.

III. The system should have clearly defined procedures for the management of credit risks and liquidity risks, which specify the respective responsibilities of the system operator and the participants and which provide appropriate incentives to manage and contain those risks.

- 3.3.1 The rules and procedures of a systemically important payment system are not only the basis for establishing where credit and liquidity risks are borne within the system, but also for allocating responsibilities for risk management and risk containment. They are, therefore, an important mechanism for addressing the financial risks which can arise in payment systems. A system's rules and procedures should therefore ensure that all parties have both the incentives and the capabilities to manage and contain each of the risks they bear and that limits are placed on the maximum level of credit exposure that can be produced by each participant. Limits on credit exposure are likely to be particularly relevant in systems involving netting mechanisms.
- 3.3.2 There are a variety of ways in which risks can be managed and contained using both analytical and operational procedures. Analytical procedures include on-going monitoring and analysis of the credit and liquidity risks participants pose to the system. Operational procedures include the implementation of risk management decisions through limits on exposures, by pre-funding or collateralising obligations, through the design and management

of transactions queues or through other mechanisms. For many systems, the use of risk management processes that operate in real time will be a key element in satisfying Core Principle III.

IV. The system should provide prompt final settlement on the day of value, preferably during the day and at a minimum at the end of the day.

- 3.4.1 Core Principle IV relates to daily settlement in normal circumstances. Between the time when payments are accepted for settlement by the payment system (including satisfaction of any relevant risk management tests, such as the application of limits on exposures or availability of liquidity) and the time when final settlement actually occurs, participants may still face credit and liquidity risks. These risks are exacerbated if they extend overnight, in part because a likely time for the relevant authorities to close insolvent institutions is between business days. Prompt final settlement helps to reduce these risks. As a minimum standard, final settlement should occur at the end of the day of value.
- 3.4.2 In most countries it should be a goal for at least one payment system to exceed this minimum standard by providing real-time final settlement during the day. This is particularly desirable in countries with large volumes of high-value payments and sophisticated financial markets. An effective intraday liquidity mechanism is necessary for this development in order to ensure that prompt final settlement is not only available, but is achieved in practice.
- 3.4.3 Core Principle IV relates to the promptness of settlement on the intended day of value. Nothing in it prevents a system from offering a facility for entering payment details in advance of that day.

V. A system in which multilateral netting takes place should, at a minimum, be capable of ensuring the timely completion of daily settlements in the event of an inability to settle by the participant with the largest single settlement obligation.

- 3.5.1 Most multilateral netting systems defer settlement of participants' obligations. Multilateral netting can create the risk that, if a participant is unable to meet its settlement obligations, other participants will face unexpected credit and liquidity risks at the time of settlement. The amount at risk can be much greater than the net amounts due. The risk is exacerbated the longer settlement is deferred. This combination of multilateral netting and deferred settlement was the focus of Lamfalussy Standard IV, which specified that, at a minimum, such netting systems must be able to withstand the failure of the largest single net debtor to the system. Such systems therefore need strong controls to address this settlement risk, and many payment systems that settle on a net basis have introduced arrangements to limit credit and liquidity risk and to ensure access to liquidity in adverse circumstances.
- 3.5.2 Systems which satisfy only this minimum standard are still exposed to the financial risks of the failure of more than one institution during the same business day. The circumstances in which one large net debtor is unable to meet its settlement obligations to the system may well be those in which other institutions are also under liquidity pressure. Best international practice now is, therefore, for such systems to be able to withstand the inability to settle of more than the one participant with the largest single settlement obligation. Careful consideration should be given to this approach and its implications should be evaluated taking into account the benefits of reduced settlement risk and any other consequences such as for the management of liquidity. In addition, alternative system designs (such as real-time gross settlement systems or hybrid systems) are increasingly being adopted to reduce or eliminate settlement risk.
- 3.5.3 Core Principle V adopts the wording of Lamfalussy Standard IV almost unchanged, and it remains a universal minimum standard for multilateral netting systems, which should be exceeded wherever possible. It is not relevant for real-time gross settlement systems. If

systems of other types, such as hybrid systems, involve multilateral netting or the deferral of settlement, the central bank may need to consider whether the risks are similar. If they are, a similar approach of applying at least the minimum standard, and preferably a higher standard, should be followed.

VI. Assets used for settlement should preferably be a claim on the central bank; where other assets are used, they should carry little or no credit risk and little or no liquidity risk.

3.6.1 Most systems involve the transfer of an asset among system participants to settle payment obligations. The most common form of such an asset, which is also the preferable form, is an account balance at the central bank, representing a claim on the central bank. There are, however, examples of other forms of settlement asset, representing a claim on a supervised institution.

3.6.2 The settlement asset must be accepted by all participants in the system. Where an asset other than a claim on a central bank is used, the system's safety depends in part on whether the asset leaves the holder with significant credit risk or liquidity risk. This form of credit risk arises if there is more than a negligible risk that the issuer of the asset could fail. Liquidity risk arises in this context if the asset might not be readily transferable, for example into claims on a central bank or other liquid assets. In either case, the system could face a crisis of confidence, which would create systemic risk. Balances at the central bank are generally the most satisfactory asset used for settlement, because of the lack of credit or liquidity risk for the holder, and they are typically used in systemically important payment systems. If settlement is completed using other assets, such as claims on a commercial bank, those assets must carry little or no financial risk.

3.6.3 In some payment systems minimal use is made of a settlement asset. For example, they may settle by offsetting one claim against another. This can be consistent with Core Principle VI provided that there is no inconsistency with other Core Principles, particularly with Core Principle I, which requires the legal basis for the offset process to be sound.

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

3.7.1 Market participants rely on payment systems for settling their financial market transactions. To ensure the accuracy and integrity of these transactions, the system should incorporate commercially reasonable standards of security appropriate to the transaction values involved. These standards rise over time with advances in technology. To ensure completion of daily processing, the system should maintain a high degree of operational resilience. This is not just a matter of having reliable technology and adequate back up of all hardware, software and network facilities. It is also necessary to have effective business procedures and well-trained and competent personnel who can operate the system safely and efficiently and ensure that the correct procedures are followed. This, together with good technology, will, for example, help to ensure that payments are correctly and quickly processed and that risk management procedures, such as limits, are observed.

3.7.2 The degree of security and reliability required to provide adequate safety and efficiency depends on the importance of the system, as well as any other relevant factors. The degree of reliability required may, for example, depend on the availability of alternative arrangements for making payments in contingency situations.

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

- 3.8.1 Operators, users (that is participants, such as banks and their customers) and overseers of systems all have an interest in the efficiency of a system. They want to avoid wasting resources and, other things being equal, would wish to use fewer resources. There will typically be a trade-off between minimising resource costs and other objectives, such as maximising safety. Within the need to meet these other objectives, the design of the system, including the technological choices made, should seek to economise on relevant resource costs by being practical in the specific circumstances of the system, and by taking account of its effects on the economy as a whole.
- 3.8.2 The costs of providing payment services will depend on the quality of service and the features demanded by users, and on the need for the system to meet the Core Principles limiting risk in the system. A system which is consistent with the demands of the markets it serves is likely to be more heavily used; if it also satisfies the Core Principles, it spreads more widely the risk-reducing benefits as well as the costs of providing the services.
- 3.8.3 Designers and operators of payment systems need to consider how to provide a given quality of service, in terms of functionality, safety and efficiency, at minimum resource cost. The relevant costs are not just those passed on to users through system charges, but those of the total resources used by the system and its users in providing the payments services. They will need, for example, to take into account any indirect costs to users, such as the costs of liquidity and collateral.
- 3.8.4 The availability of liquidity in a system can be an important element in its smooth operation. Recipients like to be paid in funds which are immediately reusable and so value the advantages of systems with intraday settlement. Senders, however, may face costs in raising liquidity to enable them to pay early in a system. Where systems have inadequate intraday liquidity mechanisms, they can face a risk of slow turnover or even gridlock (where participants are each waiting for the others to pay first). In the interests of efficiency, systems should provide participants with adequate incentives to pay promptly. The supply of intraday liquidity is particularly important for systems with real-time settlement. Factors relevant to supply include the depth of interbank money markets and the availability of any relevant collateral. With the benefits of smooth payments flows in mind, the central bank should consider whether and how to provide intraday liquidity to support a system's daily functioning.
- 3.8.5 The technology and operating procedures used to provide payment services should be consistent with the types of services demanded by users, reflecting the stage of economic development of the markets served. The design of the payment system should therefore be appropriate for the country's geography, its population distribution and its infrastructure (such as telecommunications, transportation and banking structure). A particular design or technological solution which is right for one country may not be right for another.
- 3.8.6 Systems should be designed and operated so that they can adapt to the development of the market for payment services both domestically and internationally. Their technical, business and governance arrangements should be sufficiently flexible to respond to changing demands, for example, in adopting new technologies and procedures.

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

- 3.9.1 Access criteria that encourage competition amongst participants promote efficient and low-cost payment services. This advantage, however, may need to be weighed against the need to protect systems and their participants from participation in the system by institutions that would expose them to excessive legal, financial or operational risks. Any restrictions on

access should be objective and based on appropriate risk criteria. All access criteria should be stated explicitly and disclosed to interested parties.

- 3.9.2 The rules of the system should provide for clearly specified procedures for orderly withdrawal of a participant from the system, either at the participant's request, or following a decision by the system operator that the participant should withdraw. A central bank's actions in withdrawing access to payment system facilities, or to settlement account services, may also lead to the withdrawal of a participant from a payment system, but it may not be possible for a central bank to specify explicitly in advance all the circumstances in which it might act in this way.

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

- 3.10.1 Payment system governance arrangements encompass the set of relationships between the payment system's management and its governing body (such as a board of directors), its owners and its other stakeholders. These arrangements provide the structure through which the system's overall objectives are set, how they are attained and how performance is monitored. Because systemically important payment systems have the potential to affect the wider financial and economic community, there is a particular need for effective, accountable and transparent governance, whether the system is owned and operated by the central bank or by the private sector.

- 3.10.2 Effective governance provides proper incentives for management to pursue objectives that are in the interests of the system, its participants and the public more generally. It also ensures that management has the appropriate tools and abilities to achieve the system's objectives. Governance arrangements should provide accountability to owners (for example, to the shareholders of a private sector system) and, because of the system's systemic importance, to the wider financial community, so that those served by the payment system can influence its overall objectives and performance. An essential aspect of achieving accountability is to ensure that governance arrangements are transparent, so that all affected parties have access to information about decisions affecting the system and how they are taken. The combination of effective, accountable and transparent governance provides a foundation for compliance with the Core Principles as a whole.

Section 4: Responsibilities of the central bank in applying the Core Principles

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

4.1.1 Designers and operators of private sector payment systems, and participants and users of all systems, as well as other interested parties, need to have a clear understanding of the central bank's role, responsibilities and objectives in relation to payment systems. They need also to understand how the central bank intends to achieve those objectives, whether by formal powers or other means. This will enable those parties to operate in a predictable environment and to act in a manner that is consistent with those objectives and policies.

4.1.2 The central bank should therefore have clear payment system objectives. It should also define clearly and disclose major policies that will affect the operators and users of systems to ensure that they are well understood and to build support for them.

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

4.2.1 The central bank is often the operator of one or more systemically important payment systems. It therefore can and should ensure that they comply with the Core Principles.

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

4.3.1 Where systemically important payment systems are not operated by the central bank, it should oversee their compliance with the Core Principles. The central bank's oversight of systems should have a sound basis. There may be a wide variety of means by which this can be achieved, depending on the country's legal and institutional framework. Some countries have a statute-based system of oversight with specific tasks, responsibilities and powers assigned to the central bank and sometimes also to other agencies. Others have regimes based on custom and practice, which rely on non-statutory approaches. Either approach can work in its own setting – depending on the legal and institutional framework of the country concerned and the acceptance of the approach by the institutions overseen. The potential benefits of a statute-based approach to oversight, however, deserve serious consideration in countries newly establishing or significantly revising the oversight role and related policies.

4.3.2 The central bank should ensure that it has the expertise and resources to carry out its oversight functions effectively. It should not use its oversight role to disadvantage private sector systems relative to those which it owns and operates itself, but to ensure that the combination of public and private sector provision meets the public policy objectives.

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

4.4.1 A number of different authorities can have an interest in the safe and efficient functioning of payment systems. In addition to central banks, they can include, for example, legislative authorities, ministries of finance, supervisors and competition authorities. In particular, oversight of a country's payment systems, surveillance of its financial markets and supervision of financial institutions are complementary activities, which may be carried out by different agencies. A cooperative approach is likely to assist the fulfilment of all the relevant public policy goals.

- 4.4.2 Payment system oversight concentrates on the stability of the system as a whole, while the supervisors of individual banks and other financial institutions focus on the risks to specific participants. In particular, in assessing payment system risks, overseers may need to take into account the ability of individual participants to fulfil their responsibilities in the system. In monitoring the financial risks for an individual institution, the supervisors may need to take into account risks to which participants can be exposed as a result of participation in the systems and which could affect the viability of the institution. Regular exchanges of views and information between supervisors and overseers, including, where relevant, about key individual participants, can assist these complementary objectives. These exchanges can often benefit from agreements on the sharing of information.
- 4.4.3 Cooperation is particularly important for systems with cross-border or multi-currency characteristics. The principles for cooperative central bank oversight set out in Part D of the Lamfalussy Report provide a framework for such cooperation.

Annex

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