



National Payments System Annual Report 2009

Reserve Bank of Malawi

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1.0 INTRODUCTION

A national payments system (NPS) is normally defined in terms of the systems, mechanisms, institutions, agreements, procedures, rules and laws that come into play from the moment an end user, using a payment instrument, issues an instruction to pay another person or a business, through to the final interbank settlement of the transaction in the books of the settlement bank. The NPS therefore enables transacting parties to exchange value to conduct business efficiently.

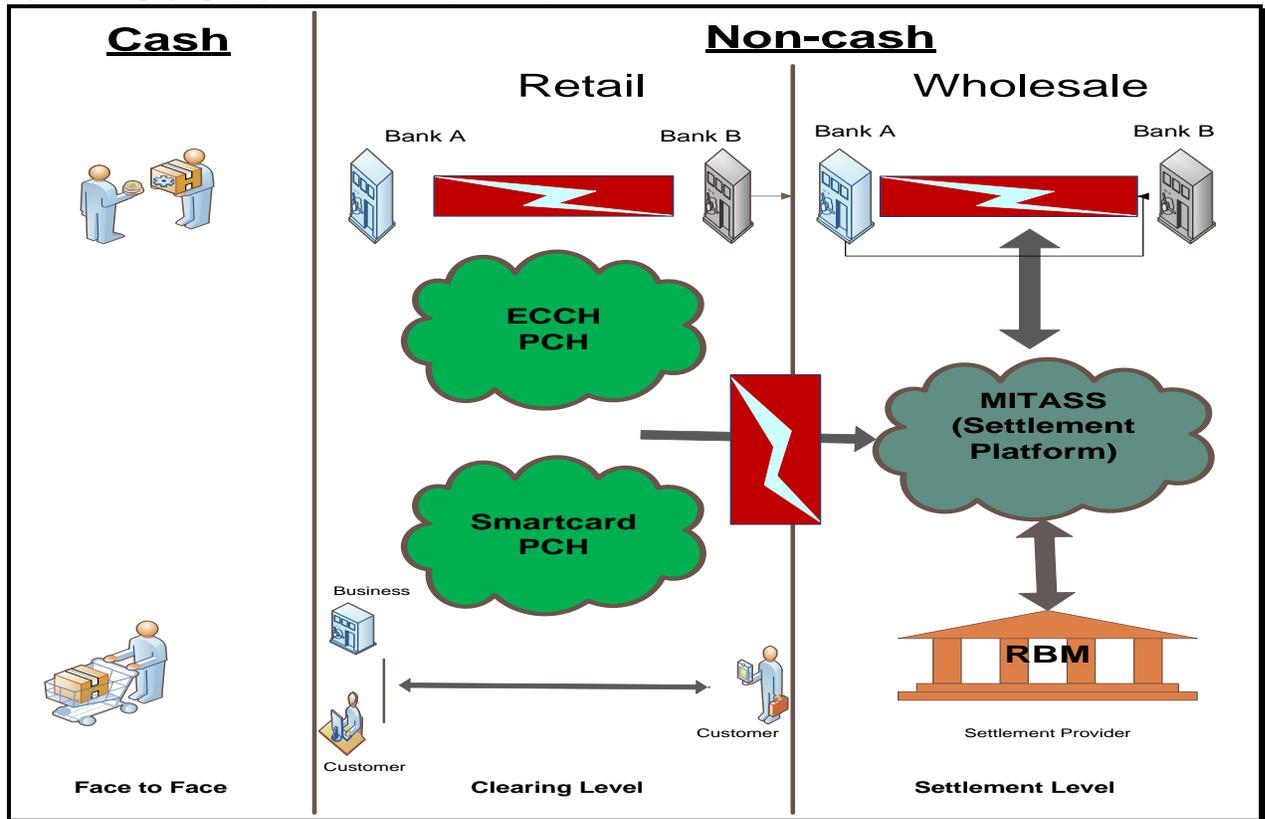
Guided by the 2009 – 2013 NPS Vision and Strategy Framework, the Reserve Bank of Malawi (RBM) in collaboration with the National Payments Council (NPC) increased efforts to ensure that Malawi's NPS is safe and efficient by among other things initiating or coordinating new reform initiatives and monitoring the existing payments facilities. Particular attention was made towards payments facilities that would provide easy access to financial services by the rural population.

This report will show increased values and volume of transactions in the designated payment systems as well as efforts that have been put in place by the NPC to sensitize the general public on electronic payments.

2.0 NATIONAL PAYMENTS SYSTEM TOPOGRAPHY IN MALAWI

Malawi has a dual payments system in which cash based transactions coexist with non-cash based payment arrangements. Non-cash based transactions are further categorised into retail and wholesale transactions based on the value and the interbank systems that support the transactions. However, due to efficiency and safety concerns, the NPS modernisation programme focuses on promoting electronic based payment products. Figure 1 below illustrates the topography of the country's payment system in 2009.

Figure 1: Topography of the National Payments System in Malawi



2.1 Non-Cash Based Payments

2.2 Large Value Transactions (MITASS)

Since an efficient payments system is vital to the country's financial stability as well as general economic development, RBM provides an inter-bank settlement service via the real-time gross settlement system (RTGS) code named MITASS. The standard payment facility used for large value transactions in MITASS is a funds settlement instruction (FSI). Besides FSIs, MITASS processes batched payment obligations arising from retail clearing systems, namely: cheque and smartcard clearing houses.

2.2.1 MITASS Throughput /Values

In 2009 the value of MITASS throughput amounted to K3, 858.7 billion, an increase of 25% from the amount recorded in the previous year. On average, MITASS transactions amounted to K15.5 billion per day. This implies that it took MITASS approximately 29 days to process an equivalent of Malawi's Gross Domestic Product (GDP) for 2009.¹

Figure 2 shows that in 2009, FSIs accounted for 78.5% of the total MITASS throughput, up from 74.9% in the previous year. The rise in FSI values is attributed to increased awareness by system participants of the benefits of processing high value and time sensitive transactions in MITASS.

2.2.2 Volume and Number of Participants

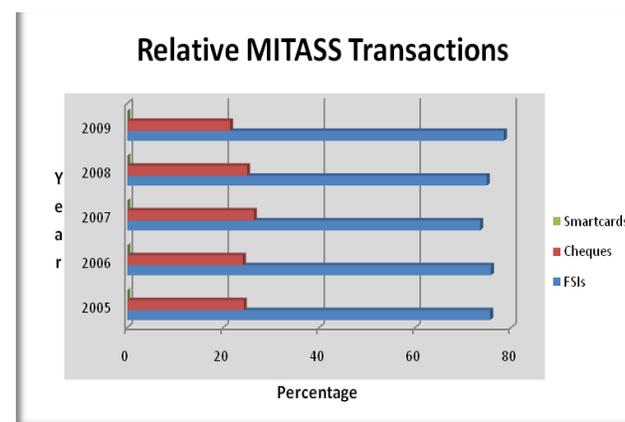
Figure 3 shows that the volume of transactions processed in MITASS in 2009 increased by 13.7% to

Table 1: Daily MITASS Throughput (K 'million)

Year	Average Daily Throughput	Annual GDP	Turnover (days)
2009	15, 496.9	442, 055.7	29
2008	12, 224.1	410, 438.3	34
2007	8, 580.7	373, 768.1	44
2006	7, 516.2	347, 816.7	46
2005	6, 148.2	326, 475.5	53

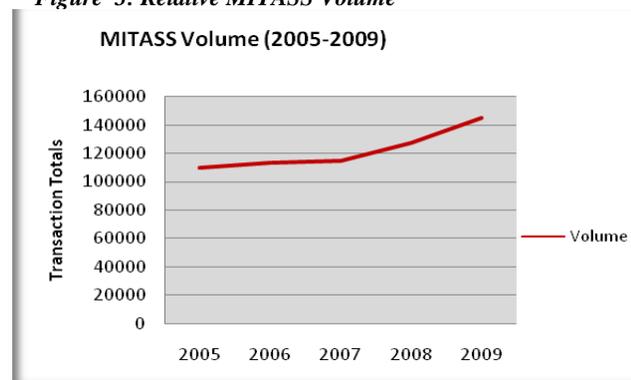
Source: RBM's Research & Statistics Dept; Banking & National Payment Systems Dept

Figure 2: Relative MITASS Transactions



Source: MITASS Statistics

Figure 3: Relative MITASS Volume



Source: MITASS Statistics

¹ Refer to Table 1 above

144, 949 in comparison to the amount recorded at the end of 2008 which stood at 127, 533. Not only did the value and volume of transactions increase but also the number of participants which rose from 13 to 14 following the entry of the International Commercial Bank into MITASS.

2.3 Retail Transactions

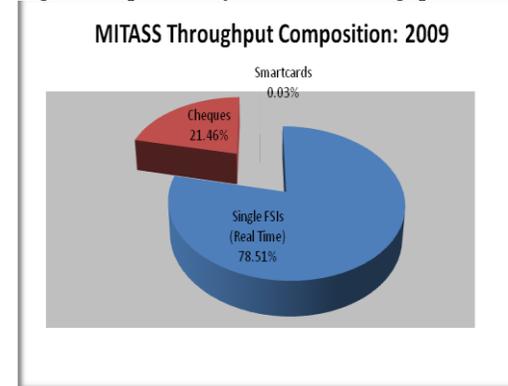
2.3.1 Cheque Payments

In Malawi, cheque payments are cleared through the Electronic Cheque Clearing House (ECCH) system while settlement takes place in MITASS. The ECCH is owned by the Bankers Association of Malawi but technical management of the same is done by MALSWITCH. Figure 4 shows that in 2009, the proportion of total cheque values settled through MITASS was 21.4% down from 25% recorded in 2008. The decline in cheque values is partly attributed to the increased awareness by the public of the risks associated with paper based payment instruments including cheques.

2.3.2 Smartcard Payments

The Smartcard payment system is owned and operated by MALSWITCH. Smartcard transactions are however settled in MITASS with a day's lag. In 2009, Smartcard transactions accounted for 0.03% of MITASS throughput down from 0.06% recorded in 2008 (see Figure 4).

Fig 4: Composition of MITASS Throughput -2009



Source: MITASS Statistics

2.4 MITASS Settlement Schedule

MITASS runs a flexible 9 x 5 settlement schedule normally commencing at 08:00 hours and closing at 17:00 hours every day of the week from Monday to Friday.

The MITASS settlement schedule is demarcated into several windows of varying time periods as well as price. As illustrated in *Fig 5*, Window 1 is the longest and runs from 08:00 hours to 13:00 hours and a 50% discount is offered on all FSIs settled in this window. The discount is aimed at encouraging participants to settle most of their transactions as early as possible in order to mitigate liquidity risk.

Window 2 runs from 13:00 hours to 15:30 hours and a standard charge is applied on all transactions processed therein.

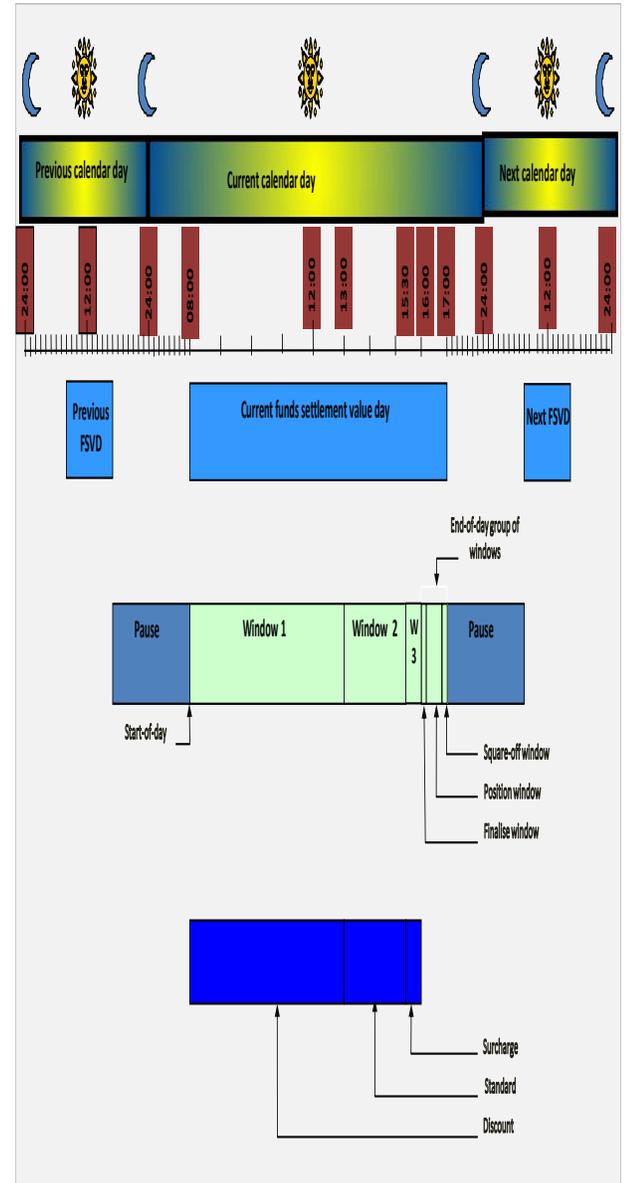
Window 3 commences at 15:30 hours up to 16:20 hours and attracts a surcharge of 50% over and above the standard charge.

During Finalise Window (i.e. 16:20 hours to 16:25 hours) the system recalculates settlement account positions of participants.

Position Window runs from 16:25 hours to 17:00 hours and is mainly meant for interbank market transactions.

Liquidity risk is defined by the BIS (2003) as the risk that a counterparty (or participant in a settlement system) will not settle an obligation for full value when due. It does not, however, imply insolvency.

Figure 5: Normal Settlement Schedule for MITASS



On a normal day, MITASS squares off at 17:00 hours.

2.5 MITASS and Operational Risks

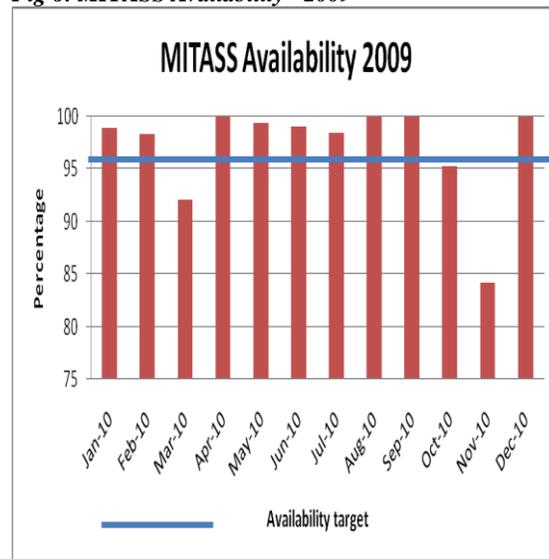
MITASS downtime (i.e. system failure or unavailability) is a key indicator of operational risk in terms of system stability and reliability. Operational risk in MITASS can result from hardware and software failures, human errors or fraud, telecommunications infrastructure failures or even external events such as power outages, pandemics, sabotage or natural disasters. Persistent or serious operational disruptions have the potential to negatively affect daily settlement operations and the ability of participants to settle payment obligations, thereby triggering financial shocks.

The main objective of RBM's operational risk management in MITASS is to ensure that the system is available, reliable and resilient enough to allow settlement to take place safely and timely.

On a normal day, MITASS is open for transactions processing up to a total of 9 hours. In 2009 MITASS was technically not available for transaction processing for a total of 65 business hours. This represented an average down-time of 5.4 hours per month. Figure 6 shows the total availability of MITASS in 2009. Overall, the system's availability in 2009 was 97.12% which exceeds the availability target of 96%.

The BIS (2003) defines operational risk in payment systems as 'the risk of direct or indirect loss resulting from inadequate or failed internal processes, people and systems or from external events

Fig 6: MITASS Availability - 2009



Source: MITASS Statistics

3.0 ELECTRONIC PAYMENTS DEVELOPMENTS

The 2009 – 2013 NPS Vision and Strategy Framework also provides for the introduction of innovative retail payment instruments or access channels. The innovative products are meant to provide easy access to financial services by the unbanked population. During the period under review, efforts were directed at promoting the establishment and subsequent management of mobile payments arrangements.

The 2009 – 2013 Vision and Strategy Framework is a blue print document detailing the roadmap for payment infrastructural development at any specified time period

Among other things, electronic payment issues encompass activities related to mobile payment services

3.1 Mobile Payment Services

In order to best guide and regulate the market on mobile payment services, RBM's Task Force on E-Banking embarked on an exercise to prepare guidelines on mobile payments. The guidelines are being prepared based on studies through literature reviews and site visits to Kenya and Tanzania conducted in September 2009. Both Kenya and Tanzania have success stories in mobile payments.

Membership of the E-Banking Task Force is drawn from Banking & National Payments System, Bank Supervision, Internal Audit, Information & Communication Technology, Legal Affairs & Bank Secretariat, and Exchange Control & Debt Management Departments.

Based on the findings from the site visits, the Task Force has, *inter alia*, recommended that interested non-bank institutions or mobile network operators (MNOs) should partner with registered commercial banks if they want to operate mobile payment services in the country.

The E-Banking Task Force has finalised drafting guidelines for the operation of mobile payment services by banks and other non-bank institutions in the country.

As of December 2009, RBM had received and vetted one application from Zain (Malawi) in partnership with

National Bank and NBS Bank to operate a mobile payment service labelled *Zap Khusa - Mmanja*.

3.2 Public Awareness Campaigns on Electronic Payment Systems

In a bid to sensitize the general public on the electronic payment developments, a Task Force under the NPC Standards & Automation sub-committee with membership from BAM, FDH Bank, MALSWITCH, National Bank of Malawi (NBM), Ecobank and Standard Bank was formed to manage an effective mechanism for delivering public awareness campaigns on electronic (including mobile) payment systems.

The terms of reference (TORs) for the Task Force on Public Awareness Campaigns of Electronic Payment Systems have been finalised and are awaiting adoption by the NPC

Nevertheless, the responsibility to market individual bank payment schemes largely remains with the institutions offering the service(s).

4.0 LEGISLATION AND OVERSIGHT OF NATIONAL PAYMENTS SYSTEM

4.1 Legislation

Currently there is no specific law governing the operations of the NPS in Malawi. The RBM's payment system oversight role is however based on its legal mandate as outlined in the RBM Act, 1989. The combination of its statutory responsibility for promoting a safe and sound payment system and the general supervisory power to collect statistical information enables RBM to perform a wide range of oversight tasks. Service level agreements signed by various system participants complement objectives of RBM's oversight activities.

The draft National Payments System Bill is expected to be tabled in parliament for possible enactment by the end of 2010

SLAs clearly outline the roles and responsibilities of each participant in terms of management and administration of MITASS.

4.2 Oversight of National Payments System

During the period under review, RBM continued to carry out its oversight role as stipulated in the Oversight Policy of January 2008. *Inter alia*, oversight is aimed at mitigating systemic risk that may arise from credit, liquidity, legal and operational anomalies or threats. In carrying out its oversight function, the RBM is guided by the BIS Core Principles for Systemically Important Payment Systems (CPSIPS).

BIS (2003) defines 'Oversight' as a central bank task, principally intended to promote the smooth functioning of payment systems and to protect the financial system from possible 'domino effects' which may occur when one or more participants incur credit or liquidity problems.

The BIS Core Principles provides minimum standards for the management of legal financial and operational risks. They also highlight minimum efficiency and governance standards.

The operational activities of payment systems were monitored continuously to, among others; ensure daily settlement of transactions and prudent liquidity usage by system participants. Disruptions in designated payment systems were logged and recorded for follow-ups by appropriate technical and operational experts.

Besides continuous off-site monitoring of payment systems, RBM conducted onsite oversight visits to MITASS and ECCH participants in March and October 2009. The visits included MALSWITCH (technical administrators of both MITASS and ECCH) and Bankers Association of Malawi (BAM) - owners of the ECCH system. The usual expectation is that the performance of MITASS and ECCH stakeholders would reflect an improved performance after each visit so as to enhance safety and reliability of the designated systems.

Discussions during onsite oversight visits mostly focus on participants' performance including implemented risk mitigation measures vis-à-vis MITASS and ECCH system.

5.0 ACTIVITIES OF THE NATIONAL PAYMENTS COUNCIL (NPC)

5.1 NPS Projects

RBM in conjunction with the NPC embarked on implementing several projects aimed at further modernising the country's national payment infrastructure during the period under review. Besides new reform initiatives, authorities continued to closely monitor already established reform programmes to ensure that intended goals were attained and maintained.

Implementation of the NPS reform projects was complimented by other institutions such as BAM and the Government of Malawi through the Accountant General's Department.

Table 2 below outlines various reform activities that were carried out either as new projects or as initiatives aimed at sustaining already established reform programmes:

The 2009-2013 NPS Vision and Strategy Framework remained the guiding blue-print for the NPS reform activities

Table 2: Selected NPC Steering Committee Activities for 2009

	Activity/Project	Aim	Status
1	Review of NPC Steering Committee Structure	Clarifying the terms of reference (TORS) of NPC structures	<ul style="list-style-type: none"> - Establishment of NPC's Contingency Committee on Financial Infrastructure has been done - Draft TORS for NPC Steering Committee has been finalised
2	ATM Interoperability Project	Interconnectivity of ATM and POS infrastructure between banks	<ul style="list-style-type: none"> - Contracting party identified (BAM) - Solution Provider identified (BCX) - Project Implementation in progress. - Project expected to go live by end 2010
3	National Cheque Archiving Project	Cost efficient storage and retrieval of cheques	<ul style="list-style-type: none"> - Participants opted for individual in-house storage arrangements

			- Common standards for in-house storage arrangements drafted by NPC Standards & Automation Sub-committee
4	Credit Reference Bureau (CRB)	- Attain financial deepening through shared customer credit information amongst formal lending institutions in the country	- CRB Bill passed into law - Project expected to go live by end 2010
5	Migration of Payments infrastructure to SWIFT Platform	- improved security, availability and hence reliability of the payments infrastructure - conform to regional trends	- Preliminary meeting with SWIFT and PERAGO officials held in November 2009
6	Public Awareness of electronic payment systems	- Increased awareness by the general public on electronic payment services in the country	- TORS for the Task Force finalised

6.0 REGIONAL AND INTERNATIONAL COOPERATION

Central Bank *Responsibility D* of the BIS CPSIPS requires that the central bank should cooperate with other local and foreign entities that deal with payment system issues. Locally, the RBM continued to cooperate with the NPC and BAM in NPS issues. Externally, RBM cooperated with SADC Payment Systems Project and the International Monetary Fund through the Norges Bank.

The BIS Responsibility D for central banks stipulates that the central bank, in promoting payment system safety and efficiency through the core principles, should cooperate with other central banks and with any other relevant domestic or foreign authorities.

6.1 Southern African Development Community

During the one-year period under review, RBM cooperated with the SADC Payment Systems Project Team by among other things, gathering and disseminating payment systems related information for the purposes of updating the SADC Green Book as well as establishment of a SADC website for payment systems related information.

Information gathered was also shared with other international institutions such as the International Monetary Fund (IMF) under the Technical Cooperation Program through the Norges Bank.

6.2 International Monetary Fund and the Bank of Norway Technical Assistance

With technical assistance from the IMF/Norges Bank, RBM's National Payment Systems Division (NPSD) collaborated with other stakeholders on financial stability issues. NPSD prepared a report for inclusion in the maiden

Financial Stability Report (FSR) produced by RBM in October 2009. Among other things, the report highlighted the role of the payment system toward financial stability. It also provided significant indicators of the stability and availability of designated payment systems in Malawi. The FSR also discusses the oversight role of RBM.

7.0 CONCLUSION

A safe and efficient national payment infrastructure is a vital prerequisite for financial stability as well as general economic development of a country. Pursuant to this, and guided by the 2009 – 2013 NPS Vision and Strategy Framework, the RBM continued to collaborate with relevant stakeholders in strengthening the country's national payment system infrastructure. Several new reform projects were undertaken besides continued efforts by the authorities to monitor already established reform programmes to ensure that Malawi's NPS is safe and efficient.