# SAARC Payments BULLETIN Volume 2 BECOND Half 2008

# SAARC Payments Initiative Impressive Achievements at a glance...

SAARC Payments Initiative (SPI) successfully completed its first year of operation with tangible achievements. The SAARC Payments Council (SPC), which is the decision making body of the SPI held all the quarterly meetings as planned, in working towards the realization of its 2015 vision, "to have an efficient, robust stable and convergent payment and settlement system (PSS) for the SAARC Region that benchmarks with international standards".

The main achievements during the year are:

- Preparation of the vision, mission and objectives
- Preparation of a comprehensive Road Map for the SPI
- Stock taking exercise to evaluate the status of PSS development in each member country
- Setting up of National Payments Councils
- Completion of the formats to collect information on worker remittances and conducting of pilot projects
- Publication of the 1st volume of the SAARC Payments Bulletin
- Launching of the SPI web site *www.saarcpay.lk* with active contribution by member countries
- Presentation on Oversight of Payment and Settlement Systems (PSS)
- Presentation on the Legal and Regulatory framework
- Presentation on governance code and best practices
- Self assessment of systemically important payment systems in each member country.

## **Road Map of PSS developments**

Based on the the Road Map of the SPI, the SPC discussed the national Road Map of PSS Developments of each member country, in depth focusing on the importance of improving large value payment systems to mitigate potential risks. PSS should focus on elements such as reducing overall risks to the financial system; ensuring efficiency and reducing settlement delays by improving retail value payment systems; understanding the importance of enhancing and tightening supervision on ATM operations, credit card and internet banking by mitigating risks in all; PSS and payments instruments; promoting competition and accessing the financial system (financial inclusion) by providing facilities in under-banked areas. The need to establish RTGS systems in all member countries by 2011 as a milestone in achieving the desired 2015 vision of the SPI was accepted by all members.

## **Stocktaking Exercise**

Having realized the importance of a stocktaking exercise to understand the current status of the PSS development in each member country before embarking upon comprehensive reforms to their National Payment and Settlement Systems, all members agreed to conduct this exercise under three broad headings, namely, (a) Policy, operational and communication

system;(b)Legal and regulatory structure; (c) Technical and institutional infrastructure. The findings of the stocktaking exercise were presented to the



SPC to form a view of the overall status of PSS development of member country.

## **Collection of worker remittances**

The need to quantify the cross border transactions, in particular the remittance flows within the SAARC region and inflows of funds to the region to assess the magnitude of the transactions that will be routed through the regional payment systems was also discussed, considering that such an exercise would ultimately require establishing a common payment gateway for the region. This exercise was piloted by assessing the worker remittance transactions of the region in order to identify the volumes as well as the transaction trends. The member countries agreed to collect the data with respect to cross boarder worker remittance transaction within the

SAARC region commencing from 01 January 2009 as a pilot project with a few banks, as per the format suggested by RBI.



## Learning and sharing

Members appreciated that the sustained efforts of SPC will achieve a common platform for integration of economies to facilitate trade payments and remittances securely and on a timely basis. The members also discussed the need to share and learn from the experiences of other regional countries with similar problems and conditions, in order to have a good understanding of the ever-increasing global complexities in Payments and Settlements Systems. In this regard three technical papers were presented.

### 1. Oversight of payments and settlements systems

The need for central banks to oversee and supervise the payment systems of the respective countries and the importance of maintaining independence in supervising and overseeing operations as most Central Banks / Monetary Authorities are the owners, operators, overseers and the supervisors of the PSS of the member countries.

### 2. Legal and regulatory framework of PSS

Legal and regulatory framework relating to the core principles of PSS development put forward by BIS was discussed. Members were enlightened on the practices that are adopted in Sri Lanka when new payment instruments are introduced to the market. The importance of setting up of a apex body such as the National Payments Council (NPC) to provide a forum for all stakeholders to participate in the PSS and learning from the experiences of others were discussed.

### 3. Governance code and best practice

The objective of this discussion was to develop a common understanding of the codes and principles available in order to carry out self-assessments of the payments systems of the respective member countries. Accordingly, all member countries were invited to do a self-assessment of PSS based on the 10 core principles of BIS of Systematically Important Payment Systems (SIPS) and the 4 responsibilities of the Central Banks in applying the core principles and to present the results of the respective self-assessment at the 5th meeting.

## Self assessment of Systemically Important Payments Systems (SIPS)

The members agreed to conduct self assessments of SIPS based on the 10 core principles put forward by BIS for PSS development and present the findings to be evaluated by another member country.

## **Mobile Banking in India**

The rapid growth in usage of mobile phone and the wider geographical coverage, banks have been exploring the feasibility of using mobile phones as an alternative channel of delivery of banking services. Reserve Bank of India has also identified mobile telecommunications as an important channel spreading the outreach of banking. Keeping this in view, the Reserve Bank of India issued 'Mobile Banking Transactions in India - Operative Guidelines for Banks' on 8th October 2008. The key aspects of the Guidelines are as under:

- Only banks which are licensed and supervised in India and have a physical presence in India will be permitted to offer mobile banking services and the services shall be restricted only to customers of banks and holders of debit / credit cards issued as per the extant Reserve Bank of India guidelines.
- Only Indian Rupee based domestic services shall be provided. Use of mobile banking services for cross border transfers is strictly prohibited.
- · The guidelines issued by Reserve Bank on "Know Your Customer

By Reserve Bank of India

(KYC)", "Anti Money Laundering (AML)" and "Combating the Financing of Terrorism (CFT)" from time to time would be applicable to mobile based banking services also.

Document based registration with mandatory physical presence of their customers, required before commencing mobile banking service for any customer.

- Banks can choose any technology to provide this facility to public. To provide adequate security it has been made mandatory that the system provide for two factor authentication.
- To ensure inter-operability between banks, and between their mobile banking service providers, it has been mandated that banks adopt message formats like ISO 8583, with suitable modification to address specific needs.
- Banks are also required to put in place appropriate risk mitigation measures like transaction limit (per transaction, daily, weekly, monthly), transaction velocity limit, fraud checks, AML checks etc. depending on the bank's own risk perception, unless otherwise mandated by the Reserve Bank.

## GOVERNORS OF THE SAARCFINANCE GROUP



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Mr Mansur-ur-Rehman Khan Deputy Governor State Bank of Pakistan



Mrs. J P Mampitiya Director, Payments & Settlements Central Bank of Sri Lanka

## Sri Lanka implements the 11th SWIFT Service Bureau in Asia

"LankaSettle system" constitutes the central hub of the national payments and settlements system of Sri Lanka where all inter-bank fund transfers get settled. The system supports the settlement of fund transfers, government securities transfers among banks and inter-bank obligations resulting from clearing of cheques, some third party transactions and payments in market transactions involving government securities. To facilitate the rapid transmission of messages between transacting parties, checking and authorizing payment messages and for the central bank to rapidly clear payments after checking the availability of sufficient funds to complete the payments & settlements, it is required all by participating institutions (PIs) to be in a closed network connected to the central hub.

PIs are required to maintain settlement accounts with the central bank to facilitate the account based fund transfers. The payment messages in the LankaSettle system are transmitted through the SWIFTNet, the internationally accepted on-line message carrier for financial transactions. In addition, banks use the SWIFTNet system to transact with their overseas correspondent banks. SWIFTNet messaging services are provided via a secure IP network (SIPN). The network availability for operations is ensured through full, advance recovery mechanisms, reliable operations and customer support services. A PI requires hardware and software to connect their internal applications to access the SWIFT message services.

Implementation of SWIFTNet connectivity is costly, particularly for small to medium sized banks with moderate to low transaction message volumes. The price subsidy enjoyed by institutions with low to medium transaction traffic was removed by the SWIFT from 2008, resulting in the individual institution's direct connectivity model to the SWIFTNet being not viable to most PIs in Sri Lanka's national payment system. However to use the facility of SWIFTNet, all PIs require the same messaging capabilities, redundancy and disaster recovery management.

The available options were evaluated and found that the best alternative was to outsource SWIFT connectivity to a Service Bureau. The service bureau model is currently promoted by the SWIFT in the context of efficiency and convenience of the SWIFTNet maintenance.

Accordingly, the National Payment Council (NPC) and Sri Lanka SWIFT user group (SLSUG) made a business decision to set up a local SWIFT Service Bureau (SSB). A separate legal entity duly incorporated under the laws of Sri Lanka and fully owned by the commercial banks, primary dealers (PDs) and the central bank, named as the Lanka Financial Services Bureau Ltd. (LFSBL) was established in June, 2007 and has been in operation from February, 2008. LFSBL is the eleventh SSB to be established and become operational in Asia. Establishing the LFSBL was jointly handled by the Central Bank of Sri Lanka, Sri Lanka Banks' Association and the SLSUG. Through the operations of the LFSBL, the commercial banks and PDs can share the infrastructure and support costs associated with running a SWIFT network; reduce the on-going costs including capital costs associated with the purchase of hardware and software and their maintenance expenditure; costs of dedicated technical personnel to manage the SWIFT network; system integration; training; transfer of technical skills; providing network and systems support; and reducing downtime. As most institutions are moving towards outsourcing their non-core activities that require very speciallised skill levels, the LFSBL would give the banks and PDs the freedom to work on their core business areas while benefiting from substantial cost savings. It is estimated that each PI will save between US\$ 12,000 - US\$ 14,000 per annum by joining the LFSBL.

As at 31st December 2008, 21 PIs including banks and PDs have connected to the LFSBL, making use of the LFSBL as a gateway to the SWIFTNet. Establishing a local SWIFT Service Bureau is a milestone achieved on the road-map of the Central Bank of Sri Lanka and the NPC for the year 2008.

## Good Bye-Shri Vittaldas Leeladhar

SPC wishes to convey its utmost gratitude to Mr Leeladhar, Deputy Governor of RBI and a senior advisor, a strong supporter of the SPC. He has contributed effectively to implement recommendations made by SPC. His professional capabilities and cordial attitude towards the membership of SPC, provided a well functioning forum for the development of the payment systems in member countries. With his dedicated support, SPC was able to establish a doable road map for the SPC at the initial meetings. SPC members will remember him for his significant contribution and good gesture in hosting meetings. The SPC and SPI secretariat wish him a very happy retirement life.



Mr V Leeladhar Deputy Governor Reserve Bank of India

## Strengthening financial sector through IT development in Bhutan

By Royal Monetary Authority of Bhutan

The Royal Monetary Authority of Bhutan (RMA) with financial assistance from the World Bank enunciated the National Payment System (NPS) Project with an aim to develop an efficient payment system for Bhutan. The NPS vision is to have in place an efficient customer centered payment system. The project is spearheaded by the RMA.

The project activities are administered by the RMA. For the purpose of involving stakeholders a committee comprised of members from financial institutions, private sector representative and telecommunication service providers has been formed.

The main objective of the project is to :

- minimise payment, clearing and settlement risks and achieve reliable and secure payment system
- develop a convenient, cost effective, universal and integrated systems to meet the needs of the economy
- improve microeconomic management capabilities of Royal Monetary Authority of Bhutan supplying timely and accurate information on stock and flow of funds;
  - to facilitate a faster the exchange and settlement of funds and securities in order to reduce floats and improve efficiency on the circulation and transmission of funds;
  - to expand flexibility in the long term and allow the adoption of, and migrate to modern modes of payment mechanisms at the same time be responsive to user needs; and
  - to establish an efficient and effective legal and institutional framework capable of regulating new payment systems.

### The way forward

Establish legal regulations; development and implementation by the stakeholders based on the agreed strategies spelled out in the strategy and visioning paper.

The long term implementation plan is basically divided into four phases:

- 1 Situational Analysis and stocktaking report-completed
- 2. Vision and strategic framework phase- to be completed
- 3. Physical design
- 4. Construction and implementation phase

### Situational Analysis and stocktaking report

The report focused on major critical factors influencing the NPS in Bhutan. It highlights the problems associated with the NPS, background of the country –socio-political culture, and the economy. It also discusses the infrastructure situation, the state of automation within and between the bank branches and their customers, the legal structure that affects the payment system, the key institutional areas, the existing payment instruments, national payments needs and the way forward.

### Visioning and Strategic framework

A workshop was conducted on 15th and 16th October among the stakeholder representative with an objective to invent a vision and a conceptual framework for future phase wise implementation of payment instruments to address the short-term and long-term needs of the country and also to agree on the strategic programs.

The execution of the NPS would be based on two track approach, to solve the current pressing needs in the shortest time possible and to adopt a strategic phased approach for long term goals and objectives.

The draft strategic document spells out the mission and payment needs of the country, the conceptual overview of the payment system, the structure, and roles and responsibilities of the key stakeholder.

### **Physical Design phase**

Provide technical specifications for systems to be developed as planned

### **Construction and Implementation phase**

Establish regulations, facilitate procurement, development and implementations by the stakeholders based on agreed strategies.

### Legal development:

As a part of the strategic development, our consultant PWC has been working with RMA and the key legal and regulatory institutions on the modernization and enhancement of legal and regulatory framework to ensure support to the NPS. Various legislation relevant to the NPS were identified in the vision and strategic framework document. The short term objectives include the introduction of Retail payment instruments namely, utility bills payment, interoperability of ATM cards, development of guidelines and the legal framework.

## Good Bye-Mr Yaseen Anwar

SPC wishes to pay tribute to Mr Yaseen Anwar, Deputy Governor of SBP, a founder member, for his strong and vital professional co-operation for the success of the SPI, from its inception. His enthusiastic leadership on steering the SPI is noted with appreciation. His diplomatic way of handling issues and the cordial relationship with all members enabled the SPI to move towards common payment and settlement system developments in the region. All members appreciate the hospitality extended by him during the SPC meeting held in Karachi. The SPC and SPI Secretariat thank him for his contribution in establishing the SPI and wish him a very happy and successful career at the SBP.



Mr Yaseen Anwar Deputy Governor State Bank of Pakistan

# Towards Modernizing National Payment Systems of Bangladesh Department of Currency Management and Payment Systems, BB

Development of payment systems is now a priority for the transformational economy of Bangladesh with major impact on performance of country's financial market. Increasing trade and commerce activities are putting colossal pressure on the demand for an efficient and cost-effective National Payment System.

A number of initiatives have been taken to improve remittance delivery channel, to enhance awareness of migrants and migrant families about using formal channels for sending remittances, to ensure productive use of remittance and to provide assistance for growth of public-private initiatives to channelize remittance through formal channel. Having all these explicit goals, the issue of building up a world-standard technology-driven modern payment & settlement system for Bangladesh, got tremendous importance and consideration.

Bangladesh Bank has taken the lead to build up Bangladesh Automated Clearing House (BACH), the most important infrastructure of modern payment & settlement system in the country. BACH has two components - first is Bangladesh Automated Cheque Processing System (BACPS) and the second is Bangladesh Electronic Funds Transfer Network (BEFTN). In BACPS, Cheque Imaging and Truncation System (CITS) has been adopted in which the cheque will remain at the first deposit bank and shall not move, but the image will move to the ACH for processing, payment and settlement. In BEFTN, it will be started with 'credit' entries and gradually roll out to 'debit' entries. BEFTN will reduce use of paper instruments and enhance efficiency in the overall payment system. Bangladesh Bank itself, Govt. Payment Offices, and 48 scheduled banks with about 7,000 branches all over the country will participate in the BACH.

During the last couple of years, a number of objectives have been

accomplished. Most of the banks have completed the cheque standardization. Govt. Payment offices, Bangladesh Bank and most of the remaining banks are in the process of standardizing their cheques. Routing numbers have already been finalized and supplied to all banks and govt. payment offices. Readiness sessions have been conducted to increase the participant banks' awareness on the importance of modern payment systems and to involve the banks actively in the payment systems modernization process.

National Payment Systems Council (NPSC), the apex advisory body consisting of representatives from the Government offices and selected commercial banks, has been formed with specific Terms of Reference and objectives for deciding on various aspects of modernization process. A National Payment Systems Strategy, "Vision 2012" has been prepared and it is under review.

Bangladesh Payment and Settlement System Regulation, 2009 is ready to go to the Board of Directors of Bangladesh Bank for approval. Drafts of other relevant operational procedures and rules are completed and are under review now.

The BACH comprising of BACPS & BEFTN, once implemented, will provide tremendous benefit for the participating banks, their customers, the Govt. payment agencies, the financial system and eventually the people of this country. It will reduce the time for payment to t+1 on national basis, reduce risks, enhance safety and security, reduce cost and increase efficiency in the economy. The initiative of Bangladesh Bank will have a significant impact on the financial sector of Bangladesh and monetary policy formulation resulting in a sound payment system consistent with its neighbors and international standards.

## Recent PSS Developments in Bangladesh

Bangladesh Payment and Settlement System Regulations have been published in Bangladesh Bank Website for public comments. The dead-line was 26th February, 2009. The regulation will be presented to the Board of Directors of Bangladesh Bank for final approval. National Payment System Council (NPSC) has been reorganized recently to play more effective role in the development of Payment Systems in Bangladesh. The revised National Payment System Strategy has been prepared to be adopted in the upcoming 5th NPSC meeting to be held in March,2009.

Installation of Bangladesh Automated Clearing House (BACH) with Automated Cheque Processing System and Electronic Fund Transfer

Network has already been started in Bangladesh Bank. The Automated Cheque Processing System is scheduled to go live in 3rd quarter of 2009 while the Electronic Fund Transfer Network is scheduled in 4th quarter of 2009.

Besides Central Bank initiatives, a few private sector initiatives are also noticeable. The notable examples are 'El-Dorado', Citi-Connect, etc. The El-Dorado is an electronic funds transfer platform floated by a consortium of private commercial banks to facilitate inward remittances. Citi-Connect is an initiative of Citibank, NA for internet based e-banking in association with Dhaka Electric Supply Authority (DESA) for payment of electric bills.

## Welcome-Mr Mansur-Ur-Rehman Khan

The SPC members warmly welcome Mr Mansur as the member from State Bank of Pakistan (SBP). He has had a distinguished and illustrious central banking career over a period of more than three decades. Before the appointment as the Deputy Governor, Mr Mansur was the Executive Director of Banking in Pakistan and he honed his talents in banking sector through the Bank Supervision Department as an examiner and a regulator. He was the Director of Banking Policy and Regulation Department before he was promoted as the Executive Director. In addition, he was the director of the World Bank Consultancy Project of SBP. SPC is certain that his thoroughness and expertise in the payments area will help the development of Payment systems in SAARC region.



Mr Mansur-Ur-Rehman Khan Deputy Governor State Bank of Pakistan

## Legal and Regulatory framework on PSS in Sri Lanka

Extract of the paper presented by Central Bank of Sri Lanka at the 4th SPC meeting in Karachi

#### Introduction

Sri Lankas' payments system has changed significantly in recent years as a culmination of reforms brought in under the Modernization Project of the Central Bank of Sri Lanka. With the structural reforms in the institutional framework and payment infrastructure, legal reforms were also introduced in order to ensure legal certainty and to reduce risks. There are number of specific legislations or regulatory requirements governing payment systems in Sri Lanka in addition to the commercial laws and consumer protection laws that apply to all business activities, regardless of the instrument or channel used.

### Legal Framework

### Monetary Law Act (MLA)

This comprehensive act includes all of the provisions necessary for the regulation of money, credit and payments in one law. In 2002, amendments were made to the MLA to make the Central Bank of Sri Lanka (CBSL) responsible for administration, supervision and regulation of monetary financial and payment system of Sri Lanka. Further, it provided wider powers for the CBSL to establish systems for transfer of funds and transfer and settlement of scripless securities. The amendment to MLA empowered the CBSL to establish finality and irrevocability of transactions; grant validity and enforceability to electronic records and transactions; and provide for the outsourcing of transactions related to payment and settlements.

#### **Bills of exchange**

This Act deals with negotiable instruments and codifies aspects related to the cheque payment instrument, the procedures for endorsement, presentment and payment of cheques.

#### Payment and Settlement Systems Act (PSSA)

PSSA is the specific payments Act in Sri Lanka. The Act provides the CBSL, a set of clearly defined legal powers to regulate and oversee the domestic PSS. The Act has made the CBSL responsible for the formulation, adoption and implementation of a payment system policy; provision of guidance and leadership to the development of the national payment system in Sri Lanka and provides for the regulation of payment, clearing and settlement systems, for the disposition of securities in the books of the CBSL; for the regulation of providers of money services; for the electronic presentment of cheques, which removed the previous requirement to deliver cheques physically to the paying bank and open the way for cheque imaging and truncation system.**Electronic Transactions Act**  The Electronic Transactions Act recognizes and facilitates the formation of contracts, the creation and exchange of data messages, electronic documents, electronic records and other communications in electronic form in Sri Lanka; and provides for the appointment of a certification authority and accreditation of certification service providers; and provides for matters connected therewith or incidental thereto. It aims to achieve functional equivalence with regard to electronic and paper transactions, and for neutrality in terms of the technology used.

The Local Treasury Bills Ordinance (LTBO) and the Registered Stock and Securities Ordinance nded (RSSO)

The LTBO and RSSO provide the necessary legal provisions for the issue of Treasury bills and Treasury bonds in scripless form, maintain securities accounts and transfer securities electronically and record ownership of government securities. Regulations have been promulgated under the LTBO and RSSO to recognize holdings of beneficial interest in scripless government securities and to recognize the trusts in respect of scripless government securities.

#### **Payment Devices Frauds Act**

The Payment Devices Frauds Act was enacted deterring illegal and hazardous practices relating to payment devices. This Act prohibits fraudulent and unauthorized productions, trafficking, possession and use of payment devices. The word 'payment device' covers all cards, plates, codes, account numbers, micro chips, optical instruments or documents whereas magnetised encoding has taken place and devices in which information is recorded by mechanical, electronic, optical or other means, whereby account numbers and other data are stored which are recognized by the issuers for the purpose of completing transactions. Under this Act, wrongdoers could be arrested without a warrant. These offences have been made extraditable to promote cooperation among different jurisdictions.

### Financial Transactions Reporting Act / Anti Money laundering Act

This facilitates the prevention, detection, investigation and prosecution of money laundering. It requires reporting of suspicious cash transactions to the CBSL and places an obligation on banks and financial institution to identify and "Know Your Customer" (KYC).

#### **Regulatory Framework**

The CBSL is statutorily responsible for the implementation of a PSS policy and has wider powers to supervise, oversee and regulate PSS. Having considered the complexity of PSS and the involvement of a large number

## Welcome-Mr Chowdhury Mohidul Haque

SPC is very pleased to have Mr Chowdhury Mohidul Haque as a member of the SPC. Mr Haque has more than 30 years of experience in currency management and payment systems. He has actively involved in payment systems modernization initiatives and establishment of Bangladesh Automated Clearing House. Currently, he is the Project Director of Remittance and Payment Partnership Project under which payment system modernization Programme is being implemented. His practical understanding and familiarization on payment systems would definitely be of value for the progress on SPC activities.



Mr Chowdhury Mohidul Haque Executive Director, Bangladesh Bank

of stakeholders, the CBSL formed the National Payment Council to obtain the assistance of representatives of all PSS stakeholders in making policy decisions. The NPC has drawn a Road Map on future development of PSS for the period 2007 - 2010 and an action plan to implement the Road Map. The implementation of the decisions taken by the NPC varies from voluntary adoption to enforcement by a direction/circular issued by the CBSL. This industry-wide institutional framework has helped the CBSL to promote innovation and competition in PSS, while promoting the adoption of international standards and best practices into the PSS in Sri Lanka.

## Initiatives Taken by SBP to Enhance Security on Plastic Money in Pakistan

E-Banking in Pakistan has witnessed a substantive growth over the last 5 years. Its popularity among the masses was, however, boosted by the introduction of Plastic Money, which provided customers the facility of accessing their accounts 24/7/365. Here the introduction of Master and VISA Cards also played a key role in the growth of plastic money. The medium of acceptance for these cards is usually either through ATM machines and/or the Point of Sale (POS) terminals deployed at various merchant locations across the country. As of December 31, 2008, more than 3,500 ATMs and 49,000 POS terminals have been working seamlessly across Pakistan catering 7.8 million cards of which 20 % are credit cards while the rest or 80% are debit cards that include ATM only cards.

Growth in plastic money also opened new avenues for fraudulent transactions and in order to streamline and support the plastic money in Pakistan and simultaneously address the public grievances effectively, Payment Systems Department, State Bank of Pakistan (SBP) while adopting a proactive approach has taken a number of measures in accordance with the international security standards like PCIDSS (Payment Card Industry Data Security Standards) and EMV (Europay, MasterCard, Visa) to increase customer's confidence in plastic money and to enhance security in card transactions.

The details of measures taken in this regard are as under.

#### **Transforming POS Machines for PAN Masking:**

Protecting cardholder's data is a requirement of Payment Card Industry Data Security Standards (PCI DSS), an organization founded by American Express, Discover Financial Services, JCB International, MasterCard international, and Visa. For protection of cardholder's data PCI DSS requires financial institutes to mask Primary Account Number (PAN) for card transactions.

In this reference, Payment Systems Department initiated the project of transforming POS machines for PAN masking with an objective to prevent the misuse of cardholder personal information and to follow the international best practices. Previously, transaction slips generated through POS machines contained Cardholders' personal information such as his/her name, complete card number, date of expiry etc which could easily be used for fraudulent purposes.

The matter was discussed with all the stakeholders and by June 2008 all 49,000 POS terminals installed across the country were reconfigured for PAN masking.

### **EMV compliant POS:**

EMV cards are considered as more secure against card fraud than cards that rely only on data encoded in a magnetic stripe on the back of the card, By - Payment Systems Department (Development & Policy Division)

since EMV cards are based on chip card technology. In order to issue EMV compliant cards in Pakistan, Payment Systems Department held discussions with stakeholders wherein, it was agreed that by end 2010 all banks will issue EMV compliant cards. However, to ensure the availability of proper infrastructure for supporting EMV cards in Pakistan, all POS network acquiring banks were advised to convert POS machines to EMV compliant and the same was accomplished in December 2008.

#### **Signature Verification on Transaction Receipts**

In the absence of PIN as a security feature for plastic card transactions on POS terminals the tool available to ensure genuineness of cardholder is signature verification. Herein, banks were advised to ensure that while executing the transactions on POS machines merchants must verify the signature for each transaction and in case signature doesn't match, transaction should be refused. In this reference, it was made compulsory for all the banks to issue necessary instructions and/or conduct awareness and training sessions for their merchants on signature verification.

#### **Development of a Database on Fraudulent Entities**

The role of merchant is very critical in card transactions as it has been observed that in some cases merchants were also found involved in fraudulent transactions. As per the current practice, if found guilty, POS acquiring bank cancels its agreement with the fraudulent merchant, but the merchants after being blacklisted by one bank can switch to other bank and start fraudulent activities on the POS of other bank, since there is no centralized database of fraudulent merchants to blacklist them. The matter was discussed with Pakistan Banks' Association (PBA) and it was agreed to develop centralized database of fraudulent entities on PBA platform. In this reference, development of database has been started and tentative date for its soft launch is March 15, 2009.

In the first Phase the information of fraudulent merchants would be entered into the database and afterwards its scope would be widened to other fraudulent entities such as courier companies, bank employees / sales & recovery staff, cardholders etc.

#### SMS Alerts on Every Transaction:

In order to further minimize the chances of misuse of Credit/Debit cards in Pakistan, all the card issuing banks were advised by SBP to send SMS to their Credit/ Debit cardholders for every transaction. The subject exercise will ensure on-time monitoring of card transactions, reduce the incidents of fraudulent transaction and promote customer confidence in plastic money. Most of the banks have started this service and others have been advised to offer the service by April 2009.

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