This working paper presents a model for the Confidential Report “Assessment and Observations on the Payments Clearance and Settlement System of Country X” delivered to the central bank at the end of the work of the international team, deployed on the field in the context of the Western Hemisphere Payments and Securities Settlement Forum (WHF). Following a request from the Western Hemisphere Finance Ministers, The World Bank in partnership with the Centro de Estudios Monetarios Latinoamericanos (CEMLA) first led the Western Hemisphere Payments and Securities Clearance and Settlement Initiative (WHI). Through the WHI, capacity has been created throughout the region and the Initiative has now evolved into a Forum, formally launched on June 2003, which represents the new set of organizational arrangements to give continuity to the efforts initiated under the WHI. The objective of the Forum is to describe and assess the payments systems of the Western Hemisphere with a view to identifying possible improvement measures in their safety, efficiency and integrity. To carry out this mandate the World Bank has sponsored an International Advisory Council (IAC) comprised of several institutions with high expertise in payments and securities clearance and settlement system.1 Another report is prepared by the international team for securities settlement arrangements and delivered to the securities regulator. In all phases the international team works in close

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coordination with a local team of technical experts appointed by the central bank and the securities regulator. This document was prepared by Massimo Cirasino (World Bank, Financial Economist) and has benefited from comments by José Antonio Garcia (Senior Economist, CEMLA), Mario Guadamillas (World Bank, Financial Economist), Robert Keppler (World Bank, Adviser), Fernando Montes-Negret (World Bank, Finance Sector Manager), and all colleagues participating in the WHF missions. This tool is constantly revised as a result of international developments, comments received and new experience gained from country assessments under the Initiative.

MARCH 2004
WESTERN HEMISPHERE PAYMENTS AND SECURITIES SETTLEMENT FORUM

FORO DE LIQUIDACIÓN DE PAGOS Y VALORES DEL HEMISFERIO OCCIDENTAL

STRICTLY CONFIDENTIAL

ASSESSMENT AND OBSERVATIONS ON THE PAYMENTS CLEARANCE AND SETTLEMENT SYSTEM OF (COUNTRY’S NAME)

PRELIMINARY DRAFT

DATE
WESTERN HEMISPHERE PAYMENTS AND SECURITIES CLEARANCE AND SETTLEMENT INITIATIVE

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ANNEXES

I. BIS CPSS Core Principles for SIPS Assessment and Observations Matrix(es)
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III. Payments System Oversight – International Comparison
EXECUTIVE SUMMARY

An Executive Summary of the Report should be prepared, in which all the main issues are highlighted.

1 INTRODUCTION

This Report constitutes a draft version of the assessment of the payments and securities clearance and settlement system of Guatemala performed by the country study team deployed in the context of the Western Hemisphere Payments and Securities Settlement Forum. Following a request from the Western Hemisphere Finance Ministers, The World Bank in partnership with the Centro de Estudios Monetarios Latinoamericanos (CEMLA) first led the Western Hemisphere Payments and Securities Clearance and Settlement Initiative (WHI). Through the WHI, capacity has been created throughout the region and the Initiative has now evolved into a Forum, formally launched on June 2003, which represents the new set of organizational arrangements to give continuity to the efforts initiated under the WHI.²

The objective of the Forum is to describe and assess the payments systems of the Western Hemisphere with a view to identifying possible improvement measures in their safety, efficiency and integrity. To carry out this mandate the World Bank has sponsored an International Advisory Council (IAC) comprised of several institutions with high expertise in payments and securities clearance and settlement systems.³ The Council provides technical guidance in defining the methodology for conducting the studies, integrating the teams that visit the countries and reviewing the main deliverables of the country study missions.

This document is the result of the work developed by an international team, in coordination with a local team. The team visited (the country) from … to … The international team was coordinated by ……. Other team members were …….. The payments work was coordinated with a local team comprising of officials from the central bank (names).

In addition to meetings with staff of the central bank and visits to the payments systems managed by the central bank, the team attended meetings with……. The team had an opportunity for open and candid discussions with many institutions and believes that has been able to sense representative views of the financial community in the country in regard to payments and securities settlement systems reform.

1.2. The purpose of the document: through this effort, the team has prepared this Aide Memoire, which includes several observations for the improvement and future development of the payments clearance and settlement arrangements in the country. These observations will be held confidentially by the Team and will not be shared with any third parties. [The document outlining the team’s preliminary views on matters perceived to be of strategic importance to the completion of the payments reform is delivered to the central bank at the end of the field work for

² A detailed explanation of the evolution of the Initiative into the Forum may be found at the Forum’s web site: www.ipho-whpi.org
two reasons: 1) to provide a basis for feedback and initial discussion; and 2) to assist the team understand and identify topics that are of interest to the central bank and therefore should be covered in more detail in the final version of the confidential report.\textsuperscript{4} At the outset, the team wants to thank the payments team within the central bank for their thorough briefings which were clearly based on a comprehensive understanding of the many issues involved in the reform process. Indeed many of the observations presented in this document were discussed with local colleagues and the international team is aware that the central bank is already taking appropriate actions on many of the issues discussed. In many points, this document should be viewed therefore as nothing more than a checklist for use by the local team in undertaking the already initiated current and future actions. In other cases, some additional elements might have been identified and those are brought to the attention of local authorities. \textit{(if applicable)}

The rest of the document is organized as follows. Section 2 gives an overall view of the country’s payments and securities clearance and settlement systems. Section 3 presents some ideas on how the reform of the payments systems should be completed by developing a strategic approach which should take into account the current and future needs of all systems participants and end-users. Section 4 presents the assessment of the legal framework in the country and Section 5 the assessment of large value systems including their compliance with the BIS CPSS Core Principles for Systemically Important Payment Systems (SIPS). Section 6 describes the interrelations between the payments and the securities settlement systems and Section 7 introduces some observations on the foreign exchange settlement system in the country. Section 8 and 9 deal respectively with retail systems and non-cash government payments. Section 10 addresses the issue of the role of the central bank in finalizing the payments reform and suggests the implementation of the payments system oversight function in the country. Section 11 discusses possible models of cooperation in the field and, finally, Section 12 analyses transparency in the payments system service provision and policy. The report includes some annexes. Annex I presents assessment matrix(es) of the large value systems on the base of the BIS CPSS Core principles for SIPS. Annex II presents the assessment matrix of the central bank’s responsibility in applying the Core Principles for SIPS. Annex III presents international comparisons in performing the payments system oversight function. \textit{[The number of Annexes will typically vary from country to country]}

2 GENERAL OVERVIEW OF THE PAYMENTS SYSTEM IN (THE COUNTRY)

This section should provide a (brief) description of all payments and securities clearance and settlement arrangements in the country, including the (relative) use of payments instruments.

3 COMPLETING THE PAYMENTS SYSTEM REFORM IN (THE COUNTRY) \textit{(if applicable)}

3.1 The Role of a National Payments System

It is widely accepted that a National Payments System (NPS) consists of a defined group of institutions and a set of instruments and procedures, used to facilitate the circulation of money within the country and internationally. Any country’s economy can be viewed as a series of layers in an inverted pyramid, in which each layer is supported by the layers beneath it. The broadest layer of the pyramid represents the real economy and the financial markets; the buying and selling of goods and services throughout the nation. It is supported by the country’s banking

\textsuperscript{4} Only for the preliminary draft of the Report.
system - the next level of the pyramid - which provides payment services to all sectors of the economy.\(^5\) The third level consists of a limited number of interbank value transfer systems through which payment and other financial transactions are processed. The final settlement of funds-transfers normally takes place across the accounts which approved institutions hold with the central bank, whose pivotal role is vital to the functioning of the economy as a whole.

The NPS is therefore a core component of the broader financial system and can be viewed as the infrastructure that provides the economy with the channels or circuits for processing the payments resulting from the many different types of economic transactions that take place on a daily basis.

A well functioning NPS requires a delicate balance between market-driven competition, cooperation and public good considerations. In a mature environment; banks and other payment-service providers should compete for payments business and customers, whilst achieving the benefits and efficiencies that stem from the sharing of non-competitive infrastructures. In the national interest, it is imperative that economies of scale are achieved and that the national payment-service infrastructure allows as many participants as possible to offer their services to the public.

### 3.2 Scope and Components of an NPS

Taking account of the previous points, it is clear that a comprehensive NPS comprises not just the funds transfer mechanisms - payment processing organizations, communications networks, and computer systems – but includes all of the following:

- institutions providing financial intermediation;
- a legal and statutory framework;
- rules, regulations and agreements;
- appropriate payment instruments;
- processing systems and procedures;
- a cost effective technological infrastructure;
- clearing and Settlement mechanisms that adequately balance risk and efficiency requirements;
- providers of access to payment-related services; and
- a carefully selected range of payment-service providers and products that satisfy market needs at acceptable costs.

### 3.3 Conceptual Framework for NPS Development

Typically, payment services have evolved -over time- in an incremental manner driven both by the need to resolve problems or to take advantage of specifically identified improvement opportunities. To avoid a continuation of this \textit{ad hoc} operational approach to payments system development, several countries have paused and initiated a business and banking needs driven strategic approach to identify and implement a phased series of agreed changes – based on stakeholder consensus – to ensure that a well described medium-term vision of the NPS is realized. A smooth and trouble-free implementation of the NPS can best be achieved through development of a vision that characterizes the sought after arrangements in terms of goals, objectives, primary features, critical success factors, fundamental principles, and strategies.

There is no disagreement that the primary goal of the NPS is to enable the circulation of money. This goal emphasizes the fact that the NPS is an enabler of economic activity. It provides the circuits for effecting payments, domestically and internationally. Usually there is no disagreement as to the objectives of the NPS. There are typically three broad objectives:

- to provide effective mechanisms for the exchange of money between transacting parties;
- to ensure finality and irrevocability of both payment and settlement; and
- to enable the management, reduction and containment of systemic and other payment related risks.

Primary features require detailed discussion and agreement with all stakeholders as they will include a full range of policy, operational and technical attributes that will characterize the future. A partial list of typical characteristics might be as follows:

- settlement of domestic interbank obligations is effected on a same day basis;
- participants compete on an equal footing in the provision of interbank clearing and settlement services;
- there is healthy competition amongst customer payment-service providers;
- the NPS is easily accessible;
- the NPS is cost efficient;
- appropriate sub-systems are provided for retail, wholesale, foreign exchange, commodities markets, capital market, and money market transactions;
- the public is aware of NPS features;
- the NPS supports electronic delivery versus payment (DvP) for securities transactions and payment versus payment (PvP) for foreign exchange transactions;
- the NPS is internationally compatible;
- payment settlement time-lags resulting from trading transactions are in line with international practice;
- the NPS makes optimum use of the available liquidity;
- the international community has an appreciation of the effectiveness of the NPS.

The success of the NPS should be measured against achievement of a comprehensive range of factors such as those illustrated below:

- adequate risk control measures;
- irrevocability of settled transactions;
- synchronization of delivery and payment;
- facilitation of monetary policy execution;
- sufficient liquidity;

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6 Money is used here in its broadest sense and includes all forms of payment, such as cash, checks, cards, electronic payments, etc.
7 The list is indicative and purely illustrative. Obviously, a tailored list of characteristics should be developed by the country’s stakeholders.
• confidentiality and security;
• sound legal foundation;
• adherence to national rules, regulations and procedures;
• effective fraud-prevention and detection measures in place;
• a suitable variety of payments;
• service to all the people of the country.

A vital issue in NPS development and implementation relates to reaching consensus on a comprehensive range of fundamental principles. The CPSS Core Principles for Systemically Important Payment Systems are an example of such principles. However, as the NPS covers all payment systems, the range of agreed fundamental principles should also cover all sub-systems. Such fundamental principles might include the following:

• the provision of NPS services is not the exclusive domain of banks;
• the evolution of the NPS infrastructure is a co-operative responsibility;
• participants are liable for the risks that they introduce into the NPS;
• a balance is maintained between risk reduction and cost;
• the central bank response to a problem in the NPS will be in the interest of the system, not individual participants;
• surveillance (oversight) is necessary to ensure the safety and soundness of the NPS;

Finally, a series of strategies should be developed that following implementation will align the current payment arrangements with the envisaged NPS. These strategies taken together will represent an agreed set of initiatives that will be co-operatively implemented by all stakeholders. Typically this change program is executed under the leadership of the central bank and includes a number of clusters of activity aimed at, for example; risk reduction, strengthening the legal and regulatory framework, payment practices, interface between trading systems and the NPS, and management of the NPS. Examples of such strategies might include:

• clarifying the roles and responsibilities of all participants in the NPS;
• introduction of measures to limit credit exposures in bulk clearing processes;
• revision of the statutory powers of the central bank regarding payment systems;
• introduction of a regulatory framework for clearing services providers;
• creation of participation agreements for utilizing common investments in infrastructure;
• creation of a NPS Forum to discuss and resolve relevant issues in the payments field;
• establishment of NPS Standards;
• liaison with banks and financial authorities in the Region; and
• review of cross-border / foreign currency market practices from an NPS perspective.

3.4 The Way Forward
This section should expand on the strategy to complete the reform of the payments system based on country’s specific characteristics.

4 LEGAL FRAMEWORK

Context

A sound and appropriate legal framework is generally considered the basis for a sound and efficient payments system. The legal environment should include the following: 1) laws and regulations of broad applicability that address issues such as insolvency and contractual relations between parties; 2) laws and regulations that have specific applicability to payment systems (such as legislation on electronic signature, validation of netting, settlement finality); and 3) the rules, standards and procedures agreed to by the participants of a payment system. The legal infrastructure should also cover other activities carried out by both public and private sector entities. For example, the legislative framework may establish clear responsibilities for the central bank or other regulatory bodies such as oversight of the payments system or the provision of liquidity to participants in these systems. Finally, relevant pieces of legislation that have impact on the soundness of the legal framework on the payments system include: law on transparency of payment instruments’ terms and conditions; antitrust legislation for the supply of payment services; and legislation on privacy. While laws are normally the appropriate means to enforce a general objective in the payments field, in some cases regulation by the overseers might be an efficient way to react to a rapidly changing environment. In other cases, specific agreements among participants might be adequate; in this case an appropriate professional assessment of the enforceability of these arrangements is usually required. Finally, since the payments system typically includes participants incorporated in foreign jurisdictions or, the payments system might operate with multiple currencies or across borders, in some cases it may be necessary to address issues associated with foreign jurisdictions.

Status in the country

A brief description about the situation in the country regarding the issue analyzed including main shortcomings and areas of potential upgrade.

Observations

Includes some observations about how the issue analyzed could be improved in order to have a safe and efficient payments system.

5 INTERBANK EXCHANGE AND SETTLEMENT CIRCUITS

5.1 Large Value Systems

Context

Large value systems are the most significant component of the national payments system. This is because they are able to generate and transmit disturbances of a systemic nature to the financial sector. In order to cope with these systemic risks, several measures are adopted,
depending on the nature of the large value system. If the system is characterized by a deferred net settlement of payment transactions, risk control measures include the introduction of bilateral and multilateral caps, the implementation of loss-sharing agreements, and the pledging of collateral to cope with the inability of one or more participants to pay. On the other hand, the development of Real Time Gross Settlement Systems (RTGS) is one response to the growing awareness of the need for sound risk management in large-value funds transfer systems. RTGS systems can offer a powerful mechanism for limiting settlement and systemic risks in the interbank settlement process, because they can effect final settlement of individual funds transfers on a continuous basis during the processing day. In addition, RTGS can contribute to the reduction of settlement risk in securities and foreign exchange transactions by facilitating the delivery-versus-payment (DVP) and payment-versus-payment mechanisms. Variants of the basic RTGS system, so called hybrid systems, which take into account liquidity saving features that exist in net settlement systems, are being introduced in some countries.

Status in the country

Assessment of the Large Value Systems with the BIS-CPSS Core Principles for Systemically Important Payment System

Box 1. Origin of CPSS Core Principles for Systemically Important Payment Systems

In January 2001, the final results of the work of a Task Force established by the Bank for International Settlements (BIS) Committee on Payment and Settlement Systems (CPSS) to develop core principles for systemically important payment systems were released. The Task Force consisted of payment system experts from 23 central banks, including several from emerging market countries, as well as the International Monetary Fund and the World Bank. In preparing the report, the Task Force consulted a number of central bank experts, including many from emerging markets. The report recognizes that safe and efficient payment systems are important to the stability of the financial system and that safety and efficiency in systemically important payment systems (i.e., those systems which present a potential systemic risk) should therefore be objectives of public policy. To further these objectives, the report sets out core principles for the design and operation of systemically important payment systems worldwide and the responsibilities of central banks in applying these principles. The report represents a broad international consensus, and the core principles are intended to be useful in a wide range of economic circumstances. The principles are therefore expressed in a sufficiently general way to be universally applicable.

The assessment in terms of the Core Principles has represented the starting point of the analysis of the large value systems in the country. The results of the assessment are presented in the matrix(es) in the Annex I. The analysis of the compliance of the systems to the Core Principles helped to identify possible areas of intervention to improve reliability and efficiency of the large value systems in the country.

XXX systems were identified to be of systemic importance in the country: (explain why)\textsuperscript{10}.  

\textsuperscript{8} The main tools used in performing the assessment are the CPSS Core Principle Report (January 2001), and the Financial Sector Assessment Program Guidance Note for Assessing Observance of Core Principles for Systemically Important Payment Systems (GN), (August 2001), prepared by the International Monetary Fund and The World Bank, in cooperation with the CPSS, mimeo. 

\textsuperscript{9} The Core Principles Report was released in its preliminary version for public comments in December 1999.

\textsuperscript{10} Refer to the documents mentioned in footnote 7 for guidance on how to determine whether a system is systemically important.
As per the X system, the analysis of the Core Principles showed that the system is …….. 

The observations presented below should be able to address some of the weaknesses that emerged from the analysis and comparison with the Core Principles for Systemically Important Payment System.

Observations 

Includes some observations about how the issue analyzed could be improved in order to have safe and efficient payments system.

5.2 Retail Systems

Context

A wide range of payment instruments is essential for supporting customers’ needs in a market economy. A less than optimal supply of payment instruments may ultimately have an impact on economic development and growth. Moreover, the safe and efficient use of money as a medium of exchange in retail transactions is particularly important for the stability of the currency and a foundation of the trust people have in it. As CPSS publications have shown, the use of retail payment instruments differs in industrialized countries both within and between the countries considered. This is due to a variety of reasons including cultural, historical, economic and legal factors. However, some common trends may be observed, namely: the continued primacy of cash (in volume terms) for face-to-face payments; growth in payment cards use; increased use of direct funds transfers, especially direct debit transfers, for remote payments; and changes in the market arrangements for providing and pricing the retail payment instruments and services delivered to end-users. This evolution is likely to continue in the future and is expected to influence traditional (especially paper-based) instruments. As the CPSS reports state, over the long term some of the observed market developments may well alter traditional payment practices and contribute to increased efficiency and convenience in retail payment systems. In an increasing number of countries more and more attention is devoted by authorities and market participants to the efficiency and efficacy of production and distribution of payment instruments (including cash).

In September 2002, the CPSS published a new Report which identifies and explores policy issues for central banks and considers the possible contribution of central banks towards furthering certain policy goals in this area. Central banks are currently involved in retail payments in three main ways: 1) in an operational capacity; 2) as payment system overseers, or 3) as catalysts or facilitators of market and regulatory evolution. Even though the involvement of the central bank in retail varies from country to country, the Report suggests that each central bank should examine developments in its markets periodically in the light of some identified policy issues(see below), in order to form a view on whether such issues arise in practice. Where such issues are judged to arise, relevant public authorities (including central banks) may decide to take action aimed at establishing or re-establishing an acceptable balance of the various aspects of

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11 Bank for International Settlements, Committee on Payment and Settlements Systems, Clearing and Settlement Arrangements for Retail Payments in Selected Countries (September 2000); and Retail Payment Systems in Selected Countries: a Comparative Study (September 1999), Basle, Switzerland.
safety and efficiency. The public policy goals, the central bank minimum action and the range of possible additional actions identified in the CPSS Report are summarized in the Boxes below.

**Box 2 Public Policy Goals, Central Bank Minimum Actions and Range of Possible Additional Actions for Retail Payment Systems**

**Legal and regulatory Framework**

**Public Policy Goal A:** Policies relating to the efficiency and safety of retail payments should be designed, where appropriate, to address legal and regulatory impediments to market development and innovation.

The Central bank should, at a minimum:

(i) Review the legal and regulatory framework to identify any barriers to improvements in efficiency and/or safety;

(ii) Cooperate with relevant public and private entities so that the legal and regulatory framework keeps pace with the changing circumstances and barriers to improvements in efficiency and/or safety are removed, where appropriate.

The **Range of possible additional actions** could include, depending on the individual central bank’s responsibilities, powers and priorities:

- Altering regulations that currently present barriers to improving efficiency and safety, where this is within the central bank’s remit and where other public interest arguments do not militate against such action;

- Introducing or proposing new regulations, as the central bank’s remit allows, where the legal or regulatory framework is insufficient to support increased efficiency and/or safety;

- Offering expert advice to other responsible authorities, for example in the preparation of relevant legislation.

**Market structure and performance**

**Public Policy Goal B:** Policies relating to the efficiency and safety of the retail payments should be designed, where appropriate, to foster market conditions and behaviors.

The central bank should, at a minimum:

(i) Monitor developments in market conditions and behaviors relating to retail payment instruments and services and assess their significance;

(ii) Cooperate with other public or private entities, as appropriate, to foster competitive market conditions and to address any significant public policy issues arising from market structures and performance.

The **range of possible additional actions** could include, depending on the individual central bank’s responsibilities, powers and priorities:

- Promoting appropriate standards or guidelines for transparency, in cooperation with relevant public and private sector entities;

- Reviewing conditions in the market for cross-border retail payments, with a view to promoting improvements, is such action is warranted;

- Considering and, if appropriate, performing regulatory and/or operational intervention in cases where market forces are judged not to have achieved or not to be likely to achieve an efficient and safe solution.

**Standards and Infrastructure**

**Public Policy Goal C:** Policies relating to the efficiency and safety of retail payments should be designed, where appropriate, to support the development of effective standards and infrastructure arrangements.

The central bank should, at a minimum:

(i) Monitor developments in security standards, operating standards and infrastructure arrangements for retail payments which the central bank judges to be important for the public interest, and assess their significance;

(ii) Cooperate with relevant public and private entities to encourage market improvements in such standards and infrastructure arrangements, where appropriate.

The **range of possible additional actions** could include, depending on the individual central bank’s responsibilities, powers and priorities:
- Participating actively in reviewing and developing appropriate standards and arrangements, in cooperation with relevant public and private entities, where the central bank judges its more intensive involvement to be necessary to furthering the goal;
- Considering and, if appropriate, performing regulatory and/or operational intervention in cases where market forces are judged not to have achieved or not to be likely to achieve an efficient and safe solution.

**Central bank Services**

**Public Policy Goal D**: Policies relating to the efficiency and safety of retail payments should be designed, where appropriate, **to provide central bank services in the manner most effective for the particular market.**

**The central bank should, at a minimum:**

(i) Review and, if appropriate, adapt its provisions of settlement services to contribute to efficient and safe outcomes;

(ii) Be transparent in its provision of services.

**The range of possible additional actions** could include, depending on the individual central bank’s responsibilities, powers and priorities:

- Reviewing the relevant non settlement services it provides and considering their adaptation to changing market conditions;
- Reviewing policies on access to central bank services and on pricing.

The CPSS Report has been prepared in the light of the trends in retail payment markets in the G-10 countries and Australia. It is likely that, in developing countries, central banks and other private and public entities need to take a proactive role and explore carefully the possibility of using the additional actions.

**Status in the country**

A brief description about the situation in the country regarding the issue analyzed including main shortcomings and areas of potential upgrade.

**Observations**

Includes some observations about how the issue analyzed could be improved in order to have safe and efficient payments system.

### 6 SEcurities CLEARANCE AND SETTLEMENT SYSTEMS (INTERRELATIONS)

**Context**

Securities markets are of high importance for a country’s financial sector. As a matter of fact, securities, and above all government securities, are used extensively to carry out monetary policy through open market operations. Also, securities settlement systems are essential for the timely delivery of collateral for payments and other purposes. Sound and efficient procedures for the settlement of securities are, therefore, an essential element for the development of the financial markets. Due to the importance of the smooth functioning of the clearance and

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13 A more comprehensive document on securities settlement arrangements is prepared in the context of the mission and delivered confidentially to the securities regulator. The central bank and the securities regulator are strongly encouraged to share the present “payments” and the “securities” reports.
settlement procedures for the timely execution of monetary policy operations and for the efficient functioning of the markets, in many countries central banks are involved or manage directly the clearance and settlement mechanisms; at least in the early stage of development of the market infrastructure.

Status in the country

A brief description about the situation in the country regarding the issue analyzed including main shortcomings and areas of potential upgrade.

Box: Intraday Liquidity of Broker-Dealers *(if applicable)*

Observations

Includes some observations about how the issue analyzed could be improved in order to have safe and efficient payments system.

7 FOREIGN EXCHANGE AND CROSS-BORDER SETTLEMENT MECHANISMS

Context

Foreign Exchange markets present risks that are potentially relevant. The Foreign Exchange (FX) settlement risk clearly has a credit risk dimension. If (as it is usually the case under current market practices) a bank cannot make the payment of the currency it sold conditional upon its final receipt of the currency it bought, it faces the possibility of losing the full principal value of the transaction. FX settlement risk also has an important liquidity risk dimension. Even temporary delays in settlement can expose a receiving bank to liquidity pressures if unsettled funds are needed to meet obligations to other parties. FX settlement risk has other dimensions as well, for example legal risk. In the case of foreign exchange deals, legal risk can be complicated by the fact settlement normally takes place in more than one jurisdiction.

In the report *Settlement Risk in Foreign Exchange Transactions*, published by the BIS CPSS in 1996, the G-10 central banks agreed a three-track strategy providing for:

- action by individual banks to control the foreign exchange settlement exposures;
- action by industry groups to provide risk-reducing multi-currency services; and
- action by central banks to induce rapid private sector progress.

The Report also states that “G-10 central banks encourage existing and prospective industry groups to develop and offer services that would contribute to the risk-reducing efforts of individual banks”.

Also as a result of the recommendations included in the CPSS (1996) Report, in September 2002 the CLS Bank International (CLS Bank) started its Continuous Linked Settlement service, settling foreign exchange transactions in 7 currencies (the Australian dollar, the Canadian dollar,

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14 See also *Supervisory Guidance for Managing Settlement Risk in Foreign Exchange Transactions* (September 2000) by the Basel Committee on Banking Supervision.
the US dollar, the Euro, the Swiss Franc, the Japanese Yen, and the British pound) on a payment versus payment (PvP) basis on the books of the seven respective central banks. At the time of its launch, CLS has 66 of the world’s financial institutions participating as shareholders and represents over 80% of the world’s foreign exchange business by value.\textsuperscript{15} Transactions in other additional currencies are likely to be settled by the CLS Bank in the future. The CLS Bank is subject to the cooperative oversight of central banks involved and it is under the direct oversight of the US Federal Reserve.

Retail cross-border payments, notably trade-related payments and personal remittances, are increasingly relevant for economies and their societies as a result of current global realities, particularly a growing economic integration and interdependence among countries at all levels and the increasing flow of immigrants all over the world. From a policy-making perspective, retail cross-border payments share many of the features of domestic retail payments. Relevant issues to look at include the efficiency of the payment instruments being used, security and other risks, customer protection, costs, diversity of service providers and oversight capabilities of the central bank, among others. The cross-border dimension brings in some additional issues, including the involvement (in many cases) of a foreign exchange transaction and of various national laws and/or regulations, institutions and even habits.

Cross-border payment services customers expect to be provided with a set of convenient, cheap, reliable and predictable instruments to cover their most important payment needs, \textit{i.e.}, face-to-face payments, one-off and recurring remote payments and ATM cash withdrawals. Performance in most of these areas is generally poor as a result of, among others, lack of transparency, the diversity of cross-border payment services (among which several types of non-financial institutions that typically remain unregulated as to their provision of payment services) and weak oversight as overseeing the full flow of a cross-border transaction would necessarily involve two or more national authorities.

As part of their role as payment system overseers, central banks should strive for the regulatory perspective in cross-border payments to be widen from the traditional areas of balance of payments and money laundering to include payment system issues, in particular issues related to efficiency, transparency and risks. Furthermore, through enhanced international cooperation central banks should analyze what the inhibitors and obstacles are for cross-border payments to become as efficient and safe as possible within the general constraints set by national and monetary boundaries.

\textit{Status in the country}

A brief description about the situation in the country regarding the issue analyzed including main shortcomings and areas of potential upgrade.

\textit{Observations}

Includes some observations about how the issue analyzed could be improved in order to have safe and efficient payments system.

\textit{Since the launch of the CLS Bank is likely to alter profoundly the business in this segment of the payments market, the central bank and the commercial banks are strongly recommended to study the implications for the local market.}\textsuperscript{15} Source: Euromoney Survey 2001.
8 NON CASH GOVERNMENT PAYMENTS

Context

In all countries, the public sector is a heavy user of the payments system. In fact, the government receives and remits many payments (for tax collection, salaries, purchase of goods and services, etc.). In several countries, the public sector has lagged behind the private sector in terms of efficient use of payment instruments and has failed to reach an efficacious integration with the banking sector. In recent years, more and more attention has been devoted to this issue and, in some countries, the government has been able to use efficiently the options offered by new technologies (Automated Clearinghouse, smart cards, etc.), significantly reducing its processing costs.

Status in the country

A brief description about the situation in the country regarding the issue analyzed including main shortcomings and areas of potential upgrade.

Observations

Includes some observations about how the issue analyzed could be improved in order to have safe and efficient payments system.

9 THE ROLE OF THE CENTRAL BANK IN THE PAYMENTS SYSTEM REFORM AND THE PAYMENTS SYSTEM OVERSIGHT

Context

The smoothness and reliability of money transfer mechanisms affect the efficiency of the real economy and the financial markets; they also have an impact on central banks’ lending of last resort and the conduct of monetary policy. Market forces alone may not be able to achieve the objectives of efficiency and reliability of the payments system since participants and operators may not have adequate incentives to minimize the risk of their own failure, or failure or costs they impose on other participants. In addition, the institutional structure of the payments system may not provide incentives or mechanisms for efficient design and operation.

These are the reasons why in all countries central banks’ involvement in the payments system is an integral component of their overall mandate to ensure stability of the financial system and to maintain confidence in the domestic currency. In this context central banks perform a number of different functions in their national clearance, settlement and payment arrangements. These functions may include direct involvement in managing clearing and settlement systems and in overseeing the payments system by developing rules, principles and best practices under which private payment arrangements operate. The oversight role of the central bank is currently at the heart of the international debate and the function is emerging as key in central bank’s activity.16

16 Recent examples are the focus on central bank’s responsibilities in the CPSS Core Principles report and the BIS/IOSCO recommendations for securities settlement systems and the paper on Payments system
The role of the central bank is particularly relevant when the country is engaged in a comprehensive reform of its payments system. In this case, the central bank will have to play a leading role in developing a vision for the reformed system, in coordinating with all stakeholders and in carrying out the reform plan. Direct involvement of the central bank in managing clearing and settlement systems has been, in all countries, the first step to governing the overall structure and operation of a country’s payments system and ensuring that the desire to limit systemic risk especially in the area of large-value payment systems is adequately taken into account. In many cases, this role stems from the need to ensure a widespread adoption of the more advanced technology in the fund transfer mechanisms and to avoid possible discriminations in the access to payment services. In all cases, in order to pursue the public interest in the payments system, central banks should ensure that the systems they operate comply with the principles and guidelines they establish, as overseers, to ensure the (financial and operational) reliability and efficiency of the clearing and settlement systems they do not operate. The oversight role of the central bank is more likely to emerge in its relevance when the payments reform is complete and the central bank will be called to ensure a proper monitoring of the reliability and efficiency of the domestic system on an on-going basis.

In recent years, in an increasing number of countries, payments system oversight has been explicitly entrusted to central banks by law. Specifying the objectives in relevant legislation may be the most direct way for providing a well-founded legal basis for the central bank to implement its policies and make it accountable in pursuing its goal and mandate in the payments system. For countries facing the implementation of the project of reform in the payments system, it is of utmost importance for the central bank to have a well-founded legal framework that clearly defines its payments system role and objectives.

As for the scope of the oversight function, at the international level there is consensus on the fact that systems that pose systemic risks should definitely fall under the direct control of the overseer. Typical examples of these systems are those that handle transactions of a high value at both the individual and aggregate level. For example, the CPSS Task Force on Core Principles identified four responsibilities of the central bank in applying the core principles for systemically important payment system, presented in the following box:

**Box 3 Oversight Role of the Central bank**

<table>
<thead>
<tr>
<th>Responsibilities of the central bank in applying the Core Principles (from CPSS, 2001)</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
</tr>
<tr>
<td>B. The central bank should ensure that the systems it operates comply with the Core Principles.</td>
</tr>
<tr>
<td>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.</td>
</tr>
<tr>
<td>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.</td>
</tr>
</tbody>
</table>

Increasing attention is being given to securities clearance and settlement systems as relevant components of the overall payments system. The oversight of these systems might well

be a cooperative effort of two or more regulatory agencies. In some countries, also retail (low value) systems fall under control of the oversight agency because of their importance for the overall efficiency of the payments system, of their potential impact on the public trust of money and for their relevance to sustain the ultimate objective of economic growth.17

The evolution towards a new role of the central bank in payment systems calls for a careful consideration of at least three key issues. First, the adequacy of legal enforcement for central bank action in the payments system should be evaluated. The central bank role in payment systems stems both from its responsibility for financial market stability and monetary policy. In many countries, a clearly stated legal enforcement for central bank’s activity as overseer of the payments system has facilitated the fulfillment of central bank’s objectives.

Second, the internal organization of the central bank as far as the payment system activities are concerned may also be worth evaluating. Experience in many central banks has indicated that significant improvements can be derived by setting up a unit specifically devoted to payments policy issues. Typically, such a unit could develop an appropriate policy framework and appropriate tools (e.g. data collection, periodical inspections, etc.) for use in assessing the appropriateness of individual payments systems. This function could be undertaken in close coordination with the banking supervisory function, for example, which has a high level of competence and experience in examining some of the related issues. In addition, it would be important for those staffing the unit to have appropriate skills. Typical aspects to be analyzed in administering the oversight functions include, *inter alia*, potential risks emerging from the various clearinghouses, the adequacy of risk control measures in place, the potential implications of the resort to unwinding procedures, as well as efficiency issues.

Third, effective cooperation must be in place between the overseer and market players, among domestic regulators and among international oversight agencies. In particular, it must be noted that central banks that do not have bank supervisory powers may face considerable information limitations, especially in crisis management situations. The overseer would have to rely on information from the supervisory authorities, or should develop their own independent access to information on payment system participants. While the first option transfers *de facto* the responsibility for triggering oversight action to the supervisory authority, the second option raises risks of duplication of information collection, inconsistent public action, and additional costs to participants. An effective way to overcome most of these problems is to stipulate rules for granting the overseer with adequate access to supervisory information. The institutionalization of information sharing arrangements may reduce the risk that the exchange of information be hampered by frictions in cooperation between different institutions. Various solutions can be adopted for this purpose, from signing a memorandum of understanding that specifies the framework for cooperation, to assuring contacts between institutions through joint board membership, the establishment of a comprehensive market regulatory/supervisory body where all the institutions with oversight responsibilities are represented and mandated to cooperate.18

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17 Many examples can be brought on how an inefficient retail system can affect economic activity, for example by failing to accommodate the needs of customers and merchants in their desire to finalize a transaction that as a result cannot take place.

18 See Banca d’Italia, White Paper on Payments System Oversight (1999) for a description of the institutional arrangements adopted in some leading industrial countries. In the UK, the Bank of England and the Financial Services Authority (FSA), responsible for regulating individual banks, recognize the need to share information about the main payment system members. The two institutions have signed a memorandum of understanding requiring that “the FSA and the Bank [of England] will establish information sharing arrangements, to ensure that all information which is or may be relevant to the discharge of their respective responsibilities will be shared fully and freely. Each will seek to provide the other with relevant information as requested” (see Bank of England, 2000). In the European Union, the
Cooperation must be pursued also between the overseer and the securities markets regulators, as securities settlement is an integral part of the payments system and problems in securities markets clearing and settlement may easily spillover to the payments system and vice versa.

Status in the country

The Role of the Central Bank in the Payments Reform

Legal Foundations of the Oversight Function

Objectives and Scope

Instruments

Pricing Policies

Access Policy

Organizational Arrangements

Dissemination of Information

Cooperation with Other Domestic and International Regulators

Observations

Includes some observations about how the issue analyzed could be improved in order to have safe and efficient payments system.

The assessment of the central bank’s responsibilities in applying the CPSS Core Principles for SIPS (see Annex II), together with the analysis of the current status of the oversight function and in the context of international comparisons formed the basis for the following observations...

10 COOPERATION WITHIN THE PAYMENTS SYSTEM

Context

Effective cooperation among market participants, between regulators and market participants and among regulators is essential for the development of a sound and efficient payments system. In particular, the “cross-nature” element that characterizes the transfer of money and the “systemic nature” of the underlying operating procedures make the payments system an “institution” whose existence and smooth functioning requires effective cooperation between all participants. On the one hand, the use of payment instruments generates significant externalities on the demand side, since the usefulness of an instrument is strictly linked to the

European Central Bank (ECB) has issued a protocol for payment system oversight to be adopted by the euro-area national central banks and the ECB.

19 See previous Section.

20 See Annex III.
degree of its acceptance and use for transaction purposes. Consequently, widespread use of new payment instruments and services relies heavily on public confidence in them. On the other hand, within the payments system, the supply of services can be affected by coordination failures due to the existence of conflicts of interests (and information costs) as well as the intermediaries’ unwillingness to cooperate. This can lead to “sub-optimal” equilibria in the organizational arrangements as to the system’s reliability and efficiency. The payments system overseer is therefore entrusted with making up for a specific type of failure in the market for payment services, i.e. the coordination failures. Cooperation problems may be especially relevant within interbank clearing and settlement systems. In fact, in these systems the risk profiles – both at the system level and at the level of the individual intermediary – may not be fully assessed by participants. In addition, the concern with having to support less reliable intermediaries may lead larger participants to discriminate against smaller ones, even when these are technically eligible to participate in the system. Finally the payment system industry also depends on agreements between producers to ensure that different components of the system are compatible. Most recently, the emergence of new types of non-bank intermediaries and payment instruments has strengthened the need for a comprehensive level of cooperation in the payments system.

With regard to the cooperation among regulators, the safety and efficiency objectives of payment and securities settlement systems may be pursued by a variety of public sector authorities, in addition to the central bank and the securities commission. Examples of these regulators include: legislative authorities, ministries of finance, competition authorities. There are also complementary relationships between oversight, bank supervision and market surveillance. Appropriate cooperation among supervisors can be achieved in a variety of ways, for example, exchanges of views and information between relevant authorities may be conducted by holding regular or ad hoc meetings. Agreements on the sharing of information may be useful for such exchanges. (The issue is dealt with in the previous section).

Status in the country

A brief description about the situation in the country regarding the issue analyzed including main shortcomings and areas of potential upgrade.

Observations

Includes some observations about how the issue analyzed could be improved in order to have safe and efficient payments system.

Box 4: Payment System Council – Terms of Reference

**Objectives**
The Payment System Council aims to support the achievement of sound and efficient payment and securities clearance and settlement systems in the Guatemala. It can also serve as a forum for cooperation to maintain orderly conditions in regional and international payment systems.

**Main Tasks**
- The Council works to facilitate the necessary cooperation between all market participants and regulators in the payment area.
- The Council promotes common initiatives towards the implementation of the payment system infrastructure. These initiatives should not impede, and should in fact foster, healthy competition among market participants.
The Council plays a key role in preparing strategic documents for the overall payment system architecture in the country.

The Council plays a key role in monitoring the implementation of payment systems reforms.

The Council plays a key role in facilitating the sharing of information on economic and business requirements of all parties impacted by the payment system.

The Council helps to identify the impact of different options on participants business and daily operations and on end-user interests.

The Council plays a key role in selecting the main principles and options for system designs.

The Council plays a key role in endorsing the priority and the schedule of individual projects to be launched, financed and implemented.

The Council promotes standardization of procedures and systems.

The Council is responsible for promoting knowledge of payment system issues in the country. To this end, the Council uses any means it might find appropriate (workshops, seminars, web pages, newsletter, etc.).

The Council seeks to promote cooperation among all institutions active in payment and securities systems within the region and at the international level.

Methodology

The Council prepares ad hoc reports on payment system issues. The reports would not have prescriptive nature. However, they would serve as a reference for the ongoing payment system reforms in the country.

The Council establishes ad hoc working groups on payment matters. Working groups may or may not be composed of the totality of the institutions represented in the Council.

The Council reports on its activities to Steering Committee on Payment Systems and the Top Management of the constituting institutions on an annual basis.

Representation and Organizational Structure

The Council gives representation to all the stakeholders of payment and securities clearance and settlement systems. These include: the Central bank, the Securities and Exchange Commission (when and if formed), the Banking Supervision, the Ministry of Finance/Treasury, the Bankers’ Association and the commercial banks, the non bank financial institutions, the clearinghouses and payment service providers, the Stock Exchange, the Central Securities Depository(s), the broker/dealers, the end-users, and other regulators (e.g., antitrust authorities), et cetera.

The BANGUAT serves as the secretariat of the Payment System Council.

Appointed representatives of the stakeholders are senior managers with an involvement in payment matters. They report directly to the top management of their respective institutions.

The Council is comprised of an appropriate number of experts. The composition of the Council should be consistent with the objective of having effective discussion in the meetings.

The Council has an internal governance structure with a chairperson and deputy(s), an executive body, formal rules to determine the terms and conditions for the appointment of the executive positions, and formal rules to govern the activity of the executive body.
♦ In the early stage of its life, the Council might seek, if necessary, assistance from other national and international entities highly experienced in managing payment system groupings.
♦ The Council may invite, if needed, other institutions and/or individual experts to participate in its meetings.

11 TRANSPARENCY IN THE PAYMENTS SYSTEM

Context

Transparency in the payments system has a twofold perspective. On one hand it refers to transparency of the conditions offer to the clientele in terms of payment services offered. In many countries a law covers the matter guaranteeing adequate protection to consumers who must receive all information about the services they are using in the payments system. On the other hand, transparency refers to clear and openly disclosed policies in the payment systems by regulators and self-regulatory organizations. In 2000, the International Monetary Fund issued a Transparency Code for Financial Regulators, Code of Good Practices on Transparency in Monetary and Financial Policies, which has become the set of international standards in the matter.\(^{21}\)

Status in the country

A brief description about the situation in the country regarding the issue analyzed including main shortcomings and areas of potential upgrade.

The, following Box presents an assessment of the country’s situation based on those items of the IMF Transparency Code, which explicitly refers to the practice of payments system oversight.

**Assessment of Observance of the Code of Good Practices on Transparency in Payments System Oversight Policies**

| 1.3.2 | The allocation of responsibilities among the central bank, the Department of Finance, or a separate public agency, for the primary debt issues, secondary market arrangements, depository facilities, and clearing and settlement arrangements for trade in government securities, should be publicly disclosed. |
| Practice | |
| Assessment | |
| Comment | |

| 5.3 | The role of oversight agencies with regard to payment systems should be publicly disclosed. |
| Practice | |
| Assessment | |

\(^{21}\) Available at www.imf.org
<table>
<thead>
<tr>
<th>Comment</th>
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<tbody>
<tr>
<td>5.3.1</td>
<td>The agencies overseeing the payment system should promote the timely public disclosure of general policy principles (including risk management policies) that affect the robustness of systemically important payment systems.</td>
</tr>
<tr>
<td>Practice</td>
<td></td>
</tr>
<tr>
<td>Assessment</td>
<td></td>
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<tr>
<td>Comment</td>
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<tr>
<td>5.4</td>
<td>Where financial agencies have oversight responsibilities for self-regulatory organizations (e.g., payment systems), the relationship between them should be publicly disclosed.</td>
</tr>
<tr>
<td>Practice</td>
<td></td>
</tr>
<tr>
<td>Assessment</td>
<td></td>
</tr>
<tr>
<td>5.5</td>
<td>Where self-regulatory organizations are authorized to perform part of the regulatory and supervisory process, they should be guided by the same good transparency practices specified for financial agencies.</td>
</tr>
<tr>
<td>Practice</td>
<td></td>
</tr>
<tr>
<td>Assessment</td>
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</table>

**Observations**

Includes some observations about how the issue analyzed could be improved in order to have safe and efficient payments system.