

PAYMENT SYSTEMS IN INDIA

VISION 2005-08



RESERVE BANK OF INDIA

MAY 2005

PAYMENT SYSTEMS VISION

Mission Statement

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

Payment Systems in India – 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 transmission 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 organisation 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 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 in India – Vision 2005-08" 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-year 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 computerisation 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 namely, a generic architecture model for connectivity, standardisation 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. The setting up of Credit Information Bureau of India Ltd. (CIBIL) facilitates the banking industry to carry out a credit check on credit card holders and thus, reduces the incidence of frauds and default by individuals.

As regards the design, development and implementation of critical payment system projects, the following are the major accomplishments:

- Extension of MICR based clearing to cover 40 major commercial centres facilitating thereby faster clearing of cheques at more centres
- Operationalisation of Real Time Gross Settlement (RTGS) System (RTGS service available at more than 4800 branches at 398 centres as at the end of April 2005)
- Risk mitigation in wholesale payment systems by way of creating enabling conditions for establishment of Clearing Corporation of India Limited (CCIL) as a central counter party and settlement guarantee organization for settlement of Government Securities trading amongst the NDS members and inter-bank Foreign Exchange transactions.
- Introduction of Negotiated Dealing System (NDS) for government securities and migrating to DVP-III mode of settlement,
- Implementation of Structured Financial Messaging Solution (SFMS) and Centralised Funds Management System (CFMS). Using CFMS, banks maintaining accounts with RBI at its various offices are in a position to know their balances at each location from their treasury branch
- Increase in scope and coverage of Electronic Clearing Service (ECS) in both its variants – Credit Clearing and Debit Clearing
- Implementation of Centralised ECS
- Enhancement in scope and coverage of Electronic Funds Transfer (EFT) system has been achieved through the Special EFT and the proposed National EFT; many banks have integrated EFT with their own product offerings
- Removal of the per transaction limit for ECS and EFT transactions
- Participation of a few banks in Electronic Data Inter-change(EDI) projects initiated by the Government of India;
- Launching of pilot project of multi-application smart cards as a prelude to setting standards in smart cards;
- Creating conditions for competition in financial switch service for inter-connecting ATMs. leading to establishment of the National Financial Switch by Institute for Development and Research in Banking Technology
- Initiating steps for Cheque Truncation Pilot Project at New Delhi

For the customer, 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 39 banks have implemented core banking solutions while 29 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, the Negotiable Instruments Act, 1881, has already been amended to enable cheque truncation and to define e-cheque. A Payment and Settlement Systems Bill has been drafted. Consequent upon Government of India Gazette Notification dated February 18, 2005 of the Reserve Bank of India (Board for Regulation and Supervision of Payment and Settlement Systems) Regulation, 2005 a Board for Payment and Settlement Systems has been constituted with effect from March 7, 2005.

4. 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 both paper based as well as electronic based systems. They 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 40 of these clearing houses, cheque processing centres (CPCs) using MICR technology have been set up. At 14 more clearing houses, MICR cheque processing systems are proposed 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 46 places (15 managed by Reserve Bank and the rest by the State Bank of India and one by State Bank

of Indore). 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. These 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 15 places - both are managed by the Reserve Bank. 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 the international best practices in this regard, moved them (except the Inter-bank Clearings at places other than Mumbai and the High Value Clearings) to either secure and guaranteed systems or the RTGS System.

5. 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 financial institutions and their users. Effective entry and exit criteria, regular monitoring, guaranteed settlements through introduction of central counter parties, risk mitigation measures through clearly defined and enforceable loss sharing procedures in the unlikely event of default are the standard ways to ensure safety of payment systems.

Security pertains to the confidence among the users of the payment and settlement systems. Confidence in the integrity of the basic paper payment instruments and payments systems in India was built over a very long period of time. New systems based on modern technology are increasingly being implemented. Prudent users will demand new systems to inspire 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 zealously.

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 required to be on sound footing, with adequate legal backing, firm operational procedures and transparency norms.

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 institutional structure for retail payment systems
- ii. National Settlement System
- iii. Sound legal base
- iv. Continuation of risk mitigation efforts
- v. Efficiency enhancements
- vi. Rural Sector facilitation ;and
- vii. Customer facilitation and protection

Details of the approach and the measures proposed to be initiated to achieve the above goals are given in Part II of this document. A Roadmap for implementation of the action points with milestones to be achieved at the end of each of the three years is given in the Annex.

6. 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 Institutional Structure for Retail Payment Systems

Today, Payment and Settlement system of the country includes retail and large value payments in the form of a 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 customer service are often compromised for operational convenience. This limits the scope of product innovation in payment services.

The institutional structure and delivery channels of payment services in other countries differ from the same in India 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. A point of view which is being increasingly recognized is that the regulator should not be the service provider unless the payment system is systemically important. A survey carried out covering the retail payment systems in 14 countries revealed that the ownership of retail payment systems - both paper-based and electronic, vary from country to country. In some countries they are operated by private companies whose ownership includes participating banks and financial institutions, while in other countries it is operated by bankers' association/ payments association. It is only in very few countries that central banks operate retail payment system.

In accordance with this international trend, it is envisaged that the Indian Retail Clearing function, in its entirety, could be entrusted to a separate legal entity at national level and Reserve Bank can provide settlement services for all the clearing systems, besides being the regulator and supervisor of the payment systems.

The broad framework of the new national entity may be as under:

- This envisioned national entity would be a limited company owned and operated by banks. Indian Banks Association will discuss with a few leading banks and develop consensus on the ownership pattern. Since a few banks have already been running MICR Cheque Processing Centres (MICR CPCs) with substantial investment, they may be consulted for the purpose. .
- The details regarding staffing, ownership of existing infrastructure etc., may have to be worked out.

- All retail clearing operations, both paper-based and electronic will be managed and operated by this limited company.
- The new organization would provide a robust technologically intensive centralized system offering ECS, EFT and SEFT (or NEFT) Services covering the entire country. It may also take initiatives on ATM-switching, multi-application smart card, e-commerce and m-commerce based payment systems.
- The new entity would bring about efficiency enhancements and uniformity in the existing payment products and develop new products taking advantage of technology innovation. Existing MICR centres would be converted into cheque truncation based clearing centres. It would also introduce cheque truncation based inter-city clearing paving the way for T+1 (or even T+0) cheque clearing for the whole country.

The advantage of setting up of the national entity on these lines for running all retail payment system activities will be that this entity will have uniformity in the structure, operations and procedures. The disparate local practices which impede efficiency and customer service in the functioning of the clearing operations would be effectively neutralized. This single entity would deploy professionally skilled and competent personnel to manage and run clearing operations. It will create an enabling environment for bringing out innovative products. It will pave the way for conducting all clearing at national level, leading to better information dissemination and better customer education on various payment services and systems.

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

Action Point:

1. Setting up of an institution at the national level which will own and operate all retail payment systems of the country.

2. National Settlement System (NSS)

An associated issue pertains to the manner in which settlement is done for various clearings in the country. Wholesale payment occurs through Large Value payment systems like RTGS, G-Sec and Forex Clearing settled in the books of RBI at Mumbai. With regard to retail clearings taking place at 1050 clearing houses spread all over the country, the settlement is done in the account of the settlement bank at each clearing centre separately. This casts a liquidity burden on the banks as they do not get benefit of excess funds at one clearing centre to offset the deficit at another. There is a need to settle the position of banks in the various clearing houses centrally in accounts maintained at Mumbai by means of a National Settlement System to enhance liquidity management efforts in banks. It is proposed to achieve this goal in a phased manner starting with the clearing settlement at the four metro centres being centralized at Mumbai. Appropriate technology based solutions will be put in place so that banks with regional presence can have access to the settlement account at Mumbai. Alternative approach can be to design the

National Settlement System such that the accounts at the regional centres can be accessed for centralized national settlement. In either way, National Settlement System would facilitate efficient funds management.

Keeping the above in view, it is proposed to initiate the following step

Action Point:

1. Reserve Bank to establish a National Settlement System through which the clearing houses/ clearing organisations can settle the net position of the participating banks at the national level. To start with, all clearing settlements from four centres (Mumbai, New Delhi, Kolkata and Chennai) would be settled through National Settlement System by December 2005. Coverage of all major clearing centres; i.e 40 MICR Clearing centres would be completed by December 2006. All settlements to be in central bank money.

3. 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 accommodate new requirements and policies. The latest amendments in respect of 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 accorded legal status to the usage of electronic payment systems in Indian banking.

However, the electronic payment systems like ECS, EFT, NDS, RTGS, etc. work on the basis of a series of bi-lateral agreements made specifically for each one of them which are of contractual 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 either within the central banks or by way of establishing 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, 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 proposed with the view to receiving and creating 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 revealed inadequacies in the present legal structure and consequently there is lack of legal clarity about the products designed using information technology. This issue becomes more pronounced in respect of 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 current international 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, the issue of 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. Finalisation of EFT Regulations
4. Initiating the process of legislation for credit transfer transactions on the lines of UNCITRAL Model Law on International Credit Transfers (1994)
5. Drafting Regulations for ECS(Debit Clearing)

4. 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 have a domino effect, leading to settlement failures in other payment systems, thereby threatening stability of 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 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 Risks:

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 posting the net position of the clearing participants in all clearing houses in the country.

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 electronic mode
3. Provide for high availability of all systems

5. 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 is available. In due course, a National Cheque-Truncation System (**National CTS**) may emerge – possibly under the new national entity for retail payment systems- that may route all intercity cheques facilitating thereby, customer credits on a T+1 or even T+0 basis.

India has introduced MICR processing in 40 places and another 14 are in the offing. With this about 70% 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 by March 2007.

Rationalisation of the Clearing Houses is another key activity that should be a priority. This is in tune with the new institutional structure suggested earlier.

Consolidation, merger and 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.

Integration of SFMS – the message transfer facilities within the country- with that of Society for Worldwide Interbank Financial Telecommunication (SWIFT) for straight-through processing (STP) by inter-connectivity between SWIFT and INFINET to facilitate seamless integration with the banking applications will receive a high priority in this phase.

The regulatory structure shall encourage the use of alternative 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.

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.

Ensuring availability of payment systems through appropriate business continuity plans (BCP) would receive priority. For MICR Clearing at the four metropolitan centres, back up MICR centres have already been setup. At Mumbai, there are now three cheque processing centres in different parts of the city which act as backup to one another. For other MICR centres, nearby MICR centre form part of backup arrangement. As regards the large value national payment systems like RTGS and G-Sec Clearing, on-city back-up has been created. Thrust during the next three years would be to build data centres - both on-city and off-city which would be the processing hubs for all large value payment systems. On-city data centre arrangement would consist of the primary processing site and a hot standby backup. The off-city data centre in a non seismic zone would serve as remote backup.

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. Implementation of Image Based Cheque Truncation Clearing at major centres (New Delhi, Mumbai, Chennai, Kolkata, Bangalore and Hyderabad) which would in due course lead to National Cheque Truncation System (National CTS)
2. Rationalisation of Clearing Operations by setting up new Clearing Houses, expansion of geographical jurisdiction of the Clearing Houses, merger and amalgamation 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 and 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 systems i.e by increased usage of RTGS system
7. Creating off-city back-up arrangements for large value national payment systems like RTGS system and G-Sec Clearing and revamping the present arrangement of on-site backup by way of two data centres (primary and hot standby).

6. Rural Sector Facilitation

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

The efforts in this regard will take into account the characteristics of the rural sector of the Indian economy such as wide 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. Improve the availability and coverage of the new delivery channels. This will be in the form of extension of facilities such as the Automated Teller Machines for cash payments.
2. Facilitate large scale deployment and use of multi application smart cards which would also be used for storage and transfer of small value payments in 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. Increase the reach of electronic modes of funds transfer at rural areas by providing variations of such modes, but with a rural bias. The proposed NEFT system would be modified such that the non-networked branches in rural areas can access the NEFT branches of banks for transfer of funds

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.

7. Customer Facilitation and Protection

The Indian payment systems have evolved over a period to accommodate customer convenience on a continuous basis. For redressal of deficiency in service, the bank customers have the following remedies under the existing framework of Indian Law:

- To approach civil courts;
- 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 (CFC) will be setup by each system service provider. Similarly CCIL and other institutions will be expected to setup CFC for the services extended by them.

Clarity and certainty about the terms on which payments are effected on one hand and about the liabilities and responsibilities of the payment service providers on the other will 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 grievance redressal procedures, etc.

As innovative and new type of payment services and instruments become 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. Setting up Customer Facilitation Centre (CFC) by each payment service provider (RBI will set up an integrated CFC for RTGS, G-Sec, MICR Clearing, ECS and EFT systems operated by RBI)
2. Each payment service provider to disclose publicly its standards, terms and conditions under which the payment will be effected and also compensation policy and procedure for any 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.

8. Other initiatives

Besides the measures under the above themes, certain additional measures as detailed below will be taken to ensure synergy:

1. Publication of Red Book on Payment Systems for a country by the Bank for International Settlements (BIS) helps documentation of all payment systems in a country in a structured format. Preliminary work in this regard has already been done. This initiative would be completed by March 2006.
2. Government payments and receipts to be facilitated through electronic mode. RBI will participate in the E-Governance initiatives in a proactive manner.

Payment and Settlement System in India –Vision 2005-08
Roadmap for Implementation

Within one year i.e. by March 2006

- Pursuing with IBA and major banks for setting up of a national level entity which will operate all retail payment systems in the country.
- Operationalising National Settlement System for all clearings at four metro centres (Mumbai, New Delhi, Chennai and Kolkata) by December 2005.
- Finalisation of the proposed EFT Regulations
- Implementing Stage-2 of RTGS System i.e IAS-RTGS Rollout during which all Inter-bank transactions at all major centres would be settled on RTGS platform. Paper-based Inter-bank Clearing would be closed.
- Pursuing with RTGS participants to cover all their net-worked branches under RTGS framework paving way for RTGS-based customer related transactions at about ten thousand branches in the country.
- Implementing image based Cheque Truncation System (CTS) at the National Capital Region on a pilot basis and preparing ground work for extension of CTS System to other metro centres
- Preparing of minimum standard of operational efficiency at MICR Cheque Processing Centre (CPC)
- Making available Electronic Funds Transfer facility at 500 capital market intensive centres as identified by BSE and NSE. It would be achieved by combination of RTGS/ SEFT/ NEFT/ NEFT(Extended) schemes.
- Setting up Customer Facilitation Centre (CFC) at RBI for various segments of national payment systems (RTGS, G-Sec Clearing, Forex Clearing, MICR Clearing, ECS and EFT)
- Each payment service provider to disclose publicly its standards, terms and conditions under which the payment will be effected and

also compensation policy and procedure for any deficiency in services including setting up of CFC

- Drafting the Red Book on Payment Systems in India
- Drafting comprehensive legislation on payment system by way of a Payment System Bill

To be Implemented during the year 2006-07

- Completing the tasks initiated during 2005-06 (setting up of new institution, extension of National Settlement System to all MICR clearing centres and getting the Redbook on Payment Systems in India published by BIS)
- Extension of MICR clearing to 14 additional identified centres
- MICRisation of every cheque – every cheque issued to follow MICR standards
- EFT systems to be implemented at a national level through the new retail payment institution
- Making all Payment Systems in India compliant to Core Principles for Systemically Important Payment Systems (SIPS)
- Increasing the reach of payment services by means of tie up and collaboration with other large coverage entities such as the Post Offices
- Government payments and receipts to be facilitated through electronic mode. RBI will participate in the E-Governance initiatives in a pro-active manner

To be Implemented during the year 2007-08

- Creating off-city back-up arrangements for large value national payment systems like RTGS system and G-Sec Clearing.
- New organization for retail payment systems to be fully functional with all retail payment systems under its umbrella.
- Regulations on various Payment Systems (drawing authority from the proposed Payment Systems Act)

- National Settlement System to cover all major clearing houses/
clearing organizations in the country

Glossary of terms / abbreviation used in the Document

The terms used which are specific to Indian Payment Systems scenario and which do not figure in the Glossary of Bank for International Settlements (BIS) been briefly explained below:

INFINET	INDian FINancial NETwork – The Closed User Group network for the Financial Sector
CIBIL	Credit Information Bureau of India Ltd.
PDO	Public Debt Office
NDS	Negotiated Dealing System
SSS	Securities Settlement System
SFMS	Structured Financial Messaging Solution – This is akin to SWIT. SFMS allows intra / inter bank message transfer. This also provided for transfer of file attached in a secured mode.
CFMS	Centralised Funds Management System – gives a global view of the balances to the entities maintaining account with the RBI to query / transfer funds in its account at the various DADs, RBI
ECS	Electronic Clearing Services
ECS (Credit)	Credit Clearing ensures multiple repetitive credits to the accounts of constituents of banks situated at various branches of banks on the basis of a single debit to the account of a corporate customer called the “user”
ECS (Debit)	Debit Clearing ensures multiple repetitive debits to the accounts of constituents of banks situated at various branches of banks and a corresponding single debit to the account of a corporate customer called the “user”
SEFT	Special EFT – is a variant of EFT. The membership is open to the bank / branches which are networked and capable of processing the transactions and return if any to be submitted with next settlement
CCIL	Credit Clearing Corporation of India Ltd. – The

	CCIL is the CCP for the securities and Forex settlement
NSS	National Settlement System - where all clearings conducted in all clearing houses in all parts of the country will be settled in a single centralised location in central bank money
National CTS	National Cheque Truncation System
NEFT	National EFT - The NEFT envisages the use of SFMS for EFT message creation and transmission from a branch to the bank's Gateway to the NEFT Centre using the tools available under SFMS.