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# Eastern Caribbean Central Bank



## Modernising the Payments System in the Eastern Caribbean Currency Union

### A VISION AND A STRATEGY (Working Paper)

*November 2022*

## Payments System Vision and Strategy in the ECCU

**The Eastern Caribbean Central Bank (ECCB) invites citizens and residents of the Eastern Caribbean Currency Union (ECCU) to provide comments on the draft Payment System Strategy for the ECCU.**

This *Payment System Strategy for the ECCU*, is a working paper, that was developed by Consultant and payments expert, Mr Massimo Cirasino, in collaboration with the Eastern Caribbean Central Bank (ECCB), under the Caribbean Digital Transformation Project, and input from stakeholders throughout the ECCU. The Strategy explores the various components of the payment system and features specific *Lines of Actions* and corresponding *Sub-Actions* under each of the five strategic pillars:

1. Legal and Regulatory Framework
2. Wholesale Financial Market Infrastructures and Interbank Markets
3. Retail payment systems and services for all actors in the economy (Individuals, Businesses, Government)
4. Cross Border Payments and International Remittances
5. Eastern Caribbean Currency Union Payments System Oversight and Cooperation.

As the ECCB continues to engage industry stakeholders, the public is hereby invited to comment on the draft Payment System Strategy for the ECCU, in anticipation of further in-country stakeholder engagements in the Q1 of 2023.

Comments on the Strategy can be forwarded via email, [PSDOU@eccb-centralbank.org](mailto:PSDOU@eccb-centralbank.org), on or before by **16 January 2023**.

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*Our Vision is that Our Economy be Supported by Modern, Sound, Efficient and Accessible Payment Arrangements*

### INTRODUCTION

**Payment and settlement systems and services have become vital components of the economic life of contemporary societies.** Over the last decades, they have gone through several waves of reforms that have changed the landscape of the National Payments System (NPS) in virtually every country in the world. The NPS encompasses all payment, settlement, and depository activities, processes, mechanisms, infrastructure, institutions, and users in a country or an integrated region (for example, common economic area). NPSs are also mutually interconnected in what can be referred to as the global payments system. The retail payments landscape, in particular, has changed significantly in view of drastic technological developments in the financial sector and changing consumer preferences. As these unfold, back-end and front-end arrangements that provide consumers with the ability to pay, save and transfer value have undergone remarkable improvements including, among other, the emergence of so-called fast or instant payment systems, the launch of new means of payment based on emerging technologies such as blockchain (e.g. virtual currencies, stable-coins), and the spread of additional access channels and enabling environments that accommodate the use of digital payments such as Quick Response (QR) codes and Application Programming Interfaces (APIs).

**Over the last few years, authorities in the Eastern Caribbean Currency Union (ECCU) have been working hard to strengthen the efficiency, safety and inclusiveness of payment systems and services, with a focus on users' needs and a view of ultimately improving the lives of individuals and businesses.**

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The ECCU comprises eight member states that share a common currency (Eastern Caribbean dollar / XCD) under the authority of the Eastern Caribbean Central Bank (ECCB). The eight countries include six (6) independent countries (Antigua and Barbuda, Dominica, Grenada, Saint Kitts and Nevis, Saint Lucia, and Saint Vincent and the Grenadines, and two (2) overseas countries (Anguilla and Montserrat) of the United Kingdom. The National Payments System (NPS) is a core asset in every country and is exposed to significant and evolving risks, as well as to innovation which can significantly improve its efficiency.<sup>1</sup> In the ECCU, the NPS will be referred as ECCU Payments System (ECCUPS).

**The ECCB, as ECCUPS Overseer, has taken the lead in these efforts and has consulted with several international and national stakeholders.** It has been concluded that - notwithstanding several notable accomplishments – **there are opportunities to further advance developments in the payment and settlement system in order to not only maximise the impact on the economic development agenda of the Eastern Caribbean Currency Union (ECCU), but to deliver value to the people of the Currency Union.**

**This documents presents the vision and strategy to further enhance financial inclusion and the safety and efficiency of the payments system in the ECCU.<sup>2 3</sup>**

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<sup>1</sup> *It is important to appreciate the difference between the (national) payments system which is the collection of payment and settlement arrangements in a given jurisdiction and an individual payment system which refers to a specific set of payment mechanisms amongst a certain group of participants, and, as such, is a sub component of the payments system.*

<sup>2</sup> *To assist in the preparation of the Vision and Strategy document, an international expert has been selected. The selected consultant is Massimo Cirasino, an Italian National, Global Advisor on Payments and Market Infrastructures, and Founder and CEO of the Payment System Academy.*

<sup>3</sup> *In addition to the findings of the stakeholders' interviews, relevant documentation used for the analysis include the relevant legislation, the World Bank 2017 NPS Assessment Report, and the ECCB Documents: "Policy Objectives and Principles for Regulating Electronic Retail Payment Services Including Digital Technology in the ECCU", "Policy Framework for the Modernisation of the Payment Systems Act", and "Payment System in the ECCU, Vision and Modernisation Plan". In addition, several other sources were consulted, including the ECCB website and the World Bank Global Payment System Survey (GPSS). Meetings were also held with the ECCB NPS modernization project team. Any errors and omissions are attributable to the International Expert only and not to any of the cited sources.*

## BRIEF STATUS OF THE PAYMENTS SYSTEM IN THE ECCU<sup>4</sup>

**The ECCU has a population of approximately six hundred and fifty thousand and tourism is regarded as the main income earner.** The Eastern Caribbean dollar is pegged to the United States dollar at 2.70 to 1.00. The ECCB is responsible for monetary policy, regulation and supervision of licensed financial institutions and the maintenance of a safe and efficient payments system.

**The current ECCU payments system relies heavily on cash, payment cards and cheques transactions. Over the years, there has been an improvement in the retail and large value payment systems.** The following facts are significant:

- The introduction of the Eastern Caribbean Automated Clearing House (ECACH) was intended to improve efficiency in the clearance and settlement of payment instruments by creating a common retail infrastructure across the ECCU.
- The ECACH was established in 2011 by the ECCB and the commercial banks to handle the clearing and settlement of retail transactions, including cheques, direct debits and direct deposits, using a deferred net settlement arrangement and large value cheques on a gross basis.
- The Real Time Gross Settlement system was modernized in 2009 with the implementation of straight through processing of transactions in real time between system participants.
- Payment System legislation was harmonised across the region during the period 2008 to 2011. The Payment System Act, together with the Eastern Caribbean Central Bank Act, as Amended in 2015, gives the ECCB the sole responsibility for the oversight of the payments system.

In addition, several other accomplishments have been achieved over the last five years amongst which:

- a. Assessment of the payments system with the support of the World Bank in 2017;

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<sup>4</sup> Summarized from the ECCB document, "Payment System in the ECCU, Vision and Modernisation Plan".

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- b. Initiation of a major project to further develop the RTGS system owned and operated by the ECCB;
- c. Revitalization and expansion of Eastern Caribbean Payments Council and establishment of five (5) supporting Working Groups;
- d. Supporting the licensing of innovative payment service providers under the Money Services Business Act;
- e. Establishment of the Payments System Oversight Function and commencement of a capacity building programme;
- f. Adoption of the Principles for Financial Market Infrastructure (PFMIs) in 2018; and
- g. Designation of Systemically Important Financial Market Infrastructures (FMIs).

## METHODOLOGY USED FOR THE PREPARATION OF THE ECCUPS STRATEGY AND VISION

The methodology followed in the preparation of this document is centered around the World Bank Principles for the Development of a National Payments System Strategy, namely:

- *Principle 1: Adopt a holistic approach considering all the key components of the NPS*
- *Principle 2: Base decisions on real data and needs*
- *Principle 3: Build on existing blocks and avoid unnecessary actions*
- *Principle 4: Follow International standards and guidance*
- *Principle 5: Consult heavily all relevant stakeholders*

The same methodology also lays out three main phases for the preparation of a strategy: 1) Carry out a comprehensive stocktaking based on tested methodologies; 2) Launch a major outreach campaign to consult all relevant stakeholders; 3) Formulate and Validate the NPS strategy in all its components.

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In particular, all the activities and material to support to the work of the ECCUPS strategy can be summarized around three main guiding principles.

### 1) BE HOLISTIC

**As mentioned above, payment and settlement systems and services (PSSS) have become vital components of the economic life of contemporary societies.** They consist of integrated networks of institutions involved in the execution and delivery of fund-transfer services across the economies. Their smooth functioning is essential to the overall efficiency and stability of the financial sector and market economies as a whole. To promote such smooth functioning, national oversight authorities have been strengthened worldwide, and oversight activities have been developed to take account of the growing interconnectedness and mutual interdependence of PSSS, which are the core of what is often referred to as the national payments system (NPS) of each country (See Box 1). NPSs encompass all payment, settlement, and depository activities, processes, mechanisms, infrastructure, institutions, and users in a country or an integrated region (for example, common economic area). NPSs are also mutually interconnected in what can be referred to as the Global Payments System (GPS).

### **Box 1: Components of the National Payments System**

*An NPS consists of a defined group of institutions, instruments, and procedures used to facilitate the circulation of money within the country and internationally. An NPS includes the following main components:*

- Payment instruments used to initiate and direct the transfer of funds between the accounts of payers and payees.
- Payment infrastructures for transacting and clearing payment instruments, processing and communicating payment information, and transferring the funds between the paying and receiving institutions.
- Securities-settlement systems to clear and settle securities transactions safely on a delivery-versus-payment mode.
- Electronic book-entry securities system(s) and trade repositories to register and record changes in ownership of both private and government securities and other capital market instruments.
- Financial institutions that provide payment accounts, instruments, and services to consumers, businesses and organizations that operate payment transaction, clearing, and settlement service networks for those financial institutions.
- Nonfinancial institutions that provide payment and access to payment-related services and offer various products to satisfy market needs.
- Market arrangements such as conventions, regulations, and contracts for producing, pricing, delivering, and acquiring the various payment instruments and services.
- Laws, standards, rules, and procedures set by legislators, courts, and regulators that govern the payment-transfer process and the conduct of payment service markets and define the rights and obligations of the transacting parties, in force of which funds are transferred, cleared, and settled.

**PSSS have gone through several waves of reforms that have changed the landscape of the NPS in virtually every country in the world.** Historically, PSSS have lain at the heart of banking. As more and more countries centralized money-issuing activities within single commercial banking institutions in the 19th and early 20th century, the deposit liabilities issued by these institutions were used as means to settle commercial banks' payment obligations. As central banks took on their role at the center of domestic interbank market systems, the provision of clearing and settlement services to serve as backbone for settling certain types of payments delivered by commercial banks evolved into a core central banking activity. As a consequence, the promotion of efficient and safe

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payment arrangements became one of the central banks' *raison d'être*. In more recent years, several countries have realized that the NPS lies at the core of economic and financial activities and needs constant attention and improvements. In the mid-1990s, countries started to upgrade their central systems by introducing real-time gross settlement (RTGS) systems that addressed the need for increased safety and efficiency in wholesale transactions. In parallel, they went through profound reforms of the legal and regulatory framework, introducing some key legal concepts in their laws and regulation, such as settlement finality, protection of creditor rights against bankruptcy, and the notion of NPS oversight. In the middle of the first decade after 2000, the focus of the global payment system community has been enlarged to cover retail payment systems, the provision of payment services, international remittances and cross-border payments, and financial inclusion, also triggered by technological developments and enhancements. This was mainly due to the widening of the oversight role of central banks to serve as catalysts for change and the emergence of new players in the payments space. Different forms of e-money were introduced, with a growing use of payment cards and batch-based transactions and the development of new channels (internet and mobile). Nowadays, the attention has turned also to the efficient provision of so called digital financial services (DFS) with a view to exploiting all benefits of available technology,

**Impressive progress has indeed been achieved to enhance the safety and efficiency of payment services, both enabling financial institutions to exchange large-value (wholesale) payments safely through sophisticated infrastructures and allowing more and more customers to make and receive small-value (retail) payments digitally and on a nearly real-time basis.** In the last few years, we are witnessing phenomena that are pushing the frontier of payments further ahead. Among them, the emergence of so-called fast (as instant, faster, or real-time) payment systems, the spread of additional access channels and enabling environments that accommodate the use of digital payments such as quick response (QR) codes and application programming interfaces (APIs), and the launch of payment means based on new technologies such as blockchain (for example, crypto-assets, stablecoins). Despite all the noted progress, however, evidence suggests that in most countries, cash, in the form of

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physical banknotes and coins issued by the central bank or government, still remains the prevalent retail payment instrument and, in some cases, store of value, indicating that further efforts are needed to understand user preferences and advance the widespread adoption and usage of more efficient digital payment instruments.

**The Payments System Strategy for the ECCU takes into account all the components of the NPS and focuses on the safety and efficiency of the ecosystem and on users' needs.** In particular, it is organized around five main NPS pillars which reflect some of the strategic themes already identified by the ECCB in previous documents: 1) Legal and Regulatory Framework; 2) Wholesale Financial Market Infrastructures and Interbank Markets; 3) Retail payment systems and services for all actors in the economy (Individuals, Businesses, Government); 4) Cross Border Payments and International Remittances; and 5) NPS Oversight and Cooperation. In particular, the revised version of the ECCB strategic themes should be as follows:

- I. Strengthen Legislative Framework**
- II. Enhance Payment and Settlement Infrastructures**
- III. Leverage Payments as a Gateway for Financial Access and Inclusion**
- IV. Connect appropriately the ECCUPS to the Global Payments System**
- V. Systematize the ECCB Oversight and Development Functions**

### **2) CONSULT ALL RELEVANT STAKEHOLDERS**

**The development of a solid payments system strategy should embed a structured process to involve all relevant stakeholders.** They include all relevant departments of the central bank, financial institutions and payment service providers (PSPs), financial market infrastructures, other authorities, and representatives from different sectors of the economy and consumers.

**The discussions in the ECCU have included preparation of workshops and individual conversations.** An inception virtual workshop was organized to create awareness on the project and pave the way for the individual conversations to be organized (also virtually) with all relevant stakeholders. The individual interviews have

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been conducted around five main general topics: 1) short description of the perceived role of the interviewed institution in the ECCUPS; 2) discussion on any identified gaps, risks and/or shortcomings in the ECCUPS; 3) any legal and regulatory concerns; 4) prospective business and development opportunities; and 5) any considerations on the role of the ECCB as ECCUPS overseer and the cooperative arrangements within the ECCUPS. Some specific questions were prepared in advance of the engagement of some individual entities. **Interviews have involved all relevant stakeholders (please see Annex I for a detailed list of the parties involved in the comprehensive presentation. In the subsequent phases of validation and implementation of the Strategy, an active consultation with all stakeholders will be maintained including by involving representatives from end-users of payment services via focus groups and other means.**

### **3) FOLLOW INTERNATIONAL AND REGIONAL STANDARDS AND GOOD PRACTICES**

**The necessary stocktaking and subsequent elaboration of the ECCUPS strategy have followed the international standards and guidance elaborated by a series of international institutions.** They include the work of the standard setters in this area, namely the Committee of Payments and Market Infrastructures (CPMI), and the CPMI together with the International Organization of Securities Commissions (IOSCO), as well as the World Bank, International Monetary Fund, CEMLA, etc. Of particular relevance, the CPMI-IOSCO Principles for Financial Market Infrastructures (PFMIs). Regional work in Latin America and the Caribbean (LAC) made through the LAC Working Group on Payment Systems (LAC-WGPS) and individual country experiences - in particular in Caribbean countries - will also be taken into account, also via direct conversations with relevant global or regional institutions

Table 1 below summarizes some of the main international standards and best practices that will be considered.

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Area	Reference
Large-value payment systems	CPMI-IOSCO: Principles for Financial Market Infrastructures (PFMI report) (2012)
Foreign exchange	CPMI (former CPSS): Settlement risk in FX transactions + Progress Reports (1998 and 2008)
Securities settlement	CPMI-IOSCO: Recommendations for Securities Settlement Systems (2001) CPMI-IOSCO: Principles for Financial Market Infrastructures (PFMI report) (2012)
Payment system oversight	CPMI: Central Bank Oversight of Payment and Settlement Systems (2005) World Bank/CEMLA: The Oversight of the Payments Systems: A Framework for the Development and Governance of Payment Systems in Emerging Economies (2001) Upcoming: World Bank Oversight Handbook (2021)
Retail Payments and Financial Inclusion	World Bank Retail Package (2012) World Bank Guidelines for the Development of Government Payment Programs (2012) CPMI: Policy Issues for Central Banks in Retail Payments (1995) CPMI and World Bank: Payment Aspects of Financial Inclusion (several reports)
Remittances	CPMI-WB General Principles for International Remittance Services (2007)
Cross-cutting issues	CPMI: The Interdependencies of Payment and Settlement Systems CPMI: General Guidance for National Payment System Development CPMI-IOSCO: Recovery of financial market infrastructures CPMI-IOSCO: Authorities' access to trade repository data CPMI-IOSCO: OTC derivatives data reporting and aggregation requirements; Public quantitative disclosures (CPMI: Cross-border Collateral Arrangements

### BRIEF ASSESSMENT OF THE SHORTCOMINGS OF THE ECCUPS

At the request of the Eastern Caribbean Central Bank (ECCB), a comprehensive assessment of ECCUPS was conducted by a World Bank Team in 2017. Although remediation actions have been taken, some of the shortcomings identified in that report are still there as emerged during the more recent analysis and stakeholders' consultation.

**Below is a list of the main gaps and recommendations identified:**

- *Insufficient clarity and comprehensiveness of the legal and regulatory framework*

**A new Payment System Act is under preparation and supporting regulations would need to be produced, as appropriate.** Among other things, the new act should better define and disclose the specific criteria for the designation of financial market infrastructures, on the basis of which the authorities can subsequently establish the technical standards and the access regime, and exercise oversight powers. Also, the legal framework should enable an increased role of non-banks, which is now constrained under a money transmission license. The full range of non-bank provision of payment services should be accommodated in the legal framework going forward, including by

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defining new types of licenses and clarifying the licensing process in order to make it consistent across all states/territories of the ECCU.

- *Need to further upgrade the Real Time Gross Settlement System and enhance the safety and efficiency of other FMs*

**The Real Time Gross Settlement (RTGS) System is the backbone of the Payments Ecosystem in every country. To fulfil that role effectively, the RTGS should be designed and operate consistently with the needs of all financial institutions and infrastructures of the jurisdiction as well as the needs of the ECCB as the central bank of the ECCU.**

**Enhancements to the RTGS system have been identified in the areas of efficiency, business continuity and operational reliability, rules, procedures and operations and risk management.** To enhance the RTGS system's efficiency, the ECCB should make it accessible through the VPN network apart from SWIFT. With the VPN in place, the use of large-value cheques should then be discouraged, for instance by (i) imposing charges on both drawee/presenting bank, and (ii) setting an appropriate threshold value. Ahead of implementing such measures, the ECCB should undertake a sizing of its system in order to ensure that it has scalable capacity adequate to handle a larger volume of transactions. In addition, a payment system should have rules, procedures, and contracts that are clear, understandable, and consistent with the relevant laws. Appropriate governance arrangements, including of risk-management, and a framework for the comprehensive management of all risks incurred in, and posed by, the system, should be established, including liquidity (although not very material at the moment). The ECCB should develop a business continuity plan to ensure: (i) resumption of critical operations within two hours from a disruption, and (ii) completion of settlement by end-of-day in any circumstances.

**Attention should be given to other financial market infrastructures which are critical to the smooth functioning of the financial sector.** In this case, the ECCB will cooperate with the Eastern Caribbean Securities Regulatory Commission. As an example, an assessment of the ECSD with the CPMI-IOSCO Principles for Financial Market Infrastructures would be appropriate.

- *Insufficient pick-up of digital payment services and heavy dependence on cash*

**Overall, the ECCU lags behind high-income and upper-middle income countries in the use of electronic payments.** Among non-cash instruments, payment cards are the most commonly used, followed by cheques. Most cards are issued on the Visa and MasterCard international networks; still, some commercial banks and most credit unions issue proprietary ATM cards.

**The ECCB should encourage full interoperability of retail payment services through the common switch (4Cs) or other ACHs.** Acceptance of electronic payments should be fostered, including by leveraging innovative products (e.g. dongles) and acceptance solutions based on e-money, for instance. In this regard, the launch of a central bank digital currency project (D-cash) is certainly going to the right direction of fostering the use of electronic payment services. However, given its current pilot stage, there seems to be insufficient clarity in the market on the role of D-cash vis-à-vis other retail payment instruments/systems. Also, given the relevance of some of the international trends in the payments space (e.g. virtual currencies, stable-coins, fast payment solutions, big tech products, it would be important to study how these global developments/phenomena will impact the local reality **and increase the level of openness of the ECCU vis-à-vis the rest of the region and the world.**

- *Strengthening the Oversight Function at the ECCB and Enhancing the central bank's role as Catalyst for change*

**The ECCB has been explicitly entrusted with payment system oversight powers through the 2015 amendments to the ECCB Agreement Act (art. 3(f)). Oversight is still commingled with operational tasks to a certain extent, and the concrete oversight activities are yet to be defined.** The ECCB is in the process of finalizing a payment system oversight policy framework, including objectives, scope, activities, standards, and tools. The ECCB oversight policy will then need to be publicly disclosed. It is important that all the components of the ECCUPS be subject to the oversight of the central bank, in some cases in cooperation with other authorities.

***During the stakeholders' consultation, some unclear expectations on the direction of ECCUPS reforms have emerged.*** The revival and expansion of the Eastern Caribbean Payments Council (ECPC) and the process of preparation validation and implementation of this Vision and Strategy are expected to address this point and enhance the visibility and role of the ECCB as catalyst for change in the payments space.

## PRESENTING THE ECCUPS VISION AND STRATEGY

To address the existing gaps and ensure that the ECCU count on a safe, efficient and state of the art payments system, the following Vision and Strategy has been prepared in consultation with all relevant stakeholders and will be executed under the leadership of the ECCB with support from all parties whose role and responsibility is significant for its implementation.

The Vision and Strategy is organized around 5 main pillars which reflect some of the strategic themes already identified by the ECCB in previous documents: 1) Legal and Regulatory Framework; 2) Wholesale Financial Market Infrastructures and Interbank Markets; 3) Retail payment systems and services for all actors in the economy (Individuals, Businesses, Government); 4) Cross Border Payments and International Remittances; and 5) NPS Oversight and Cooperation. Under each of the Pillars some strategic Lines of Action have been identified. The Lines of Action will be executed within a period of three years following the validation of the Vision and Strategy. A more detailed action plan will be prepared in parallel with the validation of the strategy.

### **Pillar I: The ECCUPS counts on a sound, comprehensive, proportionate, non-discriminatory, predictable and modern legal and regulatory framework**

A sound and proportionate legal framework is generally considered the basis for an efficient NPS. In order to ensure a sound and appropriate legal framework for the NPS, the legal environment of a country normally needs to include the following: i) laws and regulations of broad applicability that address issues such as insolvency and contractual relations between parties; ii) laws and regulations that have specific applicability to payment systems and/or instruments (such as legislation on electronic signature, validation of netting, settlement finality); iii) the rules, standards and procedures agreed to by the participants of a payment system; and iv) laws and regulations establishing clear responsibilities for the central bank and/or other regulatory bodies such as oversight over systems and services.

Relevant pieces of legislation that have impact on the soundness of the legal framework of the payments system and should consequently be made consistent with the general legal framework on payments include: secondary legislation on transparency and security of payment instruments/schemes; integrity; antitrust legislation for the supply of payment services; protection of users; and legislation on privacy.

*In order to achieve the Pillar objectives, three strategic lines of action (LoA) are envisaged:*

**LoA 1.1:** Complete legal and regulatory reforms by enacting the new payment system law and the relevant supporting regulation on financial market infrastructures, payment system provision and payment schemes/instruments, based on sound, comprehensive, proportionate, non-discriminatory, predictable and modern characteristics.

**LoA 1.2:** Clarify the institutional framework by further empowering the central bank as primary ECCUPS overseer and clarify the role of other relevant authorities, including the interaction between supranational and national authorities.

**LoA 1.3:** Ensure that the legal and regulatory framework maintain the right balance between fostering innovation and managing relevant risks.

### **Pillar II: The ECCUPS is supported by a safe and efficient clearing and settlement infrastructure**

Payment systems supporting large-value and time-critical payments represent the most sensitive component of the NPS. If not properly designed, operated and overseen, these systems have the potential to generate and transmit disturbances of a systemic nature to the financial sector. The development of an RTGS system has been in many countries one response to the need for sound risk management in large-value funds transfer systems. RTGS systems offer a powerful mechanism for limiting settlement and systemic risks in the interbank settlement process, because they effect final settlement of individual funds transfers on a continuous basis during the processing day.

In addition, RTGS systems, if appropriately designed, 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 (PvP) mechanisms.<sup>5</sup>

The Infrastructure supporting the settlement of securities transactions is a critical component of the NPS. It typically consists of two main functions, a depository service used to store, often electronically, the different types of securities typically in a so called CSD, and a monetary function used to clear and settle securities trades through so called Securities Settlement Systems (SSS). In many countries, CSD and SSS are operated by the same entity.

SSSs may handle large value transactions that create the possibility that a failure in a system could cause broader financial and economic instability. These systems form a network linking all those who participate in them. It is important that the systems be designed and operated in such a way that minimises the probability of financial difficulties spreading from one participant to another. In many countries, securities, and above all Government securities, can be used extensively to carry out monetary policy through

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<sup>5</sup> See Committee on Payment and Settlement Systems (CPSS) report on [Delivery versus payment in securities settlement systems](#), 1992.

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open market operations. Difficulties in SSSs could disrupt the ability of the central bank to implement monetary policy effectively. The linkages between monetary policy, operation of the payment system, and the economy's liquidity needs have all quite naturally cast upon the central bank the role of oversight as an extension of its reserve money-issuing function. SSSs are essential for the timely delivery of collateral for payments and other purposes. For the above reasons, CSDs and SSS are typically subject to concurrent oversight responsibilities by the central bank and the securities commission and are considered components of the Payments Ecosystem.

Infrastructures supporting retail payments are equally important for the efficiency and soundness of the NPS.

*In order to achieve the Pillar objectives, three strategic lines of action (LoA) are envisaged*

**LoA 2.1:** Keep modernizing the real time gross settlement (RTGS) system at the ECCB to make sure that it continues to serve as the backbone of the ECCUPS.

**LoA 2.2:** Promote central bank-operated and private-sector operated retail payment systems to support the efficient provision of payment services in an open and interoperable way, taking into account the needs of end-users.

**LoA 2.3:** Work proactively and cooperatively towards the observance of all the relevant financial market infrastructures (FMIs) – including payment systems, central securities depositories, securities settlement systems and trade repositories – with the appropriate international standards (currently the CPMI-IOSCO Principles for Financial Market Infrastructures, see Annex II) on a continuous way.

**Pillar III: Retail payment services in the ECCUPS are provided in an efficient, universal and secure fashion, meet the needs of end-users, and represent a gateway for access and inclusion to broader financial services**

Moving from cash and paper-based instruments to electronic payment instruments is beneficial for the whole economy. Electronic payment instruments, such as credit and debit transfers and payment cards can reduce costs for the economy. Innovative payment instruments and mechanisms that have emerged during the last few years can

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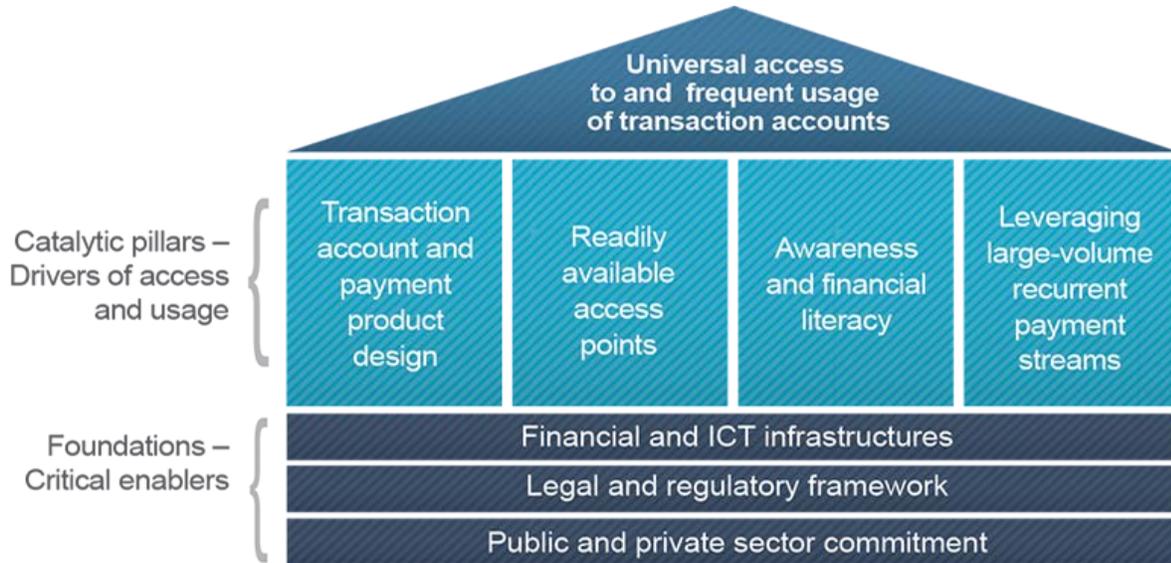
increase the speed and accessibility of payment services at lower costs. Advances in internet technologies and mobile devices have paved the way to increase the number of channels used to initiate and accept payments. This transformation of cashless payments driven by technological innovation and behavioural changes makes payment instruments more diversified and increasingly digital. Payment services are becoming more available, ignoring physical borders and time constraints to satisfy customer demand for fast, continuous and safe payment services.

Financial inclusion is an aspect of financial development which is influenced heavily by the way people make payments. Financial inclusion exists when people have effective access to a wide range of financial products and services at affordable cost. The first step of financial inclusion is access of each individual and business to a transaction account and to payment services. Increasing access to financial services is a powerful tool for poverty reduction. Achieving broader financial inclusion builds on the development of efficient, affordable, accessible and convenient retail payment services and payment instruments.

The World Bank-CPMI Payment Aspects of Financial Inclusion (PAFI) framework analyses how payment systems and services promote access to and use of financial services. It examines what elements of retail payments are critical to financial inclusion and how improving the payments infrastructure and services could accelerate access to and use of transaction accounts. It also discusses the relevance and importance of measuring the effectiveness of financial-inclusion efforts from a payments perspective. The framework outlines seven guiding principles and suggests key actions that countries could take to advance access to transaction accounts, which then can serve as a gateway to broader financial inclusion (see Figure 1).

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FIGURE 1: THE PAFI FRAMEWORK



In all countries, the public sector is a major user of the NPS. The Government receives and sends many payments (for collection of taxes, customs duties and other revenues, payment of salaries and social support disbursements, purchase of goods and services, etc.). In many countries the Government accounts for the majority of individual payments (in some cases 60 percent or higher). The scale and importance of Government payments can play an important role in promoting growth and innovation in a country's retail payment infrastructure. The use of electronic payment instruments for Government payments may lead to significant cost savings at all levels of national economy. Government payments can also promote financial inclusion by extending non-cash electronic payment instruments to the unbanked.

In recent years, more and more attention has been devoted to this issue and, in some countries, the Government has been able efficiently to use the options offered by the existing payment infrastructure (e.g. ACH and RTGS systems and traditional card payments) as well as new technologies such as pre-paid cards and mobile wallets.

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*In order to achieve the Pillar objectives, three strategic lines of action (LoA) are envisaged*

**LoA 3.1:** Work proactively to expand and achieve the socially optimal usage of payment services across the different use cases.

**LoA 3.2:** Make sure that retail payment services are provided with the highest standards of efficiency, security, transparency and integrity and by taking into account the needs of end-users.

**LoA 3.3:** Promote appropriate mechanisms to facilitate consumer protection, inclusiveness and dispute resolution and redressing.

### **Pillar IV: the ECCUPS is connected appropriately to the global payments system**

A general perception is that cross-border payments lag behind domestic ones and would need considerable improvements. A recent assessment by the Financial Stability Board of the existing cross-border payment arrangements identified four types of important challenges: cost, speed, access, and transparency. These challenges affect a number of different stakeholders on the supply side (bank and non-bank PSPs, payment system operators, and technical service providers) and the demand side (end users composed of individuals, businesses, and government agencies) and affect each of them in different ways. The CPSS-World Bank General Principles for International Remittance Services (see Box 2) and the recent CPMI report on cross-border payments provide guidance to this extent.

**BOX 2: THE CPSS-WORLD BANK GENERAL PRINCIPLES FOR INTERNATIONAL REMITTANCE SERVICES**

**General Principle 1: Transparency and Consumer Protection**

The market for remittance services should be transparent and have adequate consumer protection.

**General Principle 2: Payment Systems Infrastructure**

Improvements to payment system infrastructure that have the potential to increase the efficiency of remittance services should be encouraged.

**General Principle 3: Legal and Regulatory Framework**

Remittance services should be supported by a sound, predictable, nondiscriminatory, and proportionate legal and regulatory framework in relevant jurisdictions.

**General Principle 4: Market Structure and Competition**

Competitive market conditions, including appropriate access to domestic payments infrastructures, should be fostered in the remittance industry.

**General Principle 5: Governance and Risk Management**

Remittance services should be supported by appropriate governance and risk-management practices.

**Roles: Remittance Service Providers and Public Authorities**

*Remittance service providers* should participate actively in the implementation of the general principles.

*Public authorities* should evaluate what actions to take to achieve the public-policy objectives through the implementation of the general principles.

*In order to achieve the Pillar objectives, three strategic lines of action (LoA) are envisaged*

**LoA 4.1:** Promote the openness of the ECCUPS to the rest of the region and the world by fostering access to the local infrastructures - as needed - in order to facilitate safe and efficient outgoing and incoming payments.

**LoA 4.2:** Monitor global and regional developments to ensure that the ECCUPS be not negatively impacted by any threats coming from abroad.

**LoA 4.3:** Keep expanding the existing channels of mutual cooperation and exchange of information with relevant authorities and industry players across the borders.

### **Pillar V: the ECCUPS is adequately overseen by the ECCB who is also playing a catalyst and development role**

The growing volume and value of transactions in payment and settlement systems and the emergence of innovative payment instruments require robust oversight of the clearing and settlement infrastructure and payment arrangements by the central bank. The ECCB recognises the importance of oversight over the NPS as a key responsibility and as part of the wider central bank role of ensuring financial stability in the economy and maintaining trust in the domestic currency. The oversight role of the central bank is particularly relevant when the country is engaged in a comprehensive reform of its NPS. Payment and settlement systems are a core element of the economy. Disruptions in these systems may cause disruptions in the financial markets. Inefficiency in retail payments could increase costs for the users and raise barriers for broader financial inclusion. The role of the central bank oversight function is to ensure that systems are sufficiently protected against risks that may arise and that systems work efficiently, allowing funds to flow between individuals, businesses and financial wholesale markets quickly and safely. An ongoing and structured policy dialogue should take place with the stakeholders, also including users' representatives. The dialogue should consist of consultations and regular and ad hoc discussions on issues of common interest to stakeholders and joint work on technical issues. The policy dialogue would enable the central bank to align stakeholder expectations around shared goals and offer a channel for the central bank to communicate its policy orientation, solicit stakeholder views and feedback, and share knowledge on NPS issues. The policy dialogue is more effective when it takes place in a dedicated forum, such as a national payments council or payments association, and the creation of dedicated working groups should be considered.

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Cooperation should foster efficient and effective communication and consultation for the authorities involved in NPS oversight, in order to support each other while fulfilling their mandates. Such cooperation would need to be effective in normal circumstances and should be adequately flexible to facilitate effective communication, consultation, or coordination, as appropriate, during periods of market stress and crisis situations. Responsibility E under the CPMI-IOSCO PFMI would offer useful guidance to this effect.

*In order to achieve the Pillar objectives, three strategic lines of action (LoA) are envisaged*

**LoA 5.1:** Strengthen the oversight capacity of the ECCB by ensuring that adequate powers, resources, and institutional attention be devoted to this core function.

**LoA 5.2:** Establish clear, comprehensive and modern objectives and policies for ECCUPS oversight to meet the most important needs of the relevant components of the ecosystem.

**LoA 5.3:** Continue to foster the cooperative framework within the ECCUPS through the effective functioning of cooperative arrangements covering all relevant stakeholders.

**Annex I**

**Detailed List of Stakeholders' Meetings**

1. The Statistics Department at the ECCB
2. The Research Department at the ECCB
3. The Management Information Systems Department at the ECCB
4. The Legal Services Department at the ECCB
5. The Banking and monetary Operations Department at the ECCB
6. The ECCB Fintech Working Group
7. Payswif
8. JAD Cash
9. Squeeze Cash
10. The Caribbean Confederation of Credit Unions and Credit Union league representatives
11. Republic Bank (Grenada) Ltd
12. CIBC First Caribbean International Bank (Antigua)
13. Accountants General from across the ECCU
14. The Financial Services Unit (Commonwealth of Dominica) / Financial Services Regulatory Authority (Saint Lucia)
15. The St Kitts Nevis Anguilla National Bank Limited
16. Financial Services Authority St Vincent and the Grenadines / Grenada Authority for the Regulation of Financial Institutions
17. Financial Services Regulatory Commission (Antigua) / Financial Services Commission Montserrat / Financial Services Regulatory Authority St Kitts
18. Penny Pinch
19. Eastern Caribbean Telecommunications Authority (ECTEL)
20. Sagicor Finance Inc.
21. Chambers of Commerce (Grenada, Saint Lucia, Antigua and St Kitts)
22. Eastern Caribbean Automated Clearing House Services Incorporated (ECACHSI)

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23. Caribbean Credit Card Corporation Limited (4Cs)
24. Republic Bank (EC) Limited (St Kitts)
25. Bank of Saint Lucia Ltd
26. Consumer Advocates – Grenada
27. National Bank of Dominica Ltd.
28. FLOW
29. 1<sup>st</sup> National Bank (St Lucia) Ltd.
30. Western Union St Lucia
31. Western Union St Kitts
32. Money Gram (Antigua)
33. Digicel Group
34. Mastercard
35. VISA

## Annex II

### CPMI-IOSCO Principles for Financial Market Infrastructures<sup>i</sup>

#### ***General Organization***

##### **Principle 1: Legal Basis**

A financial market infrastructure (FMI) should have a well-founded, clear, transparent, and enforceable legal basis for each material aspect of its activities in all relevant jurisdictions.

##### **Principle 2: Governance**

An FMI should have governance arrangements that are clear and transparent, promote the safety and efficiency of the FMI, and support the stability of the broader financial system, other relevant public interest considerations, and the objectives of relevant stakeholders.

##### **Principle 3: Framework for the Comprehensive Management of Risks**

An FMI should have a sound risk-management framework for comprehensively managing legal, credit, liquidity, operational, and other risks.

#### ***Credit and Liquidity Risk Management***

##### **Principle 4: Credit Risk**

An FMI should effectively measure, monitor, and manage its credit exposures to participants and those arising from its payment, clearing, and settlement processes. An FMI should maintain sufficient financial resources to cover its credit exposure to each participant fully with a high degree of confidence. In addition, a central counterparty (CCP) that is involved in activities with a more-complex risk profile or that is systemically important in multiple jurisdictions should maintain additional financial resources sufficient to cover a wide range of potential stress scenarios that should include, but not be limited to, the default of the two participants and their affiliates that would potentially cause the largest aggregate credit exposure to the CCP in extreme but plausible market conditions. All other CCPs should maintain additional financial resources sufficient to cover a wide

range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would potentially cause the largest aggregate credit exposure to the CCP in extreme but plausible market conditions.

### **Principle 5: Collateral**

An FMI that requires collateral to manage its or its participants' credit exposure should accept collateral with low credit, liquidity, and market risks. An FMI should also set and enforce appropriately conservative haircuts and concentration limits.

### **Principle 6: Margin**

A CCP should cover its credit exposures to its participants for all products through an effective margin system that is risk-based and regularly reviewed.

### **Principle 7: Liquidity Risk**

An FMI should effectively measure, monitor, and manage its liquidity risk. An FMI should maintain sufficient liquid resources in all relevant currencies to effect same-day and, where appropriate, intraday and multiday settlement of payment obligations with a high degree of confidence under a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would generate the largest aggregate liquidity obligation for the FMI in extreme but plausible market conditions.

### ***Settlement***

#### **Principle 8: Settlement Finality**

An FMI should provide clear and certain final settlement, at a minimum by the end of the value date. Where necessary or preferable, an FMI should provide final settlement intraday or in real time.

### **Principle 9: Money Settlements**

An FMI should conduct its money settlements in central bank money where practical and available. If central bank money is not used, an FMI should minimize and strictly control the credit and liquidity risk arising from the use of commercial bank money.

### **Principle 10: Physical Deliveries**

An FMI should clearly state its obligations with respect to the delivery of physical instruments or commodities and should identify, monitor, and manage the risks associated with such physical deliveries.

### ***Central Securities Depositories and Exchange-of-Value Settlement Systems***

### **Principle 11: Central Securities Depositories**

A central securities depository (CSD) should have appropriate rules and procedures to help ensure the integrity of securities issues and minimize and manage the risks associated with the safekeeping and transfer of securities. A CSD should maintain securities in an immobilized or dematerialized form for their transfer by book entry.

### **Principle 12: Exchange-of-Value Settlement Systems**

If an FMI settles transactions that involve the settlement of two linked obligations (for example, securities or foreign exchange transactions), it should eliminate principal risk by conditioning the final settlement of one obligation upon the final settlement of the other.

### ***Default Management***

### **Principle 13: Participant-Default Rules and Procedures**

An FMI should have effective and clearly defined rules and procedures to manage a participant default. These rules and procedures should be designed to ensure that the FMI can take timely action to contain losses and liquidity pressures and continue to meet its obligations.

**Principle 14: Segregation and Portability**

A CCP should have rules and procedures that enable the segregation and portability of positions of a participant's customers and the collateral provided to the CCP with respect to those positions.

***General Business and Operational Risk Management***

**Principle 15: General Business Risk**

An FMI should identify, monitor, and manage its general business risk and hold sufficient liquid net assets funded by equity to cover potential general business losses so that it can continue operations and services as a going concern if those losses materialize. Further, liquid net assets should at all times be sufficient to ensure a recovery or orderly wind-down of critical operations and services.

**Principle 16: Custody and Investment Risks**

An FMI should safeguard its own and its participants' assets and minimize the risk of loss on and delay in access to these assets. An FMI's investments should be in instruments with minimal credit, market, and liquidity risks.

**Principle 17: Operational Risk**

An FMI should identify the plausible sources of operational risk, both internal and external, and mitigate their impact through the use of appropriate systems, policies, procedures, and controls. Systems should be designed to ensure a high degree of security and operational reliability and should have adequate, scalable capacity. Business continuity management should aim for timely recovery of operations and fulfillment of the FMI's obligations, including in the event of a wide-scale or major disruption.

**Access**

**Principle 18: Access and Participation Requirements**

An FMI should have objective, risk-based, and publicly disclosed criteria for participation, which permit fair and open access.

**Principle 19: Tiered Participation Arrangements**

An FMI should identify, monitor, and manage the material risks to the FMI arising from tiered participation arrangements.

**Principle 20: FMI Links**

An FMI that establishes a link with one or more FMIs should identify, monitor, and manage link-related risks.

***Efficiency***

**Principle 21: Efficiency and Effectiveness**

An FMI should be efficient and effective in meeting the requirements of its participants and the markets it serves.

**Principle 22: Communication Procedures and Standards**

An FMI should use, or at a minimum accommodate, relevant internationally accepted communication procedures and standards in order to facilitate efficient payment, clearing, settlement, and recording.

***Transparency***

**Principle 23: Disclosure of Rules, Key Procedures, and Market Data**

An FMI should have clear and comprehensive rules and procedures and should provide sufficient information to enable participants to have an accurate understanding of the risks, fees, and other material costs they incur by participating in the FMI. All relevant rules and key procedures should be publicly disclosed.

**Principle 24: Disclosure of Market Data by Trade Repositories**

A trade repository (TR) should provide timely and accurate data to relevant authorities and the public in line with their respective needs.

***Responsibilities of Central Banks, Market Regulators, and Other Relevant Authorities for Financial Market Infrastructures***

**Responsibility A: Regulation, Supervision, and Oversight of FMIs**

FMIs should be subject to appropriate and effective regulation, supervision, and oversight by a central bank, market regulator, or other relevant authority.

**Responsibility B: Regulatory, Supervisory, and Oversight Powers and Resources**

Central banks, market regulators, and other relevant authorities should have the powers and resources to carry out effectively their responsibilities in regulating, supervising, and overseeing FMIs.

**Responsibility C: Disclosure of Objectives and Policies with Respect to FMIs**

Central banks, market regulators, and other relevant authorities should clearly define and disclose their regulatory, supervisory, and oversight policies with respect to FMIs.

**Responsibility D: Application of Principles for FMIs**

Central banks, market regulators, and other relevant authorities should adopt, where relevant, internationally accepted principles for FMIs and apply them consistently.

**Responsibility E: Cooperation with Other Authorities**

Central banks, market regulators, and other relevant authorities should cooperate with each other, both domestically and internationally, as appropriate, in promoting the safety and efficiency of FMIs.

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<sup>i</sup> Source: 2012, CPSS and Technical Committee of IOSCO, *Principles for Financial Market Infrastructures*.