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| Papua New Guinea:TA - Financial Services Sector Development Strategy |
| **PAPUA NEW GUINEA**  **Payment System Assessment Update**[[1]](#footnote-1) |
| **Confidential**  **DRAFT FOR COMMENTS ONLY** |
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**October 2015**

# Contents

Contents 2

List of Abbreviations 3

I. Context and Background 4

II. Key Findings 5

A. Recent Developments Have Marked Important Progress 5

B. …But Important Challenges Remain 9

III. Recommended Action 12

# List of Abbreviations

ATM Automated Teller Machine

BPNG Bank of Papua New Guinea

BSS Banking Services System

CRR Cash Reserve Requirement

CSD Central Securities Depository

DOF Department of Finance

EFT Electronic Funds Transfer(s)

EFTPOS Electronic Funds Transfer at Point of Sale

IRC Internal Revenue Commission

KATS Kina Automated Transfer System

MICR Magnetic Ink Character Recognition

MOF Ministry of Finance

NMB Nationwide Microbank

NPC National Payments Council

NPS National Payments System

PGK PNG Kina (the national currency)

PNG Papua New Guinea

POMSoX Port Moresby Stock Exchange

POS Point(s) of Sale

RTGS Real Time Gross Settlement

SLS Savings and Loans Societies

USSD Unstructured Supplementary Service Data

# Context and Background

1. **On 16-20 March 2015, at the request of the Bank of Papua New Guinea (BPNG) and the Department of Treasury of the Ministry of Finance (MOF), a World Bank mission team visited Port Moresby with the objective of taking stock of recent developments in the national payments system (NPS)**.**[[2]](#footnote-2)** Specifically, the purpose of the mission was to update the results of the assessment of the Payments, Remittances and Securities Settlement Systems and associated processes, prepared for the Joint IMF-World Bank Financial Sector Assessment Program of Papua New Guinea (PNG) in May 2011. This activity is part of the overall framework to provide policy and analytical advisory and capacity building support to PNG authorities in their effort in drafting a comprehensive Financial Services Sector Development Strategy with sequenced, prioritized and time-bound reforms and action plan for implementation that is appropriate to PNG conditions. This note reports the mission findings; it identifies the progress made since the 2011 assessment, as well as the areas where further progress needs to be achieved. In this regard, the note submits a number of recommendations on steps that should be undertaken to facilitate and secure the needed progress. The note will provide information and advice for the PNG authorities to determine the course of action to be taken in the near future with assistance from the World Bank.
2. **The mission team held discussions with several institutions.** In addition to meetings with the management and staff of the BPNG (from the Payment System Unit, the Financial System Development Department, the Financial System Stability Group, and the Financial Markets Department), the team attended meetings with the Department of Finance of the MOF, commercial banks (BSP, Maybank, Westpac), the Port Moresby Stock Exchange (POMSoX), a finance company (MoniPlus), an investment managing company (Pacwealth), and a technology service provider (Enterprise Technologies). The team wishes to express its appreciation to the management and staff of the BPNG and all the representatives of the institutions visited for their full support to the mission’s activities and objectives.
3. **Since the previous assessment, significant changes have taken place in the structure of the NPS, marking considerable progress.** At the same time, critical challenges remain not only as far as infrastructure development is concerned but also, and importantly, within the realm of payment system strategy and policymaking. Progress and changes, as well as challenges, are discussed in detail in the following section, while the concluding section submits a number of policy recommendations for the consideration of the Authorities.

# Key Findings

## Recent Developments Have Marked Important Progress

1. **A decisively important step was the approval of the National Payment Systems Act of 2013.** Filling a major gap duly noted by the previous payment system assessments, the new payment system law is state of the art legislation, which includes all the provisions for the creation of a legally sound NPS environment: from the definition of the functions and powers of the central bank in the realm of payment systems to the finality of payments and protection of systems, the proper treatment of assets to be used as collateral, the rules for electronic money and transfers, and the establishment of a National Payments Council as the forum for the institutional dialogue on payment policy issues within the country. The new law constitutes the pre-condition for a well-founded, clear, transparent, and enforceable legal basis for each material aspect of the NPS, and for rules, procedures, and contractual arrangements that are clear, understandable, and consistent with the law.
2. **In recent years, the BPNG has started implemented a wide-ranging modernization process of the NPS based on the *Vision and Strategy for the future PNG National Payments System* which BPNG developed during the 2008-2009 time-frame.** The first major step in the implementation has been the introduction of the Kina Automated Transfer System (KATS), which is a hybrid payment processing system offering Real-Time Gross Settlement (RTGS) and Automated Clearing House (ACH) functionality in a single integrated system.
3. **In 2013, BPNG went live with the first stage of KATS which involves the processing of interbank high-value payments through a Real-Time Gross Settlement (RTGS) infrastructure and is now fully operational.** KATS participants communicate with the system using either the international SWIFT network or a new fiber-optic network which interconnects the banks and BPNG. The fiber-optic network is backed up by a microwave network using wireless spectrum leased from the National Information and Communication Technology Authority.
4. **In 2014, BPNG implemented the second stage of KATS involving fully electronic cheque truncation.** This feature of KATS clears standardized cheques using the Australian APCA standards for MICR (Magnetic Ink Character Recognition) encoding of all cheques. Via KATS, all commercial banks and the BPNG exchange cheques electronically (which are subsequently settled in the RTGS element of KATS), using cheque images and electronic exchange of the associated data, with a four-day period allowed for banks to carry out signature verification and dishonoring prior to final settlement. The objective of both BPNG and the banks is to reduce the processing time of cheques (especially those presented in remote areas), and to lower the high incidence of fraud. Since the introduction of electronic cheque processing the number of cheques cleared has continued to grow, although at a lower rate than previously and cheques remain a key feature of the country’s formal banking system.
5. **At the same time as going live with cheque truncation, BPNG went live with its own Banking Services System (BSS), a system which manages all customer accounts (primarily Government accounts) as well as automating the teller functions, which had previously been largely a manual process**. The BSS platform integrates various internal payment functions, such as payroll and the general ledger, into KATS. BSS also has links to the Internal Revenue Commission (IRC), the Department of Finance (DOF) and PNG Customs, and is in process of using these links to allow these organizations to access their statements and balances in real time, as well as to send payments from their own computer systems via BSS to KATS. Work is currently under way to implement straight through processing of government payments (both out-going payments from DOF and revenue collections by IRC and Customs) from banks via KATS into BSS and thence to the appropriate Government agencies.
6. **Finally, in February 2015 the third and final stage of KATS went live, involving inter-bank retail direct credit transfers, which are settled through the RTGS element of KATS.** At a future stage BPNG intends to introduce direct debit functionality in consultation with the banks and major billers.
7. **BPNG is committed to migrating low-value transactions to an electronic and automated clearing and settlement process**. Prior to KATS, the lack of an interbank electronic funds transfer (EFT) system had resulted in high costs charged for retail payments.[[3]](#footnote-3) The operation of KATS is designed to address this issue. The central bank expects electronic payment facilities to have a significant impact on the payments habits of the public as people become more and more acquainted with their use. The use of electronic and mobile transactions is growing rapidly and can be expected to continue to do so while BPNG expects the use of cheques to start to decline over the medium term as more use is made of the more modern instruments.
8. **The use of KATS has already reduced transfer times considerably**. BPNG aims, over time, to broaden the system to include non-bank financial institutions such as micro-banks, savings and loans societies, mobile financial services providers and the local stock exchange (POMSoX). The aim is also gradually to reduce cheque clearing times from the present four days to two or one, in line with the situation in similar countries, once the banks have become fully accustomed to its operation.
9. BPNG and the Government aim to transfer all Government payments and revenue collections (including Customs dues, tax payments, payments from the Government for goods and services, and Government payroll) from manual processes to electronic transfers. Work is well under way to achieving these aims for tax collections (which are already in operation for a proportion of collections), Customs collections and payments from DOF’s Accounts Payable function. In meeting separately with the BPNG and the MOF, both sides recognized and emphasized the need for tighter mutual co-operation and for integrating Government payments more closely within the strategy for NPS development.

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| **Box 1. Payment Services in PNG**  There are various categories of financial institutions in PNG. They include 4 commercial banks, 10 finance companies, 21 Savings and Loans Societies, 4 micro-banks, 22 insurance companies and brokers, and 7 superannuation funds. Among these institutions, the commercial banks currently offer the largest share of payment services. The other financial institutions make use of the payment services offered by the commercial banks, both for their own business functions and for their customers. Typically, they hold accounts with commercial banks, where they maintain their customer funds, and for all the financial products they offer to their customers the pay-in and pay-out operations currently take place in cash and cheques. In some employer-based Savings and Loans Societies (SLS) pay-in through salary deduction is supported. In this case, the employer on each pay cycle sends the list of payments to the SLS along with a cheque for the consolidated amount. However, regional SLS, and informal workers SLS, like the farmers SLS, work only on cash and cheques. A popular savings product is a savings account for school fees; the member pays into the account through salary deductions, cash or cheques, and when the school fees are due, the SLS sends a cheque to the school directly. Employees of a number of Government and private enterprises have their own SLSs. PNG Post offers a domestic end-to-end cash remittance service scheme across the country, through branch offices and local agents (primarily supermarkets). This service scheme (called Salim Moni Kwik) allows money senders in any of these locations to pay in cash and request cash payouts to intended recipients at any other locations. The transfer instructions are captured in an online system. Locations that do not have access to Internet receive/send fax instructions from/to a hub in Port Moresby. Non-cash payment services are provided, still on a small scale, by non-bank entities, such as mobile network operators, under a licensing regime. Non-bank entities, such as mobile network operators, provide electronic payments under a separate licensing regime (see below). |

1. **While the NPS is predominantly cash and cheque based, trends are changing.**  Cash remains the dominant means of payment both among the working class and the rural population, and, until the introduction of KATS, local interbank settlements have remained manual. The Port Moresby Clearing House, which handled cheque clearing and settlement manually prior to KATS phase 2 (cheque truncation) going live, operated three cheque exchanges daily, and four on Fridays, with final settlement at working day’s close. Settling low-value interbank transactions, such as cheques, traditionally took at least four working days in urban areas, but up to two weeks in more remote locations. In the urban centers, within the employment sector, EFTPOS, direct bank and post office transfers have been steadily gaining ground since their introduction a number of years ago. In particular, people increasingly use the EFTPOS facilities to make payments for goods and services as an alternative to cash or cheques. Cheques are primarily used by corporates and the Government. Such usage, however, is on a declining trend as employers both in the public and private sector have started paying salaries and wages of employees with direct crediting of the beneficiaries’ bank accounts. Nevertheless, the total volumes of cheques processed through KATS have continued to increase (showing an increase of 13.7% from January to July 2015) although the rate of increase flattened out during the last few months of this period. Volumes are expected to decline noticeably once Government payments start to be made via direct credit in KATS rather than by cheque.
2. **The Government aims at providing cashless payment services to citizens.** Currently, salaries and pensions are processed using the bulk payment product offered by the commercial banks, which results in a credit transfer to the recipient’s account or a cheque being given to the recipient. Reportedly, 90 per cent of all salary payments to public employees today take place through direct crediting of bank accounts. Also, all payments of dues to the Government (excluding taxes and Customs duties) can be done through POS, although the great majority of such payments are still made by cash or cheques at the Government treasury offices. Progressively, however, it is planned that these payments, so far as possible, will be converted into credit transfers. So far as taxes are concerned, the IRC, working with the banks, has recently introduced a facility whereby larger taxpayers can pay taxes electronically via their banks using KATS, and plans to extend this functionality to all tax payments. Likewise, PNG Customs is working with BPNG and the banks to enable payment of Customs duties in a similar manner.
3. **The BPNG supports greater access to mobile payment services.** In January 2012, the BPNG issued new rules for mobile banking and payment services. The rules provide for distinct models of mobile platforms (see Box 2). While banks offering the service do not require a separate license, non-bank operators do and must segregate the service in a distinct business unit. The minimum capital requirements for a license, which costs PGK15,000 (about USD 5,500 at exchange rates in August 2015), are PGK500,000 (about USD 180,000) and operators must maintain a trust account for the pool of deposited funds. Deposits are not limited, while transactions are capped at PGK 500 (about USD 180) daily. By late 2013, five mobile money services had been licensed (BSP’s mobile Wantok Moni, NMB’s MiCash, Digicel’s Cell Moni, and ANZ’s goMoney). The central bank reported 380,000 active subscribers as of July 2013 and a total of 70 million transactions through both mobile and EFTPOS in 2012. Meanwhile, BSP saw 100% growth in transaction volumes in 2013. The growing ecosystem of banking agents, such as retail stores and pharmacies, offering services through EFTPOS and mobile platforms has supported this expansion. While mobile banking has become more widespread, operators have witnessed very few mobile-to-mobile transactions.[[4]](#footnote-4)

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| **Box 2. Mobile Payments in Papua New Guinea**  Mobile banking is a new and emerging market in PNG. The key players are the major banks and the leading mobile telecommunications operator. The market is still relatively immature. All mobile money service providers offer services based on Unstructured Supplementary Service Data (USSD), a menu-driven solution for mobile phones that is accessible via a specific short number (a ‘shortcode’). The different services offered by these mobile money providers include: view balance, transaction history, mobile top-ups, transfer funds, utility bill payments, text message (SMS) alerts and account management, cash in and cash out services at agents, and cash out at ATM and EFTPOS terminals. All the mobile money services are transaction based, with different usage fees depending on the provider and the service offered.  There are two mobile money service models that can be identified: the bank-led model and the non-bank-led model. Bank-led models include the commercial banks BSP, ANZ,and Westpac, as well as Nationwide Microbank (NMB). NMB is a licensed financial institution that offers a mobile wallet, MiCash, connected to a bank account. The bank-led mobile money services are focused on improving banking efficiency, for example moving customers from branches to mobile banking and increasing mobile banking transaction volumes in order to increase economies of scale, thereby driving down costs. BSP is currently the only bank that offers interbank fund transfers at PGK 0.50 per transfer, either through mobile banking or using Wantok Moni if the recipient does not have a bank account. The maximum amount that can be transferred is PGK 500. ANZ Go Money also offers the ability to transfer money from an ANZ account to a recipient without a bank account, at PGK 15 per transaction, billed to the sender.  The non-bank-led models include Cellmoni, a mobile wallet solution, operated by mobile operator Digicel.  The three mobile wallets (Cellmoni, MobileSMK, and MiCash) all operate on Digicel’s mobile money platform. The non-bank-led models (Cellmoni and MobileSMK) are focused on domestic remittances and increasing the volume of mobile transactions. Interoperability for provision of mobile money services has not yet been regulated through the central bank.  PNG has a relatively advanced telecommunications network compared with other developing nations. Rural mobile coverage is improving. Mobile network accessibility has expanded from less than 3% population coverage in 2006 to almost 80% in 2015. |

1. **BPNG is considering introducing a national switch platform.** Card payments continue to grow, but the card payments infrastructure is largely used by banks to offer services to their own customers. While interoperability is available through bilateral arrangements amongst banks, it appears that it has not helped to expand the payment card network.[[5]](#footnote-5) The absence of a common interbank payment card platform has resulted in inefficient utilization of ATM and POS infrastructure, lack of uniform pricing, and costly services to consumers. It has also encouraged retailers to install multiple EFTPOS terminals from different banks, even despite the (bilateral) interoperability arrangements in place. The introduction of a single national switch infrastructure would aim to ensure full interoperability of electronic payment services across the country, covering both card and mobile phone-based payment services. The switch would enable cardholders to make withdrawals at any ATM in the country, and would also make it possible for mobile money service providers to switch transactions, thereby facilitating mobile money transfers from subscribers of one network to those of other networks. BPNG’s objective to establish one single national switch platform that is open to all operators and providers under an interoperability rule introduced and enforced by BPNG, intends to overcome possible barriers against market entry of small size and/or non-bank entities presented by the currently existing bilateral interbank switching agreements. Also, enabling the SLS and Post PNG to access the switch would help these institutions to shift many of their cash based payments to card and possibly mobile instruments.

## …But Important Challenges Remain

1. **The legal framework is still incomplete.** In spite of a very modern payment system legislation now being in place, the articles of the recent NPS Act have not yet been translated into an appropriate regulatory framework for payment system governance and operations. In practice, most of the fundamental prerogatives that the law grants to the central bank as well as its provisions covering payment systems and services currently exist only on paper and have not hitherto found actual application. For example, while the BPNG now has statutorily-recognized payment system oversight powers, the central bank has not yet laid down the necessary rules to implement and enforce its policy role and responsibilities. More generally, no rules are yet defined to articulate the legal basis for the NPS activities, its participants, and, where relevant, its customers. The lack of regulation, paradoxically, may create for the BPNG even more problems than when the law was not there, since holding formal responsibilities raises public expectations on the central bank, which may eventually backfire on its reputation and credibility if they are not consistently met through adequate rules and policy action. The design of a well-articulated secondary legislation and clear policy framework, thus, remains a significant undertaking that requires priority attention and action.
2. **KATS is not adequately safeguarded against liquidity risk.** While the banking system of PNG is currently highly liquid, this should not be taken as a sufficient reassurance against the risk that liquidity problems might arise and impair settlement at any point in time. This is because liquidity conditions in payment systems are constantly subject to change, often abrupt and unexpected, which the central bank should always consider as a possible contingency against which it should build an appropriate cushion. Moreover, while payment system participants might be very liquid, their liquid holdings might reside out of the system and not be available for use in the system when necessary. The intraday liquidity facility currently provided by the BPNG, under which banks can draw on BPNG intraday loan funds up to the limit of their Cash Reserve Requirement (CRR), is a step toward improved liquidity management in KATS. However, this is not yet quite enough to provide sufficient reassurance, since the CCR is a monetary policy instrument and is set at level that might not necessarily be consistent with intraday liquidity needs of banks in the payment system; indeed, banks might determine to hold excess reserves with a view to prevent possible intraday liquidity shortages, but this would be costly and would nullify the purpose of having a central bank liquidity facility. Moving to a fully collateralized central bank intraday liquidity facility whereby the BPNG would stand ready to supply unlimited amount of liquidity intra-daily against securities would give banks greater flexibility and reduce the opportunity cost of liquidity management in KATS (see Box 3).

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| **Box 3. RTGS and Central Bank Intraday Lending**  In the absence of an interbank market for intraday liquidity, central banks stand ready to supply intraday credit to the RTGS systems.While there are examples of interbank intraday liquidity market, the incentives for such type of market are rather weak, and certainly not strong enough to induce central banks, with few exceptions, to rely on them to protect the RTGS against liquidity risk. This explains why this activity has not developed much so far worldwide, and why central banks have retained a central role in the provision of intraday financing.  As research suggests, an intraday market may be more prone to delays than an overnight market, as managing a bank’s intraday reserve needs is considerably more difficult than managing its overnight needs. Precise timing is much more critical for intraday than for overnight reserves; hence, delay costs are higher intraday. As a result, an intraday market would be inherently more expensive to operate than an overnight market. Also, more precision in timing of funding is needed during the hours of payment system operation since banks face a variety of deadlines to make payments during the day to different ancillary systems, each with its own deadline. Due to multiple deadlines and the operational difficulties of meeting each deadline, banks face trade­offs during the day regarding the optimal use of their reserves across competing alternative purposes. In contrast, bank overnight reserves are only needed by the close of the banking day, whether these are needed to satisfy regulatory requirements or precautionary motives, and reserves held overnight do not face competing demands. As a result, an intraday market would likely face challenges in assuring participants that funds would be delivered in a timely fashion, possibly leading to a breakdown of the market and the payment system.  Also, an intraday market may suffer from the inability of the central bank to commit not to intervene to a greater extent than an overnight market; in other words, the pressure on the central bank to intervene in the intraday market is stronger than in the overnight market. This owes to the circumstance that intraday spillover effects of payment delays on ancillary systems are greater than overnight spillover effects. A failure by one bank to obtain funds in a timely way via the intraday market could have much wider effects than the failure by a bank to obtain overnight funds for required or precautionary purposes by the end of the day. The failure to deliver funds during the day may prevent the settlement of some ancillary system, causing a systemic problem and this forcing the central bank to intervene. |

1. **The settlement of foreign exchange transactions does not conform to payment-versus-payment standards.** While the Kina leg of the transaction is settled on the accounts of the BPNG through KATS, the foreign exchange leg of the transaction is processed through the SWIFT network and happens outside PNG at the counterparties’ respective Nostro accounts abroad. Upon receipt of the SWIFT transaction initiation confirmation message, the buyer sends a transfer instruction to the BPNG to complete the Kina leg of the transaction in favor of the seller. Currently, only commercial banks and one registered foreign exchange company participate in foreign exchange transactions. This foreign exchange company also operates a settlement account with the BPNG. The current process exposes the participants to settlement risk since settlement of the foreign exchange and Kina legs is not integrated and synchronized.
2. **The NPS is not subject to active central bank oversight.** As noted, in spite of having been granted by the law full legal authority and powers over domestic payment systems, the BPNG has neither formalized an oversight policy framework nor organized an oversight function within its internal structure. While the principle has been correctly affirmed within the central bank that the oversight function will have to be separated from operation, the BPNG has not yet taken action to create the oversight unit, to define the job descriptions for its staffs, and to hire the human resources to staff the unit. Delaying these decisions exposes the BPNG, as well as the NPS, to situations where oversight action might be necessary and yet the BPNG would not be able to deliver it. More generally, as a national payment system develops in its many dimensions, it requires central bank preparedness to govern its development. Currently, while the NPS in PNG is evolving rapidly, the BPNG is not yet adequately prepared to fulfill its governing responsibility.
3. **The securities settlement infrastructure for government and BPNG securities remains at an early stage of development.** Clearing procedures are still largely manual and securities registration continues to be unregulated. Fund settlement is effected on the Exchange Settlement Accounts of banks, and through cheques for non-banking institutions. In the primary market, certain designated bidders – primarily commercial banks – place bids without accompanying payment instructions; other bidders are required to submit cheques for the face value of the securities being bid along with the bidding documents. Upon allocation of securities, the bid amounts are collected from the Exchange Settlement Accounts of banks via KATS transactions, and in the case of other bidders the previously submitted cheques are presented via KATS for settlement. The secondary market is practically non-existent, although from a procedural standpoint the seller and buyer have to submit a transfer and acceptance agreement, respectively, to the BPNG. Upon receipt of both these agreements, the BPNG effects the change in ownership; however, the payment leg of the transaction is executed independently of the change in ownership.
4. **The securities settlement process for private sector securities does not address settlement risk.** The two licensed brokers have a bilateral net settlement arrangement standing. The seller’s broker uses bulk payment services offered by commercial banks to send funds to the bank account of the seller. Fund settlement is at T+3. The ownership transfer instructions received from the seller are exchanged amongst the brokers at T+3, and submitted to the PNG Registry, which takes an indeterminate amount of time to record change in ownership, usually within 2 weeks. The lack of a delivery-versus-payment modality leaves traders exposed to settlement risk.
5. **Regulation and the infrastructure of the securities market are extremely inadequate.** Although the Securities Act 1997 vests certain regulatory and oversight powers with the Securities Commission, the latter does not have powers to specify operating requirements and guidelines for brokers and to license and oversee registrars and depositories, nor does it have oversight powers over settlement systems. In addition to lacking the relevant powers, the Securities Commission is utterly understaffed for the kind of activities it is supposed to perform. Corporate stock ownership is recorded in the “PNG Registry” – an unlicensed and unregulated entity – and the ownership title is given in paper-form. The Securities Commission Act does not give the Securities Commission powers to license Registrars and Depositories. PNG Registry provides registrar services on its own and all listed companies currently use its services.
6. **Cooperation among NPS stakeholders and policy dialogue are still very limited.** As payment systems are so essentially characterized by shared networks and infrastructures, cooperation and dialogue between public policy authorities and stakeholders are necessary to achieve system safety and efficiency in effective ways. While cooperation at the technical level has proven successful in the process to implementing KATS, as was recognized by the participants involved, cooperation and dialogue in the broader sense of pursuing an established practice whereby payment system strategic and policy issues are systematically discussed and collectively acted upon are not yet a reality in PNG. The lack of such an established practice is particularly critical in a payments ecosystem, like that of PNG, where relations between industry players are reportedly very much competitive and not conducive to collaboration. Here, as acknowledged by stakeholders themselves, the BPNG has an important catalytic role to play for stimulating cooperation and dialogue.

# Recommended Action

1. **The BPNG should complete the NPS legal basis by enacting an adequate secondary legislation.** Based on the strong national payment system law now in place, the BPNGshould develop a regulatory framework that would give stakeholders certainty and clarity as to the implementation of the law, the identification of rights and responsibilities in the conduct of all payment activities, and the exercise of powers from the policy authorities. It should also give stakeholders sufficient confidence that systems are adequately protected against payments associated risks. As an essential complement to the regulatory framework, the BPNG should determine a full set of operational and administrative procedures aimed to enforce compliance of system participants with regulatory requirements and to guide central bank policy action. Critical in this context will be the BPNG’s effort to identify the information and data on payment system activities that it will need to access in order to fulfill its oversight responsibilities, and to define the modalities (e.g., offsite/onsite, regular/ad-hoc) to access the required information and data.
2. **In parallel, the BPNG should set up an effective oversight policy framework.** The framework would determine publicly the scope of the central bank’s oversight policy actions, and its plans and instruments to achieve the oversight objectives. This framework should guide the central bank’s action to: (a) ensure the smooth and efficient provision of payment services to the economy, (b) reduce and manage the risk of transmitting shocks through the economy caused by failures of individual participants to settle their payment obligations, and (c) make sure that the development of the NPS infrastructure and services satisfies over time the evolving needs of the economy. The framework should articulate policies for all the relevant components of systemically important or critical payment and settlement systems. The extension of oversight to retail systems would involve responsibilities for the protection of consumer interests, the promotion of market competition, and the fostering of financial inclusion. These objectives can either be pursued by the BPNG, as overseer of the payment system, especially in those areas that are not within the purview of other authorities, or they should be pursued by the BNPG in cooperation with other authorities as necessary. The BNPG’s oversight policy framework should be based on principles and standards developed by the international financial community, and be disclosed publicly. The BPNG should then develop appropriate guidelines for the implementation of the oversight policy framework.The guidelines would define the activities to be executed, and the tools to be adopted, by the central bank in discharging its oversight responsibilities, and would be based on international best practices. The guidelines would be meant to provide operational guidance to the staff of the BPNG’s payment system oversight unit, and should be intended mainly for internal use by the BPNG.
3. **The BPNG should establish the payment system oversight unit.** The oversight policy framework and the guidelines above discussed would provide essential inputs for the definition of the job descriptions and the identification of the unit staff. The BPNG should ensure that the unit would be adequately staffed and resourced. It should also make sure that the unit would be adequately visible and that its role and responsibilities be duly recognized within the organization. The BPNG should also make sure that the oversight unit be fully separated from the central bank unit in charge of payment system operation, and that the oversight function be integral to the central bank process of financial stability analysis. This means that, while the oversight unit might not necessarily sit within the Financial System Stability Group, it would have to be in constant dialogue with it given the importance of payment system oversight for the overall understanding of financial stability issues and vice versa.
4. **The BPNG should consider strengthening the KATS by setting up a collateralized intraday liquidity facility.** In the event of one or more participants in the system falling short of liquidity to settle their payment obligations, the facility would provide credit on an intraday basis against securities pledged by the borrowing banks as collateral, say through repo operations. The credit extended during one day would have to be repaid within the same day, and the collateral would protect the BPNG against the risk of non-repayment by the borrowing banks. Setting up a collateralized intraday liquidity facility would require completing the KATS infrastructure by integrating in it a central securities depository (CSD) for the handling of the collateral.
5. **Setting up a CSD would have relevant developmental benefits.** First of all, it would serve as basic infrastructure to establish a central bank lending-of-last-resort facility as a financial safety net for the economy. It would also be a key infrastructure for the development of an interbank deposit market, and would facilitate banks’ liquidity management and portfolio diversification. Finally, it would represent an essential platform to handle central bank and Government debt instruments, and would be part of the effort to develop the domestic secondary market for debt. The CSD could be the central facility for the safe and efficient custody, trading and settlement of all types of (public and private sector) securities. It could be established and hosted by the BPNG as part of the payment system infrastructure. At a later stage, it could be owned and operated by the private sector. In fact, as experience in many countries shows, while a CSD function could initially be originated by and within the central bank in its role as catalyzer of payment and settlement system development, the CSD could then become privately owned and operated under appropriate regulation and oversight.
6. **The BPNG, in consultation with all relevant stakeholders, should develop a national vision and strategy for the development of retail payment systems and instruments.** This would also be highly instrumental to the achievement of the financial inclusion objectives of the country. The central bank should exercise a leadership and catalyzing role in this exercise, and should prepare itself for playing such role effectively. Only a sustained and concerted effort that succeeds in mobilizing the widespread payments-related knowledge and capacity existing in the country can identify the best means to develop and implement an appropriate national retail payment system strategy. As part of this concerted action, coordinated efforts should be undertaken to promote public education and awareness on payment system issues. From the infrastructural standpoint, the fairly broad EFTPOS network already in place and the rapidly growing mobile phone business could both be leveraged to achieve scale and outreach. Given the risks of carrying and holding cash, PNG presents an opportunity to develop systems that allow for multiple ways to cash-in and cash-out, including through electronic disbursement (cash-in) as well as the electronic purchase of goods and services (cash-out) and eventually to reduce the use of cash itself. The fact that most goods and services are bought and sold in secondary cities, coupled with the limited need for cash in villages, may minimize the need to build extensive networks of rural cash points from the outset. Still in the realm of retail payments, SLS and Post PNG may have the potential to play a greater role; they can be issuers of prepaid cards or mobile wallets attached to their existing products, thus enabling many cash-based systems to migrate to electronic modes. Also, their service points can be used to provide payment services like bill payments, tax payments, submitting payment instructions, etc. Finally, they can themselves become intensive users of EFT for their own funds movement needs. Their participation in the NPS can thus be critical. The BPNG should initiate a discussion with these (as well as with all other) entities that can contribute to extending and improving retail services across PNG.
7. **Retail payment systems and services in PNG should be interoperable.** As discussed earlier, the BNPG is considering developing a single national switch platform, which would replace the current bilateral agreements between banks. The small number of banks should induce the BPNG and stakeholders to consider carefully the real advantage of establishing a new (costly) infrastructure against the alternative of strengthening and better regulating the current interbank bilateral agreements, providing that they do not constitute a barrier to new entrants in the market for payment services. The business case for the facility should therefore be thoroughly evaluated, and all other options available to achieve the same objective should be taken into account in the interest of sound budgetary choices.
8. **NPS development can receive a significant boost by the Government.** The large role of the Government in national payments can be used as a major modernizing factor of the NPS. The Government should work with the central bank, the commercial banks and other payment service providers with a view to migrating social payments form traditional to modern (electronic) channels. While PNG lacks a large system of social payments or a high number of utility subscribers, it is a very top-down economy, dominated by a relatively small number of entities, primarily composed of the Government and large corporate exporters. The movement of cash to the provinces has been described by bankers as a “conveyor belt,” where banks move money on behalf of the Government and corporations to the provinces, then see very little of it flow back through the formal banking system. Most households receive cash from the Government and/or the exporters directly or through a relative who is an employee, grower, landholder, or beneficiary. There is an opportunity through these major money suppliers to quickly push electronic money (for example, through EFT and /or digital devices) into the system by paying salaries, paying royalties, and purchasing commodities electronically in lieu of the current cash systems. These electronic payments could directly reach over 500,000 households – or nearly half the population of PNG. This, also, would “force” large numbers of recipients into the financial system.
9. **Developing the NPS requires an appropriate forum for policy dialogue and cooperation on payment system issues.** Recognizing this important point, the new payment system law provides for the creation of the National Payments Council (NPC). This provision should now be translated into practice. The NPC – to be led by the BPNG – would be the place where all relevant stakeholders would be represented and express their voice on payment system issues; it would allow the elaboration of a shared vision of the NPS development, it would help to build up broad consensus on payment system strategy and policymaking, and it would reinforce the role of the BPNG as payment system regulator and overseer. Members of the NPC would include other regulatory authorities (for instance, the Securities Commission and the Telecoms authority NICTA) and Government agencies, providers of payment or payment-related services (including banks as well as non-bank entities), and any institutions that may have a critical role in the development of the NPS infrastructure (e.g., public utilities). Members should be represented at the highest level of the NPC governance structure as well as at the operational level where technical and implementation issues are addressed.
10. **Increased attention should be given to securities clearance and settlement systems as relevant components of the overall NPS.** Strengthening the legal basis and the supervision of these systems should be a prerequisite to this purpose. However, this would only be part of the more comprehensive plan that would be necessary to create a safe and efficient market for private securities in PNG, especially considering the large existing potential. The plan should extend to all aspects of market activity, from infrastructure to regulation covering information, transparency, competition and investor protection, and a complete overhaul of the supervisory regime. In particular, the Securities Commission and POMSoX should be thoroughly reformed and brought up to international standards. Importantly, in the opinion of the mission team, acting on only one or a few of these aspects would be insufficient to deliver appreciable results. Instead, the Authorities should be advised to commit to pursuing “a big bang” type of approach, which would publicly (and internationally) convey a convincing signal that a major structural change is in order and will happen. The role of the BNPG should be considered in this context, in its capacity as overseer of the payments and securities settlement systems in the country, in cooperation with the securities regulatory and market authorities as necessary.

1. The report was drafted by Mr. Carlo Corazza, Sr. Payment System Specialist, World Bank and Mr. Biagio Bossone, Sr. Payment System Advisor based on assessment done in April 2015. The authors thank the support provided by Bank of Papua New Guinea. The assessment and recommendations are that of the authors and do not necessarily reflect the views of the Executive Directors of the World Bank or the governments they represent. The Word Bank does not guarantee the accuracy of the data included in this work. [↑](#footnote-ref-1)
2. The team comprised Carlo Corazza andJohn Vivian Finance and Markets Global Practice, World Bank Group), and Biagio Bossone (Consultant). [↑](#footnote-ref-2)
3. Small retail customers use cheque discount services offered by merchants for immediate realization of cheques. The discount averages around 15 percent, while the cash-based domestic remittance services of Post PNG are charged at around 10 percent; ATM and POS transactions incur a fee of 2.5 Kina. It appears that these high costs, coupled with the high operating costs of traditional bank branches and issues in meeting know-your-customer (KYC) requirements, have led to very limited penetration of banking services, estimated to be between 7 percent and 9 percent of the population. [↑](#footnote-ref-3)
4. As the Oxford Business Group reports (see http://www.oxfordbusinessgroup.com/analysis/casting-wider-net-new-technologies-offer-unbanked-populations-more-convenience), mobile services are being actively used to improve financial inclusion in a country where still in 2013, according to BPNG estimates, some 85.62% of citizens remain entirely excluded from formal financial services. BSP Rural has achieved considerable success in signing the unbanked up for its scaled-down Kundu Account, which waives monthly fees and charges only PGK1 (USD 0.36) per deposit or withdrawal. Launched in 2011, the bank opened 120,000 accounts through BSP Rural by mid-2013, expecting to reach 200,000 in early 2014. BSP reported having migrated 375,000 users to its mobile platform by 2013, although the number of active users is lower. The IFC stated in October 2013 that BSP had facilitated USD 38m in e-payments since 2011. Meanwhile, Post PNG registered 150,000 users for its mobile remittance service in 2013. [↑](#footnote-ref-4)
5. Despite these bilateral arrangements, investments in POS/ATM networks are still determined by each bank based on the principle of servicing customers in its own network. This has led to a very large overlap of the ATM/POS networks of the three commercial banks, instead of one network complementing another. [↑](#footnote-ref-5)