

PAYMENT SYSTEMS IN INDIA

VISION DOCUMENT

RESERVE BANK OF INDIA

JANUARY 2005

PAYMENT SYSTEMS VISION

Mission Statement

<<< The establishment of safe, secure, sound and efficient payment and settlement systems for the country >>>

Payment Systems – Vision 2005-08

Part I

1. Introduction

The primary goal of any national payment system is to enable the circulation of money in its economy. It is recognised world wide that an efficient and secure payment system is an enabler of economic activity. It provides the conduit essential for effecting payments and the execution of monetary policy. Payment systems have encountered many challenges and are constantly adapting to the rapidly changing payments landscape. More recently, the proliferation of electronic payment mechanisms, the increase in the number of players in the financial arena and the payment crises in quite a few countries and regions in the 1990s have focused attention on public policy issues related to the organization and operation of payment systems. Three main areas of public policy have guided payments system development and reform: protecting the rights of users of payment systems, enhancing efficiency and competition, and ensuring a safe, secure and sound payments system.

Electronic commerce and finance are growing rapidly. New payments mechanisms designed to aid electronic commerce have become routine. Predictions abound about the capabilities of the information and communication technology to bring forth important tools for conducting electronic commerce and payments. We are in the midst of a wave of innovation and change.

In a dynamic economy, markets need to play a key role in guiding the development of infrastructure, including mechanisms like payments systems. This means that innovation and competition will be central to the future development of the payments system - as they are in other areas of the economy. Strategic planning and investments by market participants will be shaped by views about the future. Public policy should assist them in shaping their views by pronouncing its vision and intentions clearly and well in advance so that the market participants can face the challenges and take advantage of opportunities. This Vision helps in charting out a course to purposeful and orderly change.

For such policy pronouncements, a country can opt for a strategic approach, where the state of the payment system is established, its weaknesses and strengths determined and a way forward charted, giving due regard to the country's environment and the strategic direction of the payment technologies and practices. This approach enables one to have a holistic vision of the entire payment system, and leads to the development of a Strategic and Implementation Plan that is well structured, appropriately phased, properly sequenced and convergent in perspective.

India adopted this approach in the year 2001 when it came out with its "Payment Systems – Vision Document". It detailed, in the Document, the strategies and implementation plan for the payment system arena for 2001-03. As we completed this period, it is time for taking stock of the plan, review its implementation, list and assess achievements and shortfall, learn lessons and re-plan for the next period. This document, "Payment Systems – Vision 2008" is the result of that exercise.

2. Components of the Payment Systems Mission Statement:

The four broad tenets of the mission relate to the Safety, Security, Soundness and Efficiency. Called the 'Triple S + E' principle in short, each of the principles, which have a synergistic inter-relationship, would specifically address the following:

- ❖ Safety will relate to addressing risk, so as to make the systems risk free or with minimal risk
- ❖ Security will address the issues relating to confidence, with specific reference to the users of these systems
- ❖ Soundness will be aimed at ensuring that the systems are built on strong edifices and that they stand the test of time
- ❖ Efficiency will represent the measures aimed at efficiencies in terms of costs so as to provide optimal and cost effective solutions.

3. Vision 2001-03: Accomplishments

The Reserve Bank had earlier in December 2001 published its "Payment Systems – Vision Document" detailing its vision, goals, objectives and proposed measures relating to the payments systems in India for a three years period. An evaluation of the results of the steps taken as per the broad directions contained in the Vision statement for the period 2001-04 reveal that most of the goal sets outlined have been met while a few are at various stages of implementation.

Under the approach to computerization and networking, with the definitive role of technology in facilitating large scale developments in payment and settlement systems, the main requirements of INFINET becoming the secure, dedicated communication backbone for the banking and financial sector, a generic architecture model for connectivity, standardization of hardware, operating systems, systems software, application software and messaging middleware, prescribing a Common Minimum Requirement Level for hardware and networking requirements for payment gateways, secured connectivity between internet and INFINET, link between SWIFT and INFINET have all been achieved; facilities for e-mail, and secured file transfer are now available on INFINET; applications for ATM transactions, intra-bank transactions like remittances and foreign exchange transactions do use INFINET.

As regards designing, developing and implementation of critical payment system projects, Real Time Gross Settlement(RTGS) System, Negotiated Dealing System/Securities Settlement System(PDO/NDS/SSS), Structured Financial Messaging Solution(SFMS) and Centralised Funds Management System(CFMS) have been implemented; scope and coverage of ECS (both Credit and Debit versions) have been increased; centralised ECS has been implemented; scope and coverage of EFT has been enhanced through the Special EFT and the proposed National EFT; many banks have integrated EFT with their own product offerings; a few banks have initiated EDI; smart cards are being used; pilot project of multi-application smart cards has been initiated as a prelude to setting standards; ATM clusters have come on the scene; and the National Financial Switch has been established for inter-connecting ATMs. New systems introduced included the Special Electronic Funds Transfer System (SEFT), Cheque Truncation Pilot Project and the pilot Multi Application Smart Card Project. Facilitating initiatives included extension of MICR based clearing to cover 39 centres in all and the removal of the per transaction limit for ECS and EFT transactions, apart from making these transactions PKI based for better security. Risk mitigation got a shot in the arm in the form of the establishment of the CCIL for Settlement of Government securities trading and for foreign exchange transaction settlement on a fully guaranteed basis.

For the customer too, there have been definitive benefits. Internet based banking which was one of the goals to be achieved has been implemented in 26 banks. The need for core banking solutions at banks which is at the base of many centralised initiatives such as Internet and mobile banking is also being implemented by banks and as many as banks have implemented core banking solutions while are at various stages of implementation. The delivery channels for customers have also improved with ATMs taking over a large number of cash related functions. Recognising the potential of this delivery channel, the Reserve Bank not only set the direction for banks to share ATMs but also helped the settlement process in the form of an ATM switch which has been set up and operated by the IDRBT, Hyderabad. Thus, card holders of any bank among the group can use their cards at the ATMs of any bank in the group.

With regard to upgradation of processing environment, banks are undertaking BPR as a part of implementing core banking, security standards have been prescribed, PKI based Digital Signatures are used for security and legal protection, On the legal front, a Payment and Settlement Systems Bill has been drafted forwarded to government for adoption; at the

implementation level, the setting up of a Board for Payment and Settlement Systems has been approved by the government; the Negotiable Instruments Act has been amended to enable cheque truncation and to define e-cheque.

3. Payment Systems – Current Status

There are diverse payment systems functioning in the country, ranging from the paper based systems where the instruments are physically exchanged and settlements worked out manually to the most sophisticated electronic fund transfer system which are fully secured and settle transactions on a gross, real time basis. They cater to both low value retail payments and large value payments relating to the settlement of inter- bank money market, government securities and forex transactions.

The retail payment systems in the country comprise of both paper based as well as electronic based systems. These systems typically handle transactions which are low in value, but very large in number, relating to individuals firms and corporates. These transactions relate mainly to settlement of obligations arising from purchase of goods and services. In India there are about 1050 cheques clearing houses. These clearing houses clear and settle transactions relating to various types of paper based instruments like cheques, drafts, payment orders, interest/ dividend warrants etc. In 39 of these clearing houses, cheque processing centres (CPCs) using MICR technology have been set up. In the coming months in 5 more clearing houses MICR cheque processing systems are scheduled to be set up. The clearing houses at 16 places including the 4 metros are managed by the Reserve Bank which also functions as the settlement banker at these places. In other places the clearing houses are managed by the State Bank of India and certain other public sector banks and the settlement bank functions are also performed by the respective banks. The clearing houses are voluntary bodies set up by the participating banks and post offices and they function in an autonomous manner. The Reserve Bank has issued the Uniform Regulations and Rules for Bankers' Clearing Houses (URRBCH) which have been adopted by all the clearing houses. These regulations and rules relate to the criteria for membership/sub-membership, withdrawal/removal/suspension from membership and the procedures for conducting of clearing as well as settlement of claims between members.

There are various types of electronic clearing systems functioning in the retail payments area in the country. Electronic Clearing System (ECS), both for Credit and Debit operations, functions from 45 places (15 managed by Reserve Bank and the rest by the State Bank of India). The ECS is the Indian version of the Automated Clearing Houses (ACH) for catering to bulk payments. The Electronic Funds Transfer (EFT) System is operated by the Reserve Bank at 15 places. This is typically for individual/single payments. These systems are governed by their own respective rules. A variant of the EFT, called the Special Electronic Funds Transfer (SEFT) System is also operated by the Reserve Bank to provide nation-wide coverage for EFT. All these electronic fund transfer systems settle on deferred net settlement basis.

There are a few large value payment systems functioning in the country. They are the Inter-Bank Cheques Clearing Systems(the Inter-bank Clearing), the High Value Cheques Clearing System(the High Value Clearing), the Government Securities Clearing System(the G-Sec Clearing) , the Foreign Exchange Clearing System(the Forex Clearing) and the Real Time Gross Settlement(RTGS) System. All these systems except the High Value Clearings are electronic based systems. These mostly relate to inter-bank / inter-financial institutional transactions except the High Value Clearing where high value customer cheques are cleared. The Inter-bank clearing functions in 7 places and the High Value Clearing in 13 places. Both are managed by the Reserve Bank or the State Bank of India. The G-Sec Clearing and the Forex Clearing are managed by the Clearing Corporation of India Limited (CCIL). The RTGS System is operated by the Reserve Bank. All these are deemed to be Systemically Important Payment Systems (SIPS) and therefore the Reserve Bank has, in line with international trends, moved them (except the Inter-bank Clearings at other than Mumbai and the High Value Clearings) to either secure and guaranteed systems or the real time gross settlement system.

4. Payment Systems Vision 2005-08: Perspectives

The approach to be followed for payment and settlement systems is best captured in the Mission Statement which encompasses Safety, Security, Soundness and Efficiency (the triple S and E) as its vital components.

Safety in payment and settlement systems relate to the avoidance of risks in these systems. Payment Systems, by their nature are risk prone and the need for addressing these risks assumes significance. Sound designs, rules, and risk-management practices promote the safety of payments for users and their financial institutions Effective entry and exit criteria, regular monitoring, guaranteed settlements, introduction of central counter parties, risk mitigation measures and effective loss sharing procedures in the unlikely event of any eventuality are the standard ways to ensure safety of payment systems.

Security pertains to the confidence among the users of the payment and settlement systems. Public confidence in the payments system is a closely related concern. Confidence in the integrity of our basic paper payment instruments and payments systems was built up over a very long period of time. New systems based on technology are increasingly being implemented. Prudent users will require new systems to earn confidence with strong evidence that these systems will meet their needs in both normal and exceptional circumstances. The process of building confidence can take years, and payment service providers realize that confidence is an asset to be guarded vigorously.

Soundness, which indicates the well rooted foundation for the payment and settlement systems is another pillar in the payment systems edifice. All the systems are envisaged to be on sound footing, with adequate legal backing, firm operational procedures, transparency norms and with well laid out error handling processes.

Efficiency is the key word for all the new initiatives and this would be achieved by leveraging the benefits of technology so as to result in cost effective solutions, and optimal turn around timings for the systems.

Thus the payment system policy goals will continue to be “to foster a safe, secure, sound and efficient payment systems for the country”. Keeping this in view, for the period 2005-08, the focus will be on the following major themes:

- i. A new organizational structure for retail payment systems
- ii. Sound legal base
- iii. Continuation of risk mitigation efforts
- iv. Efficiency enhancements
- v. Rural Sector facilitation
- vi. Customer facilitation and protection and
- vii. Regional co-operation and co-ordination.

Details of the approach and the measures proposed to be initiated to achieve the above goals are given in Part II of this document.

5. Conclusion

Substantial progress in bringing forth reforms in the payment and settlements systems has been achieved under “Payment Systems – Vision 2001-03”. Encouraged by this, “Payment Systems – Vision 2005-08” attempts to carry forward the efforts to complete the agenda of establishing a safe, secure, sound and efficient payment system for India, matching international standards and best practices.

Part II

Strategic Approach

1. New Organisational Structure for Retail Payment Systems

Today, Payment and Settlement system of the country includes retail and large value payments in the form of variety of paper based and electronic payment instruments. As detailed in the earlier section, there are a large number of institutions operating with different ownership pattern having varied types of functions including processing, clearing, management and settlement.

Due to multiplicity of operators, local practices which vary from place to place, determine the conduct of clearing and settlement and important aspects like safety, efficiency and better customer service are often compromised at the altar of operational convenience. There is lack of coordination among the organisations which leads to inconsistency in the operations. This results into the wastage of available resources and also limits the scope of implementing innovations in the systems.

The system in other countries differs from Indian system in the sense that the ownership of the retail payment systems in other countries rests with a separate legal entity, whereas in India they are voluntary associations. The single entity conducts clearing for the entire country in the countries studied, where as in India there is no country-wide system. Settlement is done in central bank money, whereas in India only in 15 places it is done in central bank money.

In accordance with the international scenario, the Indian Retail Clearing function, in its entirety, could be entrusted to a separate legal entity and Reserve Bank can remain the settlement institution for all the clearing systems, besides being the regulator and supervisor of the payment systems.

The advantage of setting up of this single entity for running all clearing activities will be that this entity will have uniformity in the structure, operations and procedures. The local practices and bank specific practices / procedures which impede safety, security and efficiency in the functioning of the clearing operations would be effectively neutralized. This single entity would deploy professionally competent and suitably trained personnel to manage and run clearing operations. The operational drawbacks can be considerably reduced by setting up an all-India entity. It will create enabling environment for bringing out innovative products. It will facilitate the option for conducting all clearing at national level, leading to better information dissemination and better customer education on various payment services and systems. The system will also have an effective Customer Redressal mechanism. Moreover, It will help Reserve Bank to focus more on its regulatory and oversight role.

Keeping the above in view, it is proposed to initiate the following steps towards a new organizational structure for retail payment systems during 2005-08:

1. Setting up of a single organisation at national level which will operate all retail payment systems of the country.
2. Reserve Bank to focus on regulation and supervision of payment systems and be freed from operational functions
3. The existing large value system such as the Negotiated Dealing System (NDS) will be hive off from being operated by the Reserve Bank.
4. All settlements to be in central bank money
5. Reserve Bank to establish a National Settlement system

2. Legal framework for payment and settlement systems

The Negotiable Instruments Act, 1881 (N. I. Act) continues to be the predominant legal base for all cheque-based (instrument-based) payment systems in India. It has been amended time and again to legalise new requirements and policies. The latest amendments to the definition of cheque by inclusion of the “electronic image of a truncated cheque” and a “cheque in the electronic form” have opened up avenues for introducing new methods of processing paper-based payment instruments. Simultaneous amendment to the Information Technology Act, 2000, making it applicable to N.I. Act, has brought about legal status to usage of electronics-based payment systems in Indian banking.

However, the electronic payment systems like ECS, EFT, NDS, RTGS, etc. work on the basis of agreements made specifically for each one of them which are of contractual in nature between the participant and the manager of the

systems. The process of netting of payables and receivables is adopted by all payment systems except RTGS where the settlement is on gross basis. Existing legal structure does not explicitly cover 'netting' and 'finality of settlement'. Some countries have legislated 'netting' and 'finality of settlement' and also built regulatory structures within the central banks or through established quasi-judicial institutions to oversee payment systems.

The growth and proliferation of existing and new payment systems has necessitated central banks to move away from operating retail payment systems. Management and operations of payment systems are being taken over by consortium of banks, trusted central counter parties, authorised private service providers, etc. Lack of an apposite provision in law for regulation and supervision of these entities reduces the scope of having a monitoring mechanism leading to apprehension of participants and end-users on the safety and security of the payment systems.

The 'Payment and Settlement Systems Bill' has been propounded with the view to receive legal definition of 'netting' and 'settlement finality' and also to create a regulatory framework for the payment and settlement systems.

The shift towards electronic modes of payments has created large gaps in the legal structure and consequently there is lack of clarity about the products designed on information technology. This issue becomes more pronounced in the 'instruction' based payments, i.e. the now prominent 'credit transfer' systems. The United Nations has published an UNCITRAL Model Law on International Credit Transfers (1994) to cover payment instructions which are originated by the payer through a banking system to pay into a beneficiary's bank account. Such a law will have to be put in place in India too as trends indicate a bias towards the more risk-free credit transfer mode of payments.

Keeping in view the possibility of dishonour of instructions, on the due date, legality of action required to be taken against the defaulters has to be addressed. Such instructions of payment are in the nature of non-negotiable standing instructions. These types of instructions, not being instruments, are not covered under the existing laws. Therefore, there is a need to examine this issue to provide desirable level of robustness.

Keeping the above in view, it is proposed to initiate the following steps towards building a sound legal base for payment systems during 2005-08:

Action Points:

1. The Payment and Settlement Systems Bill to be enacted;
2. Regulations for authorised payment and settlement systems to be framed
3. EFT regulations to be notified
4. Initiating the process of legislation for credit transfer transactions;
5. Examine and draft provisions for bringing non-negotiable, non-instrument based instruction type payment products such as, ECS (Debit).

3. Risk Mitigation in Payment Systems

Safe, secure and efficient payment systems are critical to the effective functioning of the financial systems. Payment Systems face various risks like credit, liquidity, legal, operational and settlement risks. However, systemic risks by far outweigh other types of risks. In case of systemically important payment systems, failure of one or more participants could lead to a domino effect, leading to settlement failures in other payment systems as well and could result in instability in the entire financial system. Over the past few years an international consensus has developed on the need to strengthen the payment systems by promoting and adopting internationally accepted standards and practices. The Committee on Payment and Settlement Systems of the G-10 countries (CPSS) set up under the auspices of the Bank for International Settlements (BIS) has formulated such best practices in the form of Core Principles for Systemically Important Payment Systems (SIPS). The CPSS has also specified the responsibilities of the central banks with regard to the payment systems in their respective countries.

India has, by March 2004, made all the systemically important payment systems(SIPS) compliant with the Core Principles, except the Inter-bank Clearings at places other than Mumbai and the High Value Clearing Systems. There is a need to complete this process in the near future.

Keeping the above in view, it is proposed to initiate the following steps towards risk mitigation in payment systems during 2005-08:

Action Points:

To address Systemic Risk:

1. Interbank transactions at all places to be migrated to RTGS System
2. High Value Clearing Systems to be made secured netting systems by introduction of guarantee funds

To address Liquidity Risks:

1. Implementation of National Settlement System for clearing systems

To address Operational and Legal Risks:

1. For enhanced security of messages, PKI based digital signatures to be introduced.
2. Credit transfers to be encouraged and in an electronic mode
3. Provide for high availability of all systems

4. Efficiency Enhancements

Cheques continue to be the dominant retail payment instruments. To enhance efficiency in this system, India has embarked on Cheque Truncation to quicken the realization of proceeds of cheques. During the currency of the new vision document, cheque truncation will be operationalised in the four metros and some of the other major cities like Bangalore and Hyderabad where high bandwidth availability is there. On a long term basis a national centre for clearing to route intercity cheques through this single hub to offer customer credits on a T+1 or even T+0 basis.

India has introduced MICR processing in 39 places and another 9 are in the offing. With this about ---- % of the country's volume of cheques will stand MICRised. In order to bring in uniform standard for cheques and to facilitate cheque truncation nation-wide, the remaining small number of non-MICR cheques can be completely replaced with MICR cheques.

The rationalisation of the Clearing Houses is another key activity that should occupy the attention. This is in tune with the new organisational structure suggested earlier. Consolidation, Merger & Amalgamation of the Clearing Houses and establishment of new Clearing Houses in the geographies where they are required under the overall single entity shall be the desired objective. Another significant area of enhanced efficiency and customer service is the increase in the geographical jurisdictions of the Clearing Houses so that more and more number of bank branches and customer are catered to.

The High Value Clearing districts which are currently limited to a very small portion of the city shall be expanded so that fast track facilities available under the window percolate to a larger customer base.

The Order Matching System for Government Securities Market transactions being put in place will take the processes of fairer and transparent trading further by ensuring better Price discovery for the customers.

Integration of the message transfer facilities within the country (Structured Financial Messaging System) with that of Society for Worldwide Interbank Financial Telecommunication (SWIFT) for 'Straight Through Processing' by inter-connectivity between SWIFT and INFINET to allow for seamless integration with the banking applications with SWIFT will receive a high priority in this phase.

The regulatory structure shall encourage the use of alternate and innovative modes of payment tools including the smart cards and other cards with integrated memory capabilities - all to be based on uniform standards and inter-operability.

CLS aims at achieving payment versus payment in foreign exchange transactions eliminating, in the process, Herstatt Risk in such transactions. Indian rupee, so far, is not a currency eligible for CLS settlement. However, for the cross currency trades undertaken by authorised Indian entities, CLS can be very effectively used.

Requisite environment and infrastructure for end-to-end straight through processing from the customers' to banks end should be created. Initiatives such as allowing customers to upload/download their transactions files shall be pursued

forward by enabling PKI security features on them. Standardisation of account numbers, standard message format framework for the banking applications are some of the other initiatives to ensure that STP becomes an industry practice.

Keeping the above in view, it is proposed to initiate the following steps towards efficiency enhancements in payment systems during 2005-08:

Action Points:

1. Implementing Image Based Cheque Truncation with a long term objective to evolve it into a National Truncation System
2. Rationalisation of Clearing Operations by setting up new Clearing Houses, expanding the geographical jurisdiction of the Clearing Houses, merging and amalgamating Clearing Houses etc.
3. MICRisation of every cheque – every cheque issued to follow MICR standards
4. All Payment and Settlement Services to be available on a national level- National ECS, National EFT, National CTS,
5. Encouragement, facilitation and removal of impediments for the introduction of innovative products for banks, customers and government- e.g. e-purse, integration of SWIFT and SFMS, straight through processing capabilities from the customer end itself
6. Enhancing the efficiency of Systemically Important Payment – Order Matching for Government Securities Market, Linking Forex Settlement with CLS

5. Rural Sector Facilitation

Recognising the importance ascribed towards ensuring that the benefits of improvements in payment and settlement systems should be fully available for the rural population of the country also, initiatives are also planned for products and services for this sector of the economy. While the general thrust of all the overall action points would encompass the requirements of the rural populace, special focus would also be ascribed in the form of specialised, tailor made offerings.

The efforts aimed at addressing this area would take into account the characteristics of the rural sector of the Indian economy and the attendant environmental factors such as wide spread geographical coverage, infrastructural disparities and deficiencies. The differing expectations of the rural folk of the country will also form part of the foundation on which the initiatives would be built.

Keeping the above in view, it is proposed to initiate the following steps towards customer facilitation and protection during 2005-08:

Action Points:

1. Improving the availability and coverage of the new delivery channels. This would be in the form of extension of facilities such as the Automated Teller Machines for cash payments.
2. Facilitating the large scale deployment and use of multi application smart cards which would also be used for storage and transfer of small value payments in an electronic mode. This would be achieved by means of introduction of easy to use, small and cost effective hand held devices for transfer of value between cards in a secure manner.
3. Increasing the reach of electronic modes of funds transfer at rural areas by providing variations of the various electronic modes of funds transfer, but with a rural bias.
4. Increasing the reach of payment services by means of tie up and collaboration with other large coverage entities such as the Post Offices.
5. Providing support for new modes of traditional facilities such as ATM based Kisan cards.

6. Customer Facilitation and Protection

The Indian payment systems have evolved over a period. To facilitate customer convenience has been the underlying goal. For deficiency in service, under the existing framework of Indian Law, the bank customers have the following remedies: To approach civil courts by way suit for damages, injunction or specific performance; To approach Consumer Forums established under the Consumer Protection Act; To avail Customer Grievance Redressal Machinery provided within the banking system(such as the Banking Ombudsman and Customer Grievance Cells in banks etc.). However, all these mechanisms are found to be time consuming. Therefore, for quick and effective resolution, Customer Facilitation Cells will be created within each payment system.

Clarity and certainty about the terms on which payments are effected and about the liabilities and responsibilities of the payment service provider go a long way in furthering customer confidence and protection of their rights. Therefore, banks will be encouraged to publicly and prominently disclose their payment service policies and the terms and conditions of effecting payments through them, the rate and fees, compensation for deficiency in service, the compensation procedures etc.

As innovative and new type of payment services and instruments are a reality, there is a corresponding need for making the customers aware of the benefits, and the possible risks in using them. Customer education and awareness campaign should be periodically and regularly conducted through the media by the banks, bankers' association and the Reserve Bank.

Keeping the above in view, it is proposed to initiate the following steps towards customer facilitation and protection during 2005-08:

Action Points:

1. Each Payment System to have Customer Facilitation Centre for providing assistance to customers to get their problems resolved
2. Each payment service provider to disclose publicly its standards, terms and conditions under which the payment will be effected and also compensation policy for deficiency in services
3. The Reserve Bank, the Indian Banks Association and the banks to undertake Customer Education efforts with regard to features and risks and liabilities of various payment services including electronic payment products, new products and services.

6. Regional Cooperation and Coordination

A robust payment system not only helps domestic economic activities but also the country's regional and international trade and commerce through cross border payment arrangements. While India has trade relationship throughout the world, recent focus has been on the Asian region. India is a member of the Asian Clearing Union(ACU) and South Asian Regional Cooperation(SARC). As economic co-operation with these regional organizations grows, the need for regionally integrated, inter-operable and harmonised payment systems to support efficient and safe cross-border payments becomes a strategic imperative. Such cooperation stimulates trade and spurs economic growth within the region, facilitates expeditious transfer of value, makes the regional payment systems sound, minimises the chances of a country becoming a safe haven for fraudsters and provides opportunities for exchange of experience and technical knowledge.

The nature, scope and depth of cooperation and coordination depends on a number of factors, including the state of the physical infrastructure, socio-economic indicators, state of the national payment systems and the level and sophistication of fraud. In general, the areas of cooperation and coordination can cover standards for various payment instruments like cheques, credit transfers, direct debits, cards and e-cash, development and use of common payment system infrastructures and utilities and harmonization of legal and regulatory framework and risk management measures.

It is recognized that we may face considerable challenges like differences in the levels of economic development and technical capacity, the dilemma of domestic vs. regional interests, differences on the role of Payment Systems, funding the

