



Bank of Papua New Guinea

Strategy and Action Plan for the Development of the PNG National Payments System 2015-2018

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1. Introduction

This document contains the Strategy for the further development of the National Payments System (NPS) of Papua New Guinea (PNG). It covers the period from the fourth quarter of 2015 to the end of 2018 and is an update of the *Vision and Strategy for the future PNG National Payments System* which was launched by the Bank of Papua New Guinea (BPNG) in November 2009. For a full appreciation of the context, this Strategy should be read in conjunction with the original *Vision and Strategy*.

Since the publication of the 2009 *Vision and Strategy* much progress has been made in implementing its recommendations. Achievements to date are described in later sections of this document. At the same time both the economy and the financial system of PNG have undergone considerable development. Most notably, so far as this strategy update is concerned, significant numbers of new payment instruments, systems and providers have come on the scene. Nevertheless the 2009 *Vision and Strategy* remains unfulfilled in a number of respects. The objectives of the present Strategy update are to:

- Assess progress to date in carrying out the 2009 *Vision and Strategy*;
- Adjust and/or update the Strategy as necessary in light of what has happened in the last six years;
- Describe the developments over the next three years or so which BPNG plans to undertake in consultation and co-operation with all NPS stakeholders;
- Present an action plan for carrying out the planned developments.

This Strategy will be reviewed annually and revised as necessary.

1.1 Context of the NPS

The following paragraphs, describing the objectives, requirements, characteristics and principles of the PNG NPS, are adapted from the 2009 *Vision and Strategy*.

Objectives

- To provide safe, reliable and efficient mechanisms for the exchange of value (money) between transacting parties;
- To ensure finality and irrevocability of both payment and settlement;
- To enable the management, reduction and containment of systemic and other risks; and
- To provide assured and easy access to a broad range of modern payment types and services (both domestic and international) to all citizens and organisations in PNG.

Requirements

- Speed, certainty and reliability of payments;
- Safety and soundness of all payment systems;
- Confidentiality;
- Convenience;

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- Low cost structure;
- Universality.

Characteristics

- Development of PNG away from a cash-oriented society towards widespread use of non-cash electronic payment instruments;
- A sound legal foundation;
- Compliance with internationally-accepted principles and standards;
- Maintenance of the highest level of safety and stability of the financial system while encouraging innovation and competition;
- Cost-efficiency;
- Healthy competition amongst payment service providers;
- Thorough understanding and appropriate management of risks related to payment systems by all stakeholders;
- Effective oversight of the NPS by BPNG;
- Settlement of all inter-bank exchanges no later than same-day;
- Support of electronic trading in both the securities and foreign exchange markets, including electronic Delivery versus Payment (DvP) and Payment versus Payment (PvP);
- Optimum use of available liquidity;
- A high level of co-operation and collaboration between all participants in the NPS;
- Accessibility of the NPS to all qualifying payment service providers through the establishment of an interoperable infrastructure; and
- A high level of public awareness of NPS developments and available instruments and services.

Principles

- The provision of payment services is not the exclusive domain of banks;
- Participants may compete on services but should co-operate on infrastructure;
- Participants are liable for the risks that they introduce into the NPS;
- A balance is maintained between risk reduction and cost;
- Any BPNG response to a problem in the NPS will be in the interest of the system, not individual participants; and
- BPNG will exercise an adequate level of oversight over the NPS to ensure its safety and soundness, including consumer protection.

1.2 Pillars of the National Payments System

As described in the 2009 *Vision and Strategy*, the NPS is considered in terms of nine Pillars according to a model developed by the World Bank's Payment Systems Development Group (PSDG)¹. Each Pillar is addressed in turn in order to produce the complete NPS Strategy. The Pillars are:

- Pillar 1:** A sound and robust legal and regulatory environment which supports settlement finality and the efficiency of payment arrangements;
- Pillar 2:** Systems to process large value and time-critical payments which are safe and efficient, and comply fully with the CPSS/IOSCO *Principles for Financial Market Infrastructures (PFMI)*²;
- Pillar 3:** Retail payment systems which are safe, efficient, convenient and interoperable, support the provision of a wide range of payment instruments and services, and are accessible by the widest possible proportion of the population;
- Pillar 4:** Government collections and disbursements which are fully and efficiently integrated with the NPS and support its smooth functioning;
- Pillar 5:** Securities clearance, settlement and depository systems which are safe, efficient, compliant with international standards (particularly the *PFMI*), and support capital market development;
- Pillar 6:** Inter-bank money markets which are fully developed and closely integrated with settlement systems;
- Pillar 7:** International remittances and other cross-border payments which are distributed rapidly and conveniently, and are cost-efficient for end users at both ends;
- Pillar 8:** An oversight and supervisory framework which is clearly defined, and within which BPNG exercises its oversight authority in co-operation with other regulators as applicable;
- Pillar 9:** Effective, structured and fruitful co-operation between all participants in the NPS.

The structure of this document is based on the nine Pillars which are considered in turn in sections 3 to 11. Each of these sections:

- Describes the planned activities from the corresponding section of the 2009 *Vision and Strategy*;
- Summarises progress to date on carrying out those activities; and
- Describes planned future actions, with timeframe(s).

These are summarised in section 2.

¹ BPNG acknowledges with thanks the PSDG's continuing permission to use this model.

² *PFMI* was published in 2012 by the Committee on Payment and Settlement Systems of the Bank for International Settlements (CPSS) and the International Organisation of Securities Commissions (IOSCO). It replaces two previous CPSS/IOSCO documents, namely *Core Principles for Systemically Important Payment Systems* and *Recommendations for Securities Settlement Systems* both of which were referenced in the 2009 *Vision and Strategy*.

1.3 Abbreviations and definitions

ACH	Automated Clearing House. An electronic facility for clearing inter-bank payments such as truncated cheques, direct credits and direct debits.
AML/CFT	Anti Money Laundering/Countering the Financing of Terrorism.
ASYCUDA	Automated System for Customs Data.
ATS	Automated Transfer System. A system for integrated electronic clearing and settlement of inter-bank payments, comprising both ACH and RTGS elements in a single system.
BIS	Bank for International Settlements.
BPNG	The Bank of Papua New Guinea.
BSS	Banking Services System. BPNG's CBS.
CBS	Core Banking System. The system used by every bank to manage its customers' business.
CEFI	Centre for Excellence in Financial Inclusion. The national co-ordinating body for financial inclusion activities in PNG.
COTS	Commercial Off The Shelf. A term used to characterise ready-developed products such as software packages, which require only a small amount of customisation or "parameterisation" to fit the specific requirements of the purchaser.
CPSS	Committee on Payment and Settlement Systems. A committee of BIS.
CSD	Central Securities Depository. A system which maintains information relating to securities holdings and owners.
DoF	Department of Finance (of GPNG).
DoT	Department of Treasury (of GPNG).
DvP	Delivery versus Payment. A mechanism for ensuring that both legs of a securities transaction happen at the same time.
EBBBWG	Electronic Banking/Branchless Banking Working Group. A CEFI working group which focuses on promoting the availability of financial services for the currently-unbanked.
EFTPOS	Electronic Funds Transfer at Point of Sale.
FMD	BPNG's Financial Markets Division.
FSSR	Financial Services Sector Review. A broad-ranging review of the PNG financial sector being conducted in 2015 by the World Bank, Department of Treasury, Department of Finance and BPNG.
GPNG	Government of Papua New Guinea.
IFMS	Integrated Financial Management System. The system operated by DoF which manages all GPNG financial activities.
ILF	Intraday Liquidity Facility. A feature of KATS whereby BPNG can provide

	liquidity support to a participant on the understanding that it will be returned at the end of the business day.
IOSCO	International Organisation of Securities Commissions.
IPA	Investment Promotion Authority.
IRC	Internal Revenue Commission.
ITD	BPNG's Information Technology Department.
KATS	Kina Automated Transfer System. The ATS for PNG.
MOU	Memorandum of Understanding.
NBFI	Non-Bank Financial Institution. The most significant of these in the PNG context are the Microbanks and the Savings and Loans Societies.
NEC	National Executive Council.
NPC	National Payments Council.
NPS	National Payments System. This covers all aspects of the movement of funds between payers and payees. An efficient and smoothly operating NPS is a necessary precondition for business development and economic growth.
NPSA	National Payments System Act 2013. An Act which contains all necessary legal provisions for the operation of the NPS.
NPSOCU	Payment System Operational Oversight and Compliance Unit (within BPNG).
PFMI	<i>Principles for Financial Market Infrastructures</i> . A publication of CPSS and IOSCO which defines internationally-accepted standards for the operation of systems such as ATS and CSD.
PNG	Papua New Guinea.
POMSoX	Port Moresby Stock Exchange.
PSDG	Payment Systems Development Group. A specialist unit of the World Bank.
PSU	Payment Systems Unit of BPNG.
PvP	Payment versus Payment. A mechanism for ensuring that both legs of a money market transaction happen at the same time.
RABB	Record of Arrangements Between Banks. A contractual agreement which regulates the manner in which items are to be exchanged, settlements effected and cash handled between banks, including procedures for dishonouring cheques and returning credit transfers.
Repo	Repurchase agreement.
RFI	Request For Information.
RFP	Request For Proposals.
RMS	Registry and Money Market System. A system operated by BPNG which holds records of all GPNG and BPNG securities.
RTGS	Real time Gross Settlement. The process of settling high value and high urgency inter-bank payments with finality and irrevocability in real time, without any preliminary batch clearing or netting.

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SIGTAS	Standard Integrated Government Tax Administration System.
SIPS	Systemically Important Payment System. A system which is able to generate and transmit disturbances of a systemic nature to the financial sector.
STP	Straight Through Processing. The ability for a transaction to pass from one computer system to another without manual intervention. In the context of the NPS, describes the ability to handle a payment completely electronically from originator (payer) to beneficiary through the interlinking of banks' CBSs with KATS.

2. Executive Summary

As noted above, the PNG NPS is considered as covering nine distinct areas, which are called Pillars in the PSDG's model. This updated NPS Strategy describes, for each Pillar, the progress made in achieving the objectives of the 2009 *Vision and Strategy* and the activities which are planned for the period covered by this Strategy (2015-2018).

2.1 Pillar 1: Legal and regulatory environment

Achievements to date

In the 2009 *Vision and Strategy*, BPNG stated that a National Payments System Act would be enacted and that regulations, operating rules and procedures, contractual arrangements and membership agreements covering individual payment systems would be developed as necessary:

- The National Payments System Act (NPSA) was enacted in 2013.
- Rules, standards and procedures have been developed and implemented for the first major new payment system (the Kina Automated Transfer System KATS – see Pillars 2 and 3).

Planned activities 2015-2018

- There is a further identified need to develop a regulatory framework that would give stakeholders certainty and clarity as to the implementation of the NPSA. With the assistance of the International Finance Corporation (IFC), BPNG will therefore develop further regulations as necessary, particularly in the areas of electronic funds transfers, retail payment instruments, oversight and agent banking. These activities will take place starting no later than January 2016 and will be completed before the end of November 2016.
- As new systemically important payment systems (SIPS) are implemented in PNG, BPNG will ensure that the necessary rules, standards and procedures are developed for them as applicable, such that they are completed, approved and in place before the systems to which they relate go into live operation.

2.2 Pillar 2: Large value and time-critical payments

Achievements to date

In the 2009 *Vision and Strategy*, BPNG stated its intention to implement a Real Time Gross Settlement (RTGS) function to settle all large value/time-critical inter-bank payments. This would be one of the two major elements of an Automated Transfer System (ATS), the other element being an Automated Clearing House (ACH – see Pillar 3):

- The RTGS element of KATS has been operational since October 2013. It includes a Compliance Monitoring module which is used to support BPNG's Anti Money Laundering/Countering Financing of Terrorism (AML/CFT) activities. Participation in KATS is currently confined to BPNG and the four commercial banks.

Planned activities 2015-2018

- To comply with its international obligations BPNG will carry out a self-assessment of KATS' compliance with the CPSS/IOSCO *PFMI* during the first half of 2016.

- Starting in the fourth quarter of 2015, participation in KATS will be progressively extended to include any qualifying non-bank financial institutions (NBFIs) which wish to join.

2.3 Pillar 3: Retail payment systems

Achievements to date

In the 2009 *Vision and Strategy*, BPNG stated its intention to implement an Automated Clearing House (ACH) facility within the ATS for clearing and netting of truncated cheques, direct credit transfers and direct debit instructions. It would also initiate the establishment of a national card and mobile payments switch and in general actively encourage the introduction of innovative and low-cost new retail payment services:

- The ACH element of KATS went live for truncated cheques in September 2014 and for direct credit transfers in February 2015. Direct debits have not as yet been implemented.
- No progress has been made as yet on the national switch. Recently several financial institutions have expressed interest in a switch being introduced as soon as possible.
- In the last few years a number of banks and other payment service providers have introduced new payment instruments and services, many of them based on using mobile phones. All such services have been duly licensed by BPNG.

Planned activities 2015-2018

- KATS will be extended to include the processing of direct debits during the period 2016-2017.
- With immediate effect, BPNG will initiate a project for the procurement and implementation of a national card and mobile payments switch. In order to ensure full interoperability of payment systems and services in PNG, all providers of such services will be required to connect their systems to the switch once it is fully in operation. The switch should be operational with a trial group of participants by early 2017. All other systems will be progressively included by the end of 2018. In the interests of impartiality and speed of implementation, the switch will initially be owned and operated by BPNG. Its introduction will have an appreciable impact on BPNG's Information Technology Department (ITD) which will therefore be closely involved in the project. In the longer term BPNG will look to divest it to private operator(s) under an ownership/ governance model which will be defined and agreed when the time is right.
- During the period covered by this NPS Strategy update BPNG will continue to support the drive for financial inclusion in PNG through the use of innovative retail payment instruments.

2.4 Pillar 4: Government collections and disbursements

Achievements to date

In the 2009 *Vision and Strategy*, BPNG stated that it would work with the involved government departments to achieve a smooth and early transition from the present paper instruments (mainly cheques) to the use of electronic payments for the largest possible percentage of collections and disbursements:

- During the last few years BPNG has worked with the Department of Finance (DoF), Internal Revenue Commission (IRC) and PNG Customs to define and agree how their respective

payments and revenue collections can be made using electronic payment methods through KATS.

- BPNG and DoF have agreed the technical details of the interface between DoF's Integrated Financial Management System (IFMS) and KATS, and have started testing the processing of electronic payment instructions sent from IFMS to KATS (via BPNG's BSS system).
- Since late 2013 taxpayers have been able to make tax payments from their bank accounts via the KATS RTGS element to an IRC account at BPNG. IRC staff have online access to view these accounts.
- BPNG, PNG Customs and the commercial banks have agreed the procedures and data formats whereby Customs brokers can make payments via KATS to Customs' account at BPNG. Testing of this interface will begin early in the fourth quarter of 2015.

Planned activities 2015-2018

- BPNG will continue the above activities with all three agencies to complete the fully-electronic processing of GPNG disbursements and receipts. This process is expected to cover the period from the fourth quarter of 2015 to the end of the second quarter of 2017.
- At the same time BPNG will work with GPNG to identify further payment types which can be managed electronically, particularly revenue collections by agencies such as the National Fisheries Agency and the Investment Promotion Authority (IPA).

2.5 Pillar 5: Securities clearance, settlement and depository systems

Achievements to date

In the 2009 *Vision and Strategy*, BPNG stated that it would purchase and install a Central Securities Depository (CSD) software package to manage GPNG and BPNG securities. The CSD would be tightly-coupled to the RTGS element of the ATS for the purposes of: (i) settling the Kina leg of securities transactions to ensure Delivery versus Payment (DvP); and (ii) supporting the provision by BPNG of collateralised intraday liquidity support to RTGS participants. The CSD was intended to replace BPNG's existing Registry and Money Market System (RMS).

- During the ATS procurement process it became apparent that recently-completed extensions to RMS could fill at least some of the role envisaged for a CSD. BPNG therefore decided to procure only an ATS and to keep CSD as an option in case it proved to be infeasible to interface the ATS and RMS.
- During its implementation KATS has been interfaced with RMS for the settlement of the Kina leg of securities transactions but without achieving full DvP. The interface does not support automated collateralisation of intraday liquidity in the RTGS.
- During 2015 a report on capital markets in PNG has been produced from the Financial Services Sector Review (FSSR) conducted by the World Bank, BPNG, the Department of Treasury (DoT) and DoF. This report recommends the establishment of a full-blown CSD as a key infrastructure component for the development of PNG capital markets.
- BPNG is also evaluating the Bloomberg Bond Auction System for automating the securities auction process.

Planned activities 2015-2018

- If the evaluation of the Bloomberg Bond Auction System is successful it will be adopted, otherwise a requirement for an auction capability will be included in the CSD procurement (see next bullet point).
- BPNG will procure and implement a full CSD system with a view to having it operational in the first quarter of 2018. This may be based on either enhancing RMS or on a commercial off-the-shelf (COTS) software package.

2.6 Pillar 6: Inter-bank money markets

Achievements to date

In the 2009 *Vision and Strategy*, BPNG noted that at its then state of development, the money market in PNG would not benefit from the introduction of an automated system, but that the RTGS element of the ATS would provide support for the development of the PNG inter-bank money market.

- The RTGS element of KATS has been in operation since October 2013.

Planned activities 2015-2018

- The FSSR report on capital markets mentioned under Pillar 5 makes a number of recommendations for the development of the PNG money market, including “That the BPNG upgrade payment, custody, and settlement infrastructure to reduce the credit and operational risk of secondary market and interbank repurchase transactions”. This will be carried out as part of the work envisaged under Pillar 5 (Securities Clearance, Settlement and Depository).

2.7 Pillar 7: International remittances

Achievements to date

In the 2009 *Vision and Strategy*, BPNG stated that it would work with the market to ensure that international remittance services in Papua New Guinea comply with the CPSS-World Bank *General Principles for International Remittance Services* as part BPNG’s payments system oversight function. Since then it has become apparent that international remittances are relatively insignificant in the overall context of the PNG NPS and so no work has been carried out in this area.

Planned activities 2015-2018

- The payments system oversight unit which BPNG plans to establish in the near future (see Pillar 8) will include international remittances in its activities. These will particularly include gathering accurate statistics on remittance flows and evaluating any need to introduce regulations governing the flow of remittances.

2.8 Pillar 8: Oversight and supervisory framework

Achievements to date

In the 2009 *Vision and Strategy*, BPNG stated that it would establish an oversight function as part of its payments system establishment. The objective of this function would be to ensure the smooth functioning of the overall NPS and to facilitate the development of sound interoperable payment and settlement systems.

- The oversight function has not yet been established. However, BPNG has recently taken steps to create the Payment System Operational Oversight and Compliance Unit (NPSOCU), and recruitment for the position of manager of this unit has commenced. IFC will provide technical assistance for the development of the NPS oversight function once the NPSOCU has been established and the manager appointed.

Planned activities 2015-2018

- With the assistance of IFC technical assistance, the NPSOCU will become fully operational during the course of 2016.

2.9 Pillar 9: Co-operation

Achievements to date

In the 2009 *Vision and Strategy*, BPNG stated that it would form a broad-based National Payments Council (NPC) to facilitate co-operation and communication among all stakeholders in the NPS. The NPC's role would be consultative and advisory rather than decision-making.

- Because the first two main activities in developing the NPS (enacting the NPSA and implementing KATS) involved the commercial banks rather than the wider NPS community, BPNG decided to defer the establishment of the NPC until these immediate activities had been successfully concluded.

Planned activities 2015-2018

- Now that NPC development is broadening to include a range of NBFIs, BPNG will take steps to form a broad-based NPC with representation from a wide cross-section of stakeholders. Membership will be at a high level in each member organisation and will be by invitation of the BPNG Governor. Its function will be consultative and advisory rather than decision-making or prescriptive. It will be formed and hold its first meeting before the end of March 2016.

2.10. Summary of planned actions 2015-2018

As described in previous paragraphs, BPNG will carry out or initiate the following major activities during the period covered by this updated NPS Strategy, ordered by Pillar. They are also depicted in the timeline in Annex 1.

1. With the assistance of IFC, develop supplementary regulations to underpin the NPSA.
2. Carry out a self-assessment of KATS against *PFMI*.

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3. Extend KATS participation to NBFIs.
4. Implement direct debits in KATS.
5. Implement a national card and mobile payments switch.
6. Complete integration of DoF, IRC and Customs payments and collections into KATS.
7. Extend electronic payments and collections to other GPNG organisations.
8. Implement a CSD.
9. With the assistance of IFC, establish the NPSOCU.
10. Form a broad-based NPC.

3. Pillar 1: Legal and Regulatory Environment

A sound and appropriate legal framework is an essential basis for a sound and efficient payments system. Many aspects of modern payment systems involve activities and processes that were not covered in pre-existing legislation (for example cheque truncation, electronic signatures, validation of netting and settlement finality). It is therefore essential that appropriate legislation and supporting regulations be put in place before modern payment systems are introduced.

3.1 Planned actions from the 2009 *Vision and Strategy*

The 2009 *Vision and Strategy* envisaged the following actions:

1. The development and enactment of a National Payments System Act covering all payment system-specific considerations.
2. The development and implementation of rules, standards and procedures for individual payment systems as necessary.

3.2 Progress to date

The above actions have been successfully carried out in the form of:

1. The National Payments System Act 2013 (NPSA);
2. Rules, standards and procedures which have been developed and implemented for the first major new payment system, the Kina Automated Transfer System (KATS – see sections 4 and 5) as follows:
 - a. The KATS System Rules were developed by BPNG in consultation with the participants and subjected to legal vetting before being signed between all parties as a binding contract;
 - b. The existing Record of Arrangements Between Banks (RABB) was updated in a consultative process between the banks, including BPNG, to reflect changed working methods and procedures consequent on the introduction of KATS. The RABB is a contractual agreement which regulates the manner in which items are exchanged, settlements effected and cash handled between banks, including procedures for dishonouring cheques and returning electronic credit transfers;
 - c. BPNG has agreed a Memorandum of Understanding (MOU) with each KATS participant covering the respective obligations of BPNG and Participants in the operation of KATS. Similar MOUs have been agreed with relevant Government entities covering their payments activities which are conducted via BPNG's Banking Services System (BSS).

3.3 Planned further actions

Rules and regulations

While the NPSA has been successfully enacted and gazetted, so far no supplementary rules and regulations have been developed to enable BPNG to implement and enforce its policy role and responsibilities. This is a key recommendation of the payments system element of the PNG Financial Services Sector Review (FSSR) being undertaken in 2015 (with advice from the World Bank) in which BPNG is encouraged to "...develop a regulatory framework that would give stakeholders certainty

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and clarity as to the implementation of the law³, 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 risks⁴.”

In line with this, in August 2015 BPNG entered into an MOU with the International Finance Corporation (IFC) under which IFC will provide technical assistance to BPNG in the areas of (i) NPS oversight (see Pillar 8 below) and (ii) supporting the drafting of regulations and policy for:

- Electronic funds transfers;
- Retail payment instruments;
- Oversight;
- Agent banking; and
- Any other topics as necessary and agreed.

Action: With the technical assistance and advice provided in accordance with the IFC MOU, BPNG will develop regulations and policy statements as necessary to cover all relevant areas of the PNG NPS. These activities will take place starting no later than January 2016 and will be completed before the end of November 2016.

System-specific rules, standards and procedures

As new systemically important payment systems (SIPS) are implemented, BPNG will ensure that the necessary rules, standards and procedures are developed, in the same way as they have been for KATS. The most important of these systems is expected to be the national card/mobile switch (see section 5). These developments will take place to match the timetable for introducing the systems in question.

³ i.e. the NPSA.

⁴ *Payment System Assessment Update – FSSR, August 2015.*

4. Pillar 2: Large-Value and Time Critical Payments

The clearing and settlement of large-value, time-critical payments is a critical activity of the NPS. The system(s) which carry out these activities constitute a vital component of every NPS, especially in terms of risk, although the actual volumes of such payments may be relatively low. They are defined as systemically important payment systems (SIPS), because they are able to generate and transmit disturbances of a systemic nature to the entire financial sector.

4.1 Planned actions from the 2009 *Vision and Strategy*

In the 2009 *Vision and Strategy* BPNG stated its intention to introduce a Real Time Gross Settlement (RTGS) facility for large-value and time-critical payments within a BPNG operated payment system, which was intended to form the backbone of the PNG National Payments System. The RTGS facility was planned to be one of the two main capabilities of the Automated Transfer System (ATS) which BPNG intended to introduce to handle the clearing and settlement of all electronic inter-bank payments in PNG. The ATS is also covered in terms of retail payments in section 5 (Pillar 3).

As stated in the 2009 *Vision and Strategy*, the ATS was to be compliant with the *Core Principles for Systemically Important Payments System* published by the CPSS.

4.2 Progress to date

In 2011 BPNG launched the procurement and implementation of the Kina Automated Transfer System (KATS) with both RTGS and Automated Clearing House (ACH) functionality. Implementation of this system took place over the period January 2012 to February 2015. The RTGS element of KATS became operational in October 2013 and is now used for the settlement of all inter-bank large value and time-critical payments. It has proven very effective and reliable and has been well received by all banks.

The RTGS element has been implemented to include a Compliance Monitoring module which is used to support BPNG's Anti Money Laundering/Countering the Financing of Terrorism (AML/CFT) activities.

Section 5 contains information on the ACH element of KATS.

4.3 Planned further actions

***PFMI* compliance**

KATS has been implemented to be compliant with the *Principles for Financial Market Infrastructures (PFMI)* which, as explained in section 1, has replaced the *Core Principles for Systemically Important Payment Systems*. BPNG intends to carry out a self-assessment of KATS compliance with *PFMI* based on the document *Principles for financial market infrastructures: disclosure framework and assessment methodology* published by CPSS/IOSCO. Apart from this being good practice in general, the International Monetary Fund and the World Bank assess the compliance of SIPS such as KATS whenever they conduct financial sector assessments in different countries. It is therefore wise to take steps to assess and ensure compliance in anticipation of the next financial sector assessment in PNG.

Action: BPNG will carry out a self-assessment of KATS compliance with *PFMI*, and take steps to rectify any non-compliances that may be found. This will take place by the end of June 2016.

Extending KATS participation

Participation in KATS is currently confined to licensed banks, all of which are required to be participants. The system also has the ability to accommodate non-bank financial institutions (NBFIs) and BPNG has decided in principle to broaden KATS participation to NBFIs which are supervised by BPNG. BPNG has already received a formal application from one NBFI to become a KATS participant, while another NBFI has expressed interest informally in joining KATS as soon as possible.

Action: BPNG will work with one or two NBFIs with the objective of admitting it/them as KATS participant/s before the end of 2016. Based on the experience of doing this, in consultation with the existing KATS participants, BPNG will develop standard procedures, guidelines and protocols for use in admitting future new participants.

5. Pillar 3: Retail Payment Systems

Retail payment systems can be defined as funds transfer systems which handle consumer payment transactions of relatively low value and large volume, which are available for use by all sections of the population.

A wide range of efficient and interoperable retail payment instruments is essential for serving customers' needs in a market economy. Having only a restricted range of instruments available has an adverse impact on economic development and growth. In recent years, increased interest in retail payments and retail payment systems has emerged as a world-wide trend, recognising that such systems are very important in that they facilitate the conduct of commerce and improve the efficiency of both day-to-day transactions among consumers and businesses and the distribution and collection of payments made by and to government agencies. They also play a key role in fostering financial inclusion.

As noted in a World Bank publication on retail payments⁵, central banks have an important role to play in the development of retail payment systems at the national level. In particular they are concerned to pursue public policy objectives in this area, including:

- Addressing legal and regulatory impediments to market development and innovation;
- Influencing market conditions and behaviours;
- Supporting the development of effective standards and infrastructure arrangements;
- Providing central bank services in the manner most effective for the particular market;
- Promoting affordability and ease of access to payment services;
- Promoting development of efficient infrastructure to support development of payment instruments and mechanisms to meet retail payment needs; and
- Promoting socially optimal usage of payment instruments.

Globally, the variety and scope of payment services and technologies available has developed at a very fast rate in the years since the publication of the 2009 *Vision and Strategy*. This same trend can be observed in PNG, with the recent entry into the market of a number of new players, particularly offering mobile telephone-based payment services.

5.1 Planned actions from the 2009 *Vision and Strategy*

in the 2009 *Vision and Strategy* BPNG stated that it would:

- Implement an Automated Clearing House (ACH) facility within the ATS. The ACH would provide clearing and netting functionality for a range of payment instruments including truncated cheques, direct credit transfers and direct debit instructions. Settlement of net positions arising from clearing operations would take place in the RTGS element of the ATS.
- Initiate a project to establish a national switching and payment clearing facility for both card-based and mobile telephone-based payments;

⁵ *Developing a comprehensive national retail payments strategy* – World Bank 2012

- Actively encourage the introduction of innovative and low-cost new payment instruments and services (such as mobile phone payments) by a wide range of providers, with a particular focus on the currently 'unbanked' sectors of the population.

BPNG's policy was that, where possible, retail payment systems would be provided by market players rather than BPNG directly, with the overall objective of ensuring that the PNG economy is provided with a broad range of safe and efficient payment services. It was recognised, however, that BPNG might need to fill identified market needs by initiating the development of such systems. Wherever possible this should be in collaboration with market players, with a view to subsequent divestment to the market players once the systems are established.

5.2 Progress to date

ACH

An ACH capability has been implemented as a key element of KATS (see Pillar 2, previous section). Clearing of truncated cheques started live operation in September 2014 and direct credit transfers in February 2015.

The introduction of cheque truncation has enabled the reduction in cheque clearing time from nine to four days, which has been strongly welcomed by the PNG business community. For the future, BPNG intends further to reduce the clearing time (see Action below).

The KATS software has the ability also to clear direct debit instructions but this facility has not yet been introduced. Direct debits are a new instrument for PNG and it was perceived that they would take time to implement from an organisational and management perspective. In addition the KATS participants would probably need to make further technical adjustments to their core banking systems (CBSs).

National Card and Mobile Payments Switch

No work has yet been carried out on specifying, procuring or implementing a switch. However, with the entry in recent years of a number of new players offering innovative payment services in PNG, the requirement for interoperability of retail payment services has become more urgent. This can best be achieved through interconnecting all payment services and systems through a single national electronic switch. Indeed, a number of financial institutions are already pressing BPNG to go ahead with installing a switch. BPNG will therefore initiate a project for this as soon as possible.

Innovative Payment Systems

BPNG has continued to encourage the introduction of new systems and services, both by the established commercial banks and also by other players including NBFIs and mobile network operators. All providers of such services are required to be licensed by BPNG under the *Mobile Banking and Mobile Payment Service Regulation* issued by BPNG in 2011.

The development of innovative payment systems is especially important in supporting BPNG's drive for Financial Inclusion because many of these systems are particularly applicable to customers with limited financial resources in remote areas which currently do not have access to the established financial institutions and services. This is also being fostered by BPNG-led initiatives such as the Centre for Excellence in Financial Inclusion (CEFI) which is housed at BPNG and which, in the words of the Governor, "...is a national entity designed to co-ordinate the financial inclusion initiatives in Papua New Guinea. It envisages creation of a robust financial sector which will reach people across the country and enhance access to high-quality financial products and services with the combined

efforts of all stakeholders.⁶ In particular the Electronic Banking/Branchless Banking Working Group (EBBBWG) of CEFI is specifically tasked with promoting the availability of affordable, ubiquitous payment services for the currently-unbanked sectors of the population. The EBBBWG is involved in current initiatives to further the development of the NPS.

5.3 Planned further actions

KATS direct debits

Now that KATS is fully live and has proven very stable and reliable in operation, BPNG has announced that it intends to implement direct debits within the short to medium term.

Action: In consultation with the other KATS participants, BPNG will develop and execute an action plan for implementing direct debits. Planning for this will start in the first quarter of 2016, with completion planned by the end of the third quarter of 2017.

Extending KATS participation

The extension of KATS participation to NBFIs (see Pillar 2, 4.3 above) will apply at least as much to the ACH element as to the RTGS element.

Cheque clearing time

BPNG's objective is that ultimately cheques will be cleared same-day, in other words a cheque payee will receive good value for a cheque on the day it is deposited. However, it is recognised that the particular circumstances prevailing in PNG mean that this will take a period of time to achieve.

Action: BPNG will work with the banks towards progressively reducing the dishonour period permitted within KATS, starting in the first half of 2016. At the same time all financial institutions will be strongly encouraged to move their customers from the use of cheques to direct credits and direct debits.

Further KATS development

The field of electronic payment systems is developing rapidly on the international scene. BPNG expects that further capabilities will become available for use in or with the KATS software platform during the period covered by this Strategy update. These may include a form of continuous settlement of direct credits in real time.

Action: BPNG will monitor international developments and will seek to adopt any such developments that are applicable to the PNG NPS. This will be done in consultation with the National Payments Council (NPC) and in liaison NPS with the supplier of KATS.

National Card and Mobile Payments Switch

As soon as possible BPNG will initiate a project to implement a national switch in PNG. This will be carried out in consultation with all current and potential providers of electronic payment services including both financial institutions (commercial banks, microbanks and Savings and Loans Societies) and mobile network operators. It will be a major project for the PNG finance sector, involving a very large number of organisations and will be carried out in accordance with one of the principles of the PNG NPS (see 1.1), namely: "Participants may compete on services but should co-operate on infrastructure".

⁶ CEFI's Strategic Plan 2016-2020. See also www.thecefi.com.

Co-ordination, co-operation and consultation will therefore be key to its success, and BPNG will require all payment service providers to be participants in the switch as a condition of their licence, once it is fully operational.

Action: BPNG will lead a project to install a national card and mobile payments switch for PNG. This will begin with the development and publication of a request for proposals (RFP) for a comprehensive COTS package comprising a fully-developed software package, hardware and a full range of implementation services. Given the widespread pressure from the market for a switch, this project will be initiated by the end of October 2015, with a view to completing the procurement process by the end of June 2016.

The switch will be required to be operational 24 hours per day, 365 days per year, which will place new demands on BPNG's IT resources. BPNG will therefore plan to resource the IT Department appropriately.

For the purpose of manageability of the project, and in order to have the switch operational as quickly as possible, the project will initially include only a small pilot number of participating institutions. BPNG expects that the switch could be operational with this small set of participants by the first quarter of 2017. Thereafter all institutions which provide payment services will be progressively included as participants, with the objective of having the switch fully and finally operational by the end of the second quarter of 2018.

In the interests of impartiality and speed of implementation, the switch will initially be owned and operated by BPNG. In the longer term BPNG will look to divest it to private operator(s) under an ownership/ governance model which will be developed in consultation with stakeholders, in particular the National Payments Council (see Pillar 9).

Financial Inclusion

BPNG will continue to support the drive for financial inclusion in PNG, in particular via the EBBBWG.

6. Pillar 4: Government Collections and Disbursements

As in all countries, the Government of PNG (GPNG) is a heavy user of the NPS, and GPNG disbursements and collections account for a large number of all inter-bank payments. BPNG is therefore concerned to ensure that the particular circumstances and requirements of the GPNG are fully taken into account in development of the NPS.

In particular it is important to bring GPNG into the modern electronic payments environment. Automating government payments delivers benefits for all stakeholders:

- GPNG: improves the efficiency and cost-effectiveness of the government, thus also providing better value for money for the nation in general;
- Business: makes payment of taxes and duties, and receipt of payment for goods and services, easier, faster and more reliable;
- Citizens: makes dealing with the government faster and more convenient;
- Government employees and beneficiaries: payment of salaries and social benefits is faster, predictable and more convenient;
- BPNG: as banker to the GPNG, BPNG's own operations benefit from the increased speed and efficiency of handling the government's payment flows through KATS.

6.1 Planned actions from the 2009 *Vision and Strategy*

In the 2009 *Vision and Strategy* BPNG stated its intention to work with the Department of Finance (DoF) to achieve a smooth and early transition from paper instruments to the use of electronic payments for the largest possible proportion of collections and disbursements. BPNG also planned to support DoF's project to replace GPNG's existing decentralised financial processing systems with an Integrated Financial Management System (IFMS), and to take steps to ensure a close level of consultation and synchronisation between the NPS reform programme and the IFMS project.

6.2 Progress to date

During the last three years BPNG has worked with DoF with the ultimate aim of integrating payments generated by the IFMS into the new electronic payments environment based on KATS. During the same period BPNG has also worked individually with the two main revenue-collecting agencies (Internal Revenue Commission (IRC) and PNG Customs) in order to enable collections to be processed electronically using KATS. In parallel with the development of KATS, BPNG has also implemented a new core banking system called Banking Services System (BSS) which manages all GPNG accounts held at BPNG.

These activities have involved establishing electronic connections between BPNG's systems and the systems operated by the three agencies. BPNG and the GPNG agencies have also worked with the commercial banks with the objective of enabling IRC and Customs payments to be made completely electronically from commercial bank accounts via KATS into BSS, and thence into the individual agencies' own systems, all automatically without manual intervention.

As at September 2015 the situation is as follows:

DoF

IFMS is now operational in a number of GPNG Departments and is in process of being rolled-out to all central government departments and agencies. BPNG and DoF have agreed the technical details of the interface between IFMS and KATS and have started testing the processing of electronic payment instructions from IFMS.

IRC

Since late 2013 taxpayers have been able to make tax payments from their bank accounts via KATS to an IRC account held in BSS at BPNG. IRC staff have online access to view these accounts. Future developments will include:

- Connecting BSS to the SIGTAS (Standard Integrated Government Tax Administration System) system used by IRC so that information on each tax payment is transmitted automatically for updating of taxpayers' accounts in SIGTAS and for financial reconciliation;
- The ability for IRC staff actively to manage the accounts by making transfers between IRC accounts and to other GPNG accounts;
- Allowing IRC to make electronic payments for tax refunds and accounts payable transactions.

PNG Customs

BPNG, PNG Customs and the commercial banks have agreed procedures and data formats whereby Customs brokers can make payments via KATS to Customs' account in BSS at BPNG. Details of payments received will be notified immediately via the electronic interface from BSS to the ASYCUDA (Automated System for Customs Data) system used by PNG Customs. An important objective is for payments to be made and settled as soon as possible after ASYCUDA issues an Assessment of duty payable, and preferably in real time, so that import shipments can be cleared from the ports as soon as possible. The next stage will be to carry out testing with the banks and Customs.

6.3 Planned further actions

Continuation of ongoing activities

Action: BPNG will continue to work with all three agencies to complete the fully-electronic processing of GPNG disbursements and receipts as described above. This process is expected to cover the period from the third quarter of 2015 to the end of the second quarter of 2017.

Extension to other GPNG agencies

Action: At the same time BPNG will work with GPNG to identify further payment types which can be processed electronically, either through KATS or by using card and mobile payment services. Particular attention will be paid to revenue collections by agencies such as the National Fisheries Authority and the Investment Promotion Authority (IPA). It should be noted that this will generally require the agency in question to establish secure telecommunications links to BPNG. This activity will continue through the period covered by this Strategy update.

7. Pillar 5: Securities Clearance, Settlement and Depository

Securities markets are of high importance for any country's financial sector. Sound and efficient procedures for the management of securities transactions are a vital element for the development of financial markets. In particular it is essential that securities are issued, registered, held, traded and redeemed in a fast, secure and efficient manner.

7.1 Planned actions from the 2009 *Vision and Strategy*

Central Securities Depository

The 2009 *Vision and Strategy* envisaged the implementation of a Central Securities Depository (CSD) system, closely integrated with the RTGS element of the ATS (see Pillar 2). The objectives of the CSD were to:

1. Provide an online centralised electronic Registry for all GPNG and BPNG securities, which would meet the needs of issuers, bidders, holders, managers and other interested parties by holding records of all securities and their holders in book entry (dematerialised) form;
2. Support electronic clearing and settlement of securities transactions according to the principles of Delivery versus Payment (DvP), on a Straight Through Processing (STP) basis, through integration with the RTGS element of the ATS;
3. Support intraday liquidity management and monetary policy operations of BPNG and facilitate the electronic processing of repurchase agreements (repos);
4. Carry out all calculations of coupon payments, maturities, roll-over, tax payments and so on;
5. Record any changes of ownership of securities;
6. Support portfolio management by instrument and maturity profile, and provide online enquiry facilities to all legitimate enquirers;
7. Enhance the implementation of monetary policy.

The CSD would include an integrated electronic primary market system to automate the process of bidding for, allocating and issuing GPNG and BPNG securities (the auction process). The results of auctions (allocations) were to be automatically updated into the securities database in the CSD at the same time as receipt of the corresponding payments in the RTGS element of the ATS (ensuring DvP).

Tight integration between the CSD and the RTGS element of the ATS was envisaged for two main purposes:

1. To effect Delivery versus Payment (DvP) for securities transactions whereby the Kina leg of each transaction is settled in the RTGS element at the same time as the securities leg is executed in the CSD. The objective of DvP is to reduce or eliminate the risks inherent in such transactions. Payments to securities holders (coupon payments and payout on maturity) would also be made via this connection.
2. To support liquidity management in the RTGS element by enabling the automated collateralisation of intraday credit advanced by BPNG to RTGS participants via the Intraday Liquidity Facility (ILF) of KATS. This would be effected via a repurchase agreement (repo) executed over securities held by a KATS participant in the CSD, with the funds being credited

to the participant's settlement account in KATS. At the end of the business day the repo would be automatically reversed.

It was intended that the CSD would replace the existing simple Registry and Money Market System (RMS) at BPNG. In the longer term BPNG intended also to consider the introduction of an electronic Secondary Market (trading) system for GPNG and BPNG securities. This would be carried out in consultation with the PNG Securities Commission and the Port Moresby Stock Exchange (POMSoX) to ensure optimum compatibility and interworking with the systems operated by POMSoX.

Secondary market

In the longer term BPNG intended to consider the introduction of an electronic Secondary Market (trading) system for GPNG and BPNG securities in consultation the PNG Securities Commission and the Port Moresby Stock Exchange (POMSoX).

7.2 Progress to date

Following approval of the 2009 *Vision and Strategy*, BPNG planned to issue a single RFP for an ATS and CSD, with both systems being closely coupled as described above. However, at the same time as the *Vision and Strategy* was being prepared, BPNG commissioned a major extension of RMS functionality from the software supplier. Following delivery of the extended functionality it appeared that RMS would be able to fill at least some of the role envisaged in the *Vision and Strategy* for a CSD. The RFP was therefore modified to indicate that a CSD was unlikely to be required, although proposers were requested to provide information on their CSD offerings "...in case it emerges that interfacing the ATS and RMS is infeasible". The acquisition of a primary market system to automate the securities auction process was discontinued.

During the implementation of KATS it was established that an interface could indeed be established with RMS, and so the plan to procure a full CSD was shelved. The interface was duly developed, and is now live for the purpose of settling the Kina leg of primary market auction allocations, making refunds of overpayments and executing payouts on coupons and maturities. It can be considered as providing a partial form of DvP.

The interface does not, however, support the second main purpose described above, which was to enable automated collateralisation of intraday liquidity in the RTGS element.

At the time of development of this Strategy the World Bank, in partnership with BPNG, the Department of Treasury (DoT) and DoF, has been working on the FSSR in a number of areas of the PNG financial sector including payment systems and capital markets. The draft reports from the two FSSR working groups involved have identified shortcomings in both the functionality of RMS and the (limited) interface between RMS and KATS. In recognition of this the FSSR has developed a number of draft recommendations. Of particular importance to this Pillar 5, these recommendations (in the two FSSR reports covering payment systems and capital markets) include the establishment of "...an automated clearing and settlement and a Central Securities Depository (CSD) as a key infrastructure development for the interbank, government securities, and central bank bills markets⁷".

Also, the Financial Markets Division (FMD) of BPNG is currently evaluating the Bloomberg Bond Auction System for automating the present manual auction process for GPNG and BPNG securities.

⁷ *Review of the PNG Government Bond & Capital Market Development* – FSSR, August 2015.

7.3 Planned further actions

Primary Auction

BPNG will continue to evaluate the use of the Bloomberg Bond Auction System for securities auctions.

Action: If the results are favourable the Bloomberg system will be adopted for all issues of Treasury Bills, Government Inscribed Stock and Central Bank Bills. If not the requirement for a primary market auction capability will be included in the specification of a new CSD system (see following paragraphs).

CSD

In response to the FSSR recommendations, and in light of experience with the KATS-RMS interface, BPNG will proceed towards the implementation of a full CSD system.

Action: The envisaged stages for implementing the CSD are as follows:

1. BPNG will develop a detailed specification for a CSD with comprehensive functionality, not only to support the tight integration with the RTGS element of KATS described above, but also to fulfil all the specific requirements of BPNG's FMD for the development of PNG's capital markets and for BPNG's money market operations. FMD will therefore take the lead in the development of the specification and the subsequent procurement and implementation processes. This will be done in consultation with BPNG's Payment Systems Unit (PSU) so as to ensure the requisite coupling of the CSD with KATS RTGS. The specification will be completed by the end of June 2016.
2. Once the specification has been completed, BPNG will proceed to acquisition of the CSD. The first step will be to consult with the supplier of RMS to see whether RMS can be enhanced to meet the requirement and, if so, at what cost. At the same time BPNG will advertise the CSD specification internationally in the form of a request for information (RFI) in order to have a basis for comparison of the benefits and drawbacks of enhancing the existing system as opposed to acquiring a modern fully-packaged solution. This step will be completed by the end of September 2016.
3. BPNG will decide on the preferred supplier and conclude a contract by the end of December 2016.
4. Implementation of the CSD package will start in the first quarter of 2017.
5. Implementation will be complete and the CSD system fully-live in the first quarter of 2018.

Implementation of the CSD system will involve tight integration with the RTGS element of KATS as envisaged under 7.1 above, including the use of intraday repos to enable the KATS ILF to be fully implemented. This in turn will require the PNG Master Repo Agreement to be finalised and implemented well in advance.

Secondary market

In line with the recommendations of the FSSR report on Government Bond and Capital Market Development, BPNG will work with other relevant agencies including the PNG Securities Commission and POMSoX to establish an electronic secondary market system for

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retail trading of GPNG securities. For preference this system will be externally operated but must be linked to BPNG's CSD.

8. Pillar 6: Inter-Bank Money Markets

An efficient mechanism for trading and settlement of money market transactions supports improvement of liquidity management and thus increased safety and stability of the financial system. In addition it generally facilitates securities settlement through lower interest rates which benefit brokers/dealers in the credit lines which they negotiate with their banks. Another important function of money markets is to facilitate the smooth and effective functioning of monetary policy, as they are generally used by the central bank to give clear signals to banks that then extend to the rest of the financial sector.

8.1 Planned actions from the 2009 *Vision and Strategy*

The 2009 *Vision and Strategy* noted that the introduction of the KATS RTGS element, closely coupled with the CSD, would provide support for the development of the PNG inter-bank money market. In the longer term BPNG intended to look to encourage the development of specific money market systems in both local and foreign currencies, which would be linked with the RTGS facility for the settlement of the Kina leg of all transactions.

8.2 Progress to date

As described above, the RTGS element of KATS has been fully operational since October 2013 and is now used for all inter-bank financial transactions. No further action has been taken in respect of systems specifically to support the money market.

8.3 Planned further actions

The FSSR report on Government Bond and Capital Market Development⁸ makes a number of recommendations for the development of the PNG money market. These include the recommendation “That the BPNG upgrade payment, custody, and settlement infrastructure to reduce the credit and operational risk of secondary market and interbank repurchase transactions”. This will be carried out as part of the work envisaged under Pillar 5 above (Securities Clearance, Settlement and Depository).

⁸ *Ibid.*

9. Pillar 7: International Remittances

The flow of funds from migrant workers back to their families in their home country is an important source of income in many developing economies. The recipients often depend on remittances to cover day-to-day living expenses, to provide a cushion against emergencies or, in some cases, as funds for making small investments. The flow of remittances constitutes a significant percentage, not only of many countries' gross domestic product, but also of global external finance. The process of sending and receiving remittances in a safe, timely and cost-effective manner is challenging for many financial overseers and regulators.

9.1 Planned actions from the 2009 *Vision and Strategy*

The 2009 *Vision and Strategy* noted that "International remittances constitute a significant element in the PNG NPS, in both outwards and inwards directions", and that such payments "...are expensive relative to the often low incomes of migrant workers and to the relatively small amounts sent". BPNG planned to work with the market to ensure that international remittance services in Papua New Guinea comply with the CPSS-World Bank *General Principles for International Remittance Services*. This would be part BPNG's payments system oversight function. A major goal was to promote the most efficient use possible of the envisaged PNG payments infrastructure, including that of both banking and non-banking institutions.

9.2 Progress to date

Hard statistics are lacking in this area. Nevertheless experience to date indicates that international remittances are in fact relatively insignificant in the overall context of the PNG NPS. This, and the fact that the payments system oversight function is yet to be established (see Pillar 8 below), has led to little if any action having been taken in the area of remittances since the publication of the 2009 *Vision and Strategy*.

9.3 Planned further actions

Once a payments system oversight unit has been established within BPNG, it will ensure that the regulatory perspective on international remittances covers payment system issues, in particular efficiency, transparency and risk management in addition to 'traditional' issues of balance of payments and money laundering. If necessary this may include the development of regulations to foster a safe and efficient provision of services in this area and protect customers, in accordance with Pillar 1 (above). It will also include initiation of efforts to gather accurate statistics on remittance flows, both into and out of PNG.

10. Pillar 8: Oversight and Supervisory Framework

Payment and settlement systems have become a vital component of the economic life of contemporary societies. They consist of increasingly complex and integrated networks of institutions and people involved in the execution of fund transfers across the economies. Their smooth functioning is essential to the overall efficiency and stability of the market systems of which they are core parts. To ensure such smooth functioning, and to facilitate the development of sound payment and settlement systems, national oversight authorities have been established worldwide, in advanced economies as well as in emerging market and developing countries. Oversight activities have been developed to take account of the growing interconnectedness and mutual interdependence of payment and settlement systems and other financial market infrastructures.

10.1 Planned actions from the 2009 *Vision and Strategy*

The 2009 *Vision and Strategy* envisaged the establishment of a new Payment Systems Department within BPNG with two main functional units:

1. Payment systems operations, which would be responsible for the operation of KATS, liaison with KATS participants and other areas of BPNG including the Financial Markets, Banking, Finance and Accounting and Information Technology departments.
2. Policy and oversight, which would be responsible for developing and implementing suitable oversight policies and procedures.

The two units would be operationally distinct in order to maintain the necessary degree of separation between BPNG's roles as overseer of the NPS and operator of KATS (BPNG's activities as a KATS participant are carried out by the Banking Department).

10.2 Progress to date

The payment systems operations unit was established in mid-2012. It has successfully played a vital role in the implementation and ongoing operation of KATS and is now well-established.

However, as yet an oversight unit has not been formed. This is due mainly to the fact that it was necessary to concentrate attention on bringing KATS successfully into full operation, which was a very complex and challenging task lasting through the period January 2012 to February 2015.

Since that time, plans have been advanced for the formation of the National Payment System Operational Oversight and Compliance Unit (NPSOCU). As of the time of development of this Strategy, recruitment for the position of manager of this unit has commenced with a view to the manager being appointed within the fourth quarter of 2015. Once this has taken place BPNG will recruit further staff to the unit.

In addition, as mentioned under Pillar 1 (3.3 above), under the MOU between BPNG and IFC, it is planned that IFC will provide technical assistance for the development of the NPS oversight function in BPNG. The intention is that the assistance will commence once the NPSOCU has been established and the manager appointed.

10.3 Planned further actions

Action: The process of establishing the NPSOCU and getting it fully functional will involve the following steps:

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1. Appoint the manager, NPSOCU. This will be complete by the end of 2015.
2. IFC provide technical assistance. This will be provided starting in January 2016 and will continue throughout 2016 in a series of missions by an international specialist provided by IFC. The number and durations of the missions will be agreed between BPNG and IFC.
3. Fully establish the NPSOCU with staff and premises. This will start in January 2016 and will be complete by the end of June 2016.

11. Pillar 9: Co-operation

Effective co-operation among all participants and stakeholders is essential for the development of a sound and efficient national payments system. The usefulness of all payment instruments depends on their reliability and availability, which in turn requires a high degree of interoperability of the systems that support them. The supply of payment services can therefore be affected by co-ordination failures brought about by perceived conflicts of interests as well as participants' unwillingness to co-operate. BPNG is therefore concerned to ensure the widest degree of fruitful co-operation among all major stakeholders in the NPS.

11.1 Planned actions from the 2009 *Vision and Strategy*

In the 2009 *Vision and Strategy* BPNG indicated its intention to establish a National Payments Council (NPC) to facilitate co-operation and communication among all stakeholders in the NPS, including not only the participants in the new payment system(s) but also other involved groups.

11.2 Progress to date

The immediate actions undertaken after approval of the 2009 *Vision and Strategy* were aimed at establishing a sound foundation for the long-term of the NPS. As covered elsewhere in this Strategy, they particularly entailed the enactment of the NPSA and the implementation of KATS. Both of these activities specifically involved the commercial banks rather than the wider NPS community. As a result BPNG decided to defer the establishment of the NPC until these immediate activities had been successfully concluded.

This is now the case, and the time is thus now right to reconsider forming an NPC. In addition the *Payment System Assessment Update* produced by the FSSR contains the following paragraph:

“Developing the NPS requires an appropriate forum for policy dialogue and co-operation on payment system issues. Recognising this important point, the new payment system law⁹ 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.”

11.3 Planned further actions

BPNG will take steps to form a broad-based NPC with representation from a wide cross-section of stakeholders. Because the NPC is explicitly provided for in the NPSA, BPNG will consult with the National Executive Council (NEC) as to whether NEC approval is needed for its formation.

It will have the following objectives:

1. To support the achievement of sound and efficient payment and securities clearance and settlement systems in PNG through active participation in discussions on current and future developments;
2. To serve as a forum for co-operation across the whole NPS;

⁹ This is the National Payments System Act 2013 (Section 29).

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3. To play a key role in promoting financial inclusion and consumer protection; and
4. To participate in the development of an effective communications strategy for the future development of the NPS.

Membership of the NPC will be at a high level in each organisation and will be by invitation of the BPNG Governor. Its function will be consultative and advisory rather than decision-making or prescriptive. NPC membership will be drawn from the following key stakeholder categories:

- Banks;
- Other financial institutions;
- Government departments and agencies;
- Regulators;
- Mobile network/payment operators;
- Others (e.g. POMSoX).

Action: The NPC will be formed according to the following draft timeline:

1. Decide on membership and issue invitations to nominated members – to be completed by the end of December 2015.
2. Formulate the NPC's charter including procedural rules, definition of responsibilities and areas of activity – by the end of January 2016.
3. Hold the first meeting of the NPC before the end of the first quarter of 2016.

Annex 1 Project Timeline

Timeline for implementation of NPS Strategy 2015-2018													
	2015	2016				2017				2018			
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Pillar 1		Develop additional Regulations											
Pillar 2		KATS PFMI assess.											
	Extend KATS participation to NBFIs												
	Implement direct debits in KATS												
Pillar 3	Implement national switch with selected participants						Extend switch participation to all payment service providers						
Pillar 4	Complete integration of DOF/IRC & Customs payments & disbursements												
				Extend electronic payments to other GPNG agencies									
Pillar 5		CSD specification		Select CSD supplier		Implement CSD							
Pillar 8	Establish functioning NPSOCU												
Pillar 9	Establish NPC		NPC continues to meet regularly as agreed										