# PAYMENT SYSTEMS IN INDIA

**VISION 2009-12** (July - June)



**RESERVE BANK OF INDIA** 

# PAYMENT SYSTEMS VISION DOCUMENT

# Mission Statement

<<< To ensure that all the payment and settlement systems operating in the country are safe, secure, sound, efficient, accessible and authorised >>>

#### Abbreviations used in the Document

ATM Automated Teller Machines
BCs Business Correspondents

BIS Bank for International Settlements

BPSS Board for Regulation and Supervision of Payment and Settlement Systems

CCIL Clearing Corporation of India Limited

CCPs Cheque Collection Policies

CenECS Centralised ECS

CFMS Centralised Funds Management System

CPCs Cheque Processing Centres

CPSS Committee on Payment and Settlement Systems

CTS Cheque Truncation System

ECS Electronic Clearing Service

FATF Financial Action Task Force

IFSC Indian Financial System Code

IRDA Insurance Regulatory and Development Authority

MICR Magnetic Ink Character Recognition

MMBCS Magnetic Media Based Clearing System

NECS National Electronic Clearing Service
NEFT National Electronic Funds Transfer

NFS National Financial Switch

NPCI National Payments Corporation of India

RECS Regional ECS

RTGS Real Time Gross Settlement

SEBI Securities and Exchange Board of India
SIPS Systemically Important Payment Systems

SPC SAARC Payments Council

SWIPS System-Wide Important Payment Systems

SWS Secured Web Server

#### Payment Systems in India – Vision 2009-12

#### I Introduction

- 1.1 Safety, security, soundness and efficiency of the payment systems assume critical importance from the angle of systemic stability. Smooth functioning of payment systems becomes vitally important in the light of inter-linkages they have with other financial systems. As indicated in the Report on "interdependencies of payment and settlement systems" published by the Committee on Payment and Settlement Systems (CPSS) of the Bank for International Settlements (BIS) in June 2008, smooth functioning of an individual system often depends on smooth functioning of other related systems. The Reserve Bank of India (the Bank) shall continue its initiatives for ensuring smooth operations and proper conduct of the payment systems. It is of prime importance thus, to be assured that the payment and settlement systems in the country are duly authorised and operating within the framework of guidelines applicable to them. The Bank shall also continue to discharge its oversight, regulatory and developmental responsibilities, apart from raising efficiency standards and improving performance benchmarks.
- 1.2 The Approach to be followed on aspects relating to oversight, safety and efficiency and the various initiatives proposed to be operationalised in the various payment system components and products in the near-to-short-term are detailed in this Vision Document. The Vision Document would guide the payments system-related activities of the Bank and concisely convey the intended direction to realise the Mission Statement components.
- 1.3 The Mission Statement articulated for payments system objectives of the Bank has six distinct and succinct components that would be integrated to form the universe of scope and premise of action. To briefly elucidate, the components represent -
  - Safety Keeping the risks in various payment system products minimum and manageable if they are necessary and unavoidable.
  - Security Giving confidence to stakeholders that the payment systems can be trusted and are reasonably protected from threats and vulnerabilities.
  - Soundness Demonstrating the capability and ensuring the payment systems function in a non-disruptive manner.
  - Efficiency Providing measures to assure that the payment systems are costeffective, reliable and promote financial and economic stability.

- Accessibility To ensure reach of various payment systems at reasonable cost to various segments of the populace.
- Authorisation Granting entities authorisation to operate payment systems in accordance the provisions of the Payment & Settlement Systems Act and the Regulations framed thereunder.
- 1.4 The Board for Regulation and Supervision of Payment and Settlement Systems (BPSS), is the apex body for regulation and supervision of payment systems in the country. The vision would be achieved under the overall guidance, direction and supervision of the BPSS.

# II Payments System Initiatives

- 2.1 Several initiatives taken by the Bank for migration of cash payments to the non-cash mode notwithstanding, use of cash is still substantial. The endeavour to migrate cash mode of payment to the non-cash modes, be it paper or electronic, will continue. There have been consistent efforts to move away from paper-based payments to the safer and more efficient electronic modes of payments.
- 2.2 Outreach of existing payment system products to cover more geographical areas and more segments of the populace in the country shall continue to be focused upon.
- 2.3 The Bank continues to play an important role in introducing customer service initiatives. Towards this end, the recent steps taken in various payment system segments include card payments (increasing card security), ATM payments (increasing accessibility to the public, bringing transparency and reasonableness in charges), rationalising charges for electronic payments (NEFT / RTGS) and collection of outstation cheques, mobile payments (issuance of 'Mobile Banking transactions in India Operative Guidelines for Banks'), pre-paid payment instruments (guidelines on 'Issuance and Operation of Pre-paid Payment Instruments in India (Reserve Bank) Directions, 2009'), etc.
- 2.4 Competition, encouraging alternate methods of accomplishing the payment requirement and facilitating new initiatives of payment system providers to bring in more efficiency in the existing / new payment systems remain the thrust areas.

# III Payments System Oversight

3.1 The guiding principles while pursuing the oversight goal will continue to be objectivity, simplicity and transparency. Streamlining operating instructions, prescribing uniform practices, laying down minimum benchmarks, insisting on adequate

redundancies and requiring effective business continuity plans will be vigorously pursued. Focus will be on monitoring implementation of guidelines both in letter and spirit.

- 3.2 The Payment and Settlement Systems Act, 2007 (the Act) (effective from August 12, 2008) prohibits any entity from commencing or continuing to operate a payment system without the approval of the Bank. The Bank may accord approval to the payment system, based on the need for the proposed activity, the services proposed to be undertaken / offered and the efficiency it will bring to functioning of the payments systems in the country. The Bank, while authorising payment systems, would advise the criteria and prescribe the terms and conditions under which the said systems shall operate.
- 3.3 It is imperative that payment systems are operated in a safe and efficient manner as well as in the best interests of the public. The Bank shall endeavour to
  - Enhance the security, integrity and resilience of the payment system infrastructure in the country by ushering in new initiatives or necessitating standards through a consultative process and balancing with the suggestions of various stakeholders. The approach will be need-based and appropriately calibrated to reflect rational expectations.
  - Comply with the general principles enunciated in the 'Report on Central Bank Oversight of Payment and Settlement Systems' published by the Committee on Payment and Settlement Systems duly taking into account our practices and requirements. The general principles of oversight are (i) transparency, (ii) international standards, (iii) effective powers and capacity, (iv) consistency, and (v) co-operation with other authorities. The Bank would accordingly make public the requirements and the criteria for the various payment systems.
  - Adopt the recommendations and principles enunciated by international institutions like the BIS, FATF, etc., while developing or approving systems, issuing operational guidelines or mandating requirements in new or existing payment systems. For the purposes of wider dissemination and transparency, the Bank would be placing on its website the names of entities to whom authorisation to operate payment systems has been approved and the conditions of authorisation subject to which only such entities can operate.

- Put in place appropriate off-site monitoring / surveillance and on-site audits / inspections / scrutinies to ensure compliance with the laid down prescriptions.
- 3.4 These measures are expected to facilitate an orderly growth and functioning of the payment systems thereby instilling confidence among the various stakeholders.

# IV Risk Mitigation

- 4.1 With increase in reach, size and significance of payment systems the Bank is committed to assuring their safe and efficient functioning by identifying various risks, addressing risk-reduction by putting in place risk-mitigation measures and mandating appropriate risk-management practices.
- 4.2 The risks in payment systems viz. concentration risk, counter-party risk, credit risk, legal risk, liquidity risk, operational risk, regulatory risk, settlement risk and systemic risk will continue to be addressed by the Bank.
- 4.3 Towards this end, emphasis will be on advocating -
  - Mitigating concentration risk in both large value as also retail payment systems by way of limiting operations of multiple payment systems by a single entity as also one bank acting as settlement bank for multiple payment systems or alternatively putting in place measures for risk mitigation wherever necessary. Important large value payment systems are now being operated by Clearing Corporation of India Limited (CCIL), which also acts as a central counterparty for systemically important payment systems. This calls for very close monitoring of the activities and functioning of CCIL and continuously reviewing the need for an additional / alternate central counterparty operating some of the payment systems with each capable of taking over the operations of the other in case of eventuality. The risk of concentration of settlement in the form of a single central counterparty needs to be carefully looked into. The retail payment systems are operated by various entities, and the focus would be to ensure that there is no concentration of a single bank acting as settlement bank for multiple payment systems. The other issue that needs to be addressed as part of concentration risk is in the outsourcing arrangements entered into by system participants with service providers. Reliance on a single or few service providers gives rise to concentration risk and could emerge as a significant single-point-of-failure. Proper risk mitigation measures in this regard would be pursued in consultation and co-ordination with all the regulatory departments.

- Risk mitigation measures to address operational risk would be by way of (a) using latest and relevant technology, (b) having straight-through-processing interfaces, (c) placing controls in the form of maker-checker practices and building proper audit trails, (d) encouraging vendor-neutral platforms and products, (e) addressing scalability issues by monitoring adequacy of infrastructure and performance, etc.
- Approaches to mitigating counterparty liquidity and settlement risks by regulating
  access (access criteria, credit ratings, exposure limits, net debit cap, etc.),
  guaranteed settlement by committed lines of credit, settlement guarantee fund
  using central counterparty, preventing volatility (margins, haircuts, calling for
  additional securities, etc.) and secure netting systems.
- 4.4 With the move towards consolidation of infrastructure and integration of various payment systems, isolating and mitigating operational risk assumes importance. Risk-containment is the plan and as part of this exercise, exacerbation and transmission to other systems will be analysed and prevented both in Bank-operated and others-operated systems. The participants in such systems will also be expected to institutionalise similar practices.

## V Other Initiatives

- 5.1 The Bank shall continue its initiatives towards information dissemination, policy and product outreach, co-ordination with other regulators / international / regional bodies, both within the country (SEBI, IRDA, etc.) and abroad (central banks, CPSS, SAARC Payments Council, etc.).
- 5.2 The Bank will contribute to international oversight and co-operation initiatives as a member of the CPSS, the SAARC Payments Council and such other similar bodies. The Bank shall also encourage and support partnership programs with neighbouring countries and regional institutions for reforms in payment systems in the region.
- 5.3 The Bank shall publish the Red Book on Payment Systems for India in collaboration with CPSS-BIS.
- 5.4 The First Report on Oversight of Payment Systems in India was released during the year 2007. The Second Report on Oversight of Payment Systems in India will be brought out.

- 5.5 A Review of Categorisation of Systemically Important Payment Systems (SIPS) and System-Wide Important Payment Systems (SWIPS) was carried out during 2002. A Review of SIPS and categorisation of SIPS was also carried out by the Committee on Financial Sector Assessment as part of the Financial Sector Assessment Program during 2008-09. It shall be the endeavour to repeat this exercise and bring out a Review of Large-Value Payment Systems in the country as well.
- 5.6 The various initiatives undertaken would have to be reviewed periodically to ascertain their impact on smooth functioning, taking corrective measures, if required, etc. For the purpose, the following studies are planned to be undertaken
  - Impact of rationalisation of charges on the use of various payment systems.
  - Growth in use of pre-paid payment instruments consequent upon issuance of guidelines and authorisation of various entities to issue such instruments.
  - Bank-group-wise usage of Intra-Day Liquidity for smooth settlement of RTGS transactions.
  - Impact of closure of High Value Clearing on MICR Clearing and migration of large-value transactions to electronic mode (RTGS / NEFT).
  - Increased usage of cards for making payments and corresponding decline in use of cash for retail transactions.
- 5.7 As part of the Information System Policy framework, the pre-requisites of a policy for preservation and storage of data / information generated and maintained both in respect of the paper and electronic clearing modes is being finalised in consultation with the Bank's Legal Department. This is expected to ensure uniform practices at various clearing locations in terms of preservation of records and availability thereof.

#### VI Action Plan

6.1 With the above agenda in mind, the following action points have been targeted to be achieved in the next one-to-three years' time. The Bank's response would be proactive and to dovetail its initiatives depending on co-operation and support from various stakeholders, expectations of the system, capabilities and preparedness of participants, and developments from time to time.

# 6.2 Authorisation of payment systems

6.2.1 Notification of the Payment and Settlement Systems Act, 2007 empowers the Bank to regulate and oversee all payment systems. The existing and proposed payment systems will need to obtain authorisation from the Bank to continue / commence operations. The central bank is expected to lay down operational and technical

standards for the functioning of these systems, empowered to issue directions, call for information / returns, revoke authorisation and impose penalties / initiate prosecution proceedings for violations of the Act, the Regulations, the directions issued by it and the terms and conditions of authorisation.

# 6.2.2 For the purpose the Bank shall -

- Bring all payment systems in operation in the country under its regulatory purview.
- Authorise new payment systems and operators of payment systems only if they
  add efficiency, increase customer convenience, expand the outreach and bring in
  improvements to the payment system scope and activities in the country.
  Assessment will be made vis-à-vis efficiency parameters like need, technology to
  be used, benefits to the economy, expertise of the operator, financial soundness,
  composition of management, adherence to corporate governance, compliance
  with legal / regulatory guidelines, etc.
- Refuse authorisation and revoke authorization of payment systems if the need therefor is not felt or their operations are not satisfactory. This will be done in a transparent manner and in accordance with the provisions of the Act.

#### 6.3 Smooth functioning of existing payment systems

- 6.3.1 Endeavour will be to ensure that the systems authorised to operate function in a smooth and non-disruptive manner. This would be achieved by
  - Streamlining access criteria prescriptions for all retail and large value payment systems like MICR, ECS / NECS, NEFT and RTGS. The existing access criteria parameters will be constantly reviewed and modified, wherever necessary.
  - Ensuring redundancies to handle business continuity requirements. The
    redundancies in the form of additional / alternate arrangements will address both
    processing and settlement requirements. Periodic assessment by way of
    conducting drills, switch-over of the operations / settlements will be carried out
    and business continuity plans will be documented and suitably modified.
  - Putting in place appropriate mechanism for on-site inspections / off-site surveillance.
- 6.3.2 Banks need to indicate in their Cheque Collection Policies (CCPs) the timeframe for collection of local and outstation cheques, apart from other aspects advised to them from time to time. The CCPs need to be widely publicised and also published in the respective banks' websites. The CCPs framed by banks will be made comprehensive in

terms of scope, coverage, transparency and dissemination. It will be ensured that banks strictly operate within the meaning and intent of the CCPs especially in regard to timeframe for collection, grievance redressal mechanism and penalties for non-conformity.

- 6.3.3 In addition to the timeframe specified for collection of US-Dollar Denominated Instruments, guidelines will be framed and advised for collection of foreign-currency denominated cheques payable in UK and / or locations that have significant volumes.
- 6.3.4 Charges levied for offering various payment products will be constantly reviewed and appropriate interventions will be considered if the charge-structure is found to be non-transparent or unreasonable.
- 6.3.5 The Payment and Settlement Systems Act, 2007 provides legal basis for finality of settlement i.e. it lays down the point of time when the settlement will be deemed final. The Reserve Bank in order to provide operational clarity is in the process of issuing a Settlement Finality Directive.
- 6.3.6 One of the focus areas would be to ensure optimal operation of clearing entities. Recognising the role played by clearing and settlement facilitating entities such as the CCIL, the Bank would continue to closely monitor and oversee the operations of such entities. Insofar as the activities of CCIL are concerned, the operations have grown manifold and the organisation has been responding well to the changing requirements. Given the criticality of CCIL in the financial stability of the country, it would be necessary to review the shareholding pattern and the management structure to further strengthen efficiency levels so as to result in better confidence among users.

#### 6.4 Infrastructure building and improvement

- 6.4.1 The Reserve Bank of India will render its views / opinion to National Payments Corporation of India (NPCI) in preparation of its roadmap. NPCI has been set-up as an umbrella organisation by the banking community to take over the retail payment system activities in the country. NPCI will be authorized for all the systems set-up by it / taken over by it.
- 6.4.2 Back-up arrangements by way of identifying alternate banks to take over processing and settlement operations in the event of non-availability of the main bank would ensure availability of clearing infrastructure during strikes / disruptions. Back-up arrangements by way of first / second alternate banks both for processing and settlement of clearing transactions will be operated in all major Clearing Houses in the country.

Such arrangements will be put in place at the top 100 Clearing Houses in the country in terms of volumes handled.

- 6.4.3 Putting in place alternate settlement arrangements in the event of non-availability of RBI as a settlement bank will also be explored.
- 6.4.4 Single Window Facility will be extended to all member banks that are part of Clearing Houses managed by major banks. This will enable member banks to view balances maintained by them with these banks at different Clearing Houses and also initiate funds transfer requests from / to their own accounts.
- 6.4.5 Secured Web Site (SWS) facility will be extended to cover all MICR-CPCs. The SWS facility will be used by CPCs / member banks to upload / download clearing data / reports. Hard copies of clearing reports by the CPCs will be provided only in exceptional and need-based circumstances.

# 6.5 Promoting electronic modes of payment

- 6.5.1 All large-value and time-critical payments will be processed only through the electronic mode.
- 6.5.2 All bank branches will be enabled with IFSC and MICR codes. The intention is to leave the user with the choice of product for retail and small-value transactions viz. use MICR for NECS and IFSC for NEFT.
- 6.5.3 Reach of electronic products like RTGS, NEFT and NECS will be extended to cover all the branches of banks, including Regional Rural Banks.
- 6.5.4 Operating hours of RTGS will be reviewed and considered based on market / user expectations and stakeholder feedback.
- 6.5.5 Number of settlements in NEFT will be reviewed and further increased / rationalised depending on analysis of volumes, user requirements and efficiency perspectives.
- 6.5.6 Efforts would be made to provide positive acknowledgement to the remitter confirming credit to the beneficiary's account for transactions initiated in NEFT. This would give comfort to the remitter and enhance his usage.
- 6.5.7 Electronic modes of payments have the benefits of safety, speed, efficiency, low cost and audit trails. The Bank will therefore endeavour to facilitate the electronic modes.

- 6.5.8 Local ECS operating in a number of centres will gradually be subsumed in NECS.
- 6.5.9 The introduction of Regional ECS (RECS) (introduced in Bangalore) will be explored in centres where the users (payer and payee) are based in the same region.
- 6.5.10 Further to the initiatives taken to operationalise Indo-Nepal Remittance Facility Scheme (for one-way migrant remittances from India to Nepal), operationalisation of electronic products like NEFT and ECS / NECS in Bhutan will be taken up. In addition, the possibility of extending National Financial Switch (NFS) to cover banks operating in Bhutan will also be actively explored.
- 6.5.11 The Centralised Funds Management System (CFMS) as it presently exists, facilitates centralised balance viewing of and funds transfer between own accounts of a member bank maintained with the Bank at different locations. It will be examined if CFMS can be enabled to facilitate funds transfer between member banks as well.

# 6.6 Reducing risks in paper-based clearing

- 6.6.1 Over a period of time, efficiency has been brought into the paper mode of clearing by way of introduction of MICR processing, computerised settlement, truncating the movement of physical cheques, etc. Operations across all Clearing Houses in the country will be fully computerised. Magnetic Media Based Clearing System (MMBCS) software will be used to computerise processing and settlement operations at all Clearing Houses in the country. All new Clearing Houses will function only on MMBCS mode.
- 6.6.2 Operationalising MICR-Cheque Processing Centres (MICR-CPCs) will be considered at all locations where it is viable and have a daily volume of 10,000 instruments or more. Such CPCs could be made part of the grid-based CTS. Cheques processed by MICR-CPCs will cover over 95% of volume and value of cheques processed in the country.
- 6.6.3 Given the various risks associated with paper-based clearing especially for large-value transactions, and the advantages available in the electronic products like NEFT / RTGS, conduct of High Value Clearing will be discontinued at all locations in the country.
- 6.6.4 Speed Clearing to clear outstation cheques at the centre of presentment will be extended to cover 100 major centres in the country.
- 6.6.5 The Bank run Inter-City Clearing will be discontinued at all locations.

- 6.6.6 Cheque Truncation System (CTS) will be rolled out at Chennai. National roll-out of CTS will be considered once this project is operationalised.
- 6.6.7 The prospect of bringing various Clearing Houses in a region (covering adjacent states) using a Grid-based approach is being examined. Grid-based cheque clearing system to cover nearby MICR-CPCs and Clearing Houses under the Chennai-grid (covering southern states) will be implemented. The New Delhi-grid will also be operationalised by extending the jurisdiction of New Delhi Bankers' Clearing House to cover nearby cities / states. Extending the concept of grid-based clearing to cover other regions in the country will be reviewed based on experience gained from the operationalisation and functioning Chennai and New Delhi grids.
- 6.6.8 Cheque standardisation will be endeavoured which would build more security features to cheques and thus reduce incidence of frauds. Standardisation will also facilitate OCR capture of information contained in the cheques, thereby enabling straight-through-processing and least manual intervention. Cheques with enhanced security features when presented through CTS will provide the level of comfort expected by presenting banks and drawee banks alike.
- 6.6.9 All cheques in the country, including the cheques used by the Government departments will be completely migrated to the MICR mode. Non-MICR clearing presently operational in a few locations in the country (on a once-per-week basis or otherwise) will be discontinued.
- 6.6.10 The clearing infrastructure in place at various locations have the advantages of faster clearing cycle, low cost, uniform practices, better dispute resolution and are functioning since long. Bilateral arrangements function outside the clearing infrastructure and do not contribute to the efficiency of the system in all situations. Therefore, all the Bilateral Clearing arrangements between banks would be reviewed and allowed to continue only where necessary.

#### 6.7 New frontiers

6.7.1 There has been an increase in the various new payment systems initiatives / products. Introduction, usage and acceptability of the new on-site and off-site delivery channels viz. Core Banking Solutions (Branch Banking), Computers (Net Banking), Cards (Pre-paid Payment Instruments), Mobiles (Mobile Banking), Automated Teller Machines, Points-Of-Sale Terminals, Hand-held Devices, Interactive Voice Response Modes and the like will be carefully monitored, nurtured and actively pursued. Some of

these initiatives have been very popular on account of low cost, convenience and high efficiency. The increasing popularity is reflected in their fast increasing customer / user base.

- 6.7.2 Effectiveness and reach of Business Correspondents (BCs) and various modalities including eligibility criteria, area of operations, appointment of sub-agents, etc., will be periodically reviewed and streamlined, if necessary, in the interest of increased outreach and expansion of banking services to the rural populace.
- 6.7.3 Review of the policy on ATMs in terms of increasing the number, criteria for setting up on-site and off-site ATMs, levy of charges, safety of transactions on ATMs, activities permitted to be carried out through ATMs, security features for ensuring the privacy and safety of transactions, resolution of grievances, complaint handling, accessibility of other-bank ATMs, inter-ATM networks, etc., will be closely watched and appropriate measures will be put in place to protect usage and prevent mis-use.

# 7. New Projects / Major Initiatives

- 7.1 Major projects intended to be pursued would include -
  - Implementing a new and feature rich RTGS system The need to migrate to a
    new version of RTGS that could leverage on advancements in technology,
    provide for scalability in volumes, parameterise more features in line with similar
    facilities available in other countries, result in more flexibility in operations, better
    liquidity saving features, etc., would be pursued.
  - India MoneyLine A 24x7 system for one-to-one funds transfers The
    existing NEFT system operates during weekdays from 9 am to 5 pm and on
    Saturdays from 9 am to 12 noon. The Bank would pursue the suggestion to
    consider the need to extend NEFT to function on a 24x7 basis or to develop a
    new system akin to the Faster Payments Service in the UK which operates on a
    24x7 basis.
  - India Card A domestic card initiative The concept of a domestic payment card (India Card) and a PoS switch network for issuance and acceptance of payment cards would be looked into. The need for such a system arises from two major considerations (a) the high cost borne by the Indian banks for affiliation with international card associations in the absence of a domestic price setter and (b) the connection with international card associations resulting in the need for

routing even domestic transactions, which account for more than 90% of the total, through a switch located outside the country.

- Redesigning ECS to function as a true Automated Clearing House (ACH) for bulk transactions Currently, Local ECS (to facilitate bulk electronic transactions with one-to-many and many-to-one variants) is operational at 76 centres. Centralisation of this process is already underway with the launch of credit variant of NECS at Mumbai (and RECS on a pilot basis). The debit variant is also being planned for implementation. The ECS / NECS solution is internally developed and has been in use since long and the need for building a technology and feature-rich ACH network by totally redesigning the existing ECS to provide end-to-end processing in a straight-through manner would be examined.
- Mobile payments settlement network Mobile phones are expected to emerge
  as an important channel for transmission of payment instructions. Efficient mobile
  payments would require real time transfer of funds with adequate security.
  Currently all inter-bank mobile transfers are payment instructions for settling
  funds through existing payment systems. This would require building a national
  infrastructure for facilitating real time mobile payments.

The India MoneyLine, India Card, ACH and Mobile payments settlement network initiatives would be taken forward in co-ordination with the NPCI.

#### **Roadmap for Implementation**

The timeframe for reaching the various milestones is encapsulated below. The aspects which would be attended to on an ongoing basis are indicated under the 'Ongoing' category.

# Ongoing

- 1. Grant of authorization to operate 'payment system' under the Payment and Settlement Systems Act.
- 2. Publishing the list of entities authorized under the Payment and Settlement Systems Act, 2007.
- 3. Oversight of payment systems including issue of directions, guidelines, minimum benchmarks, etc., for operating payment systems.
- 4. Identifying various risks, addressing risk-reduction by putting in place risk-mitigation measures.
- 5. Information dissemination, co-ordination with other regulators / regional bodies, within the country and abroad.

#### **By June 2010**

- 1. Carrying out review of increased usage of cards and the decline in use of cash for retail transactions.
- 2. Finalising information system policy framework for storage of data / information for paper and electronic clearing modes.
- 3. Framing guidelines for collection of foreign-currency denominated cheques payable in locations that have significant volumes.
- 4. Guiding / Advising NPCI on the roadmap for various retail payment system development initiatives 24x7 funds transfer system, redesigned ECS / ACH, etc.
- 5. Discontinuing High Value clearing at all locations in the country.
- 6. Review and progressively discontinue bilateral clearing arrangements between banks.

# During the year July 2010-June 2011

- 1. Putting in place appropriate framework for off-site monitoring / surveillance and on-site audits / inspections / scrutinies to ensure compliance with the laid down prescriptions.
- 2. Publishing the Red Book on Payment Systems in India in collaboration with the Committee on Payment and Settlement Systems, BIS.
- 3. Reviewing and categorising the Systemically Important Payment Systems (SIPS) and System-Wide Important Payment Systems (SWIPS).
- 4. Reviewing
  - a. Impact of rationalization of charges on the use of various payment systems
  - b. Growth in the use of pre-paid payment instruments
  - c. Bank group-wise usage of IDL
  - d. Impact of closure of High Value clearing on MICR clearing and electronic mode.
- 5. Monitoring of the activities of CCIL including reviewing the shareholding pattern and management.
- 6. Putting in place a BCP arrangement for top 100 clearing houses in the country. Also, considering alternate settlement arrangements in the event of non-availability of RBI as settlement bank.

- Enabling Single Window facility for all member banks that are part of the clearing houses managed by major banks for viewing and transfer of funds from / to their own accounts.
- 8. Extending the facility of Secured Web Site to cover all MICR-CPCs.
- 9. Taking steps for migrating all large value and time critical payments to the electronic mode.
- 10. Enabling all bank branches in the country with IFSC and MICR codes.
- Reviewing number of settlements in NEFT based on volume / requirement / efficiency.
- 12. Providing confirmation to the remitter on credit to beneficiary account in NEFT transactions.
- 13. Commencement of various Government payments through electronic modes in co-ordination with Central / State Governments.
- 14. Operationalising NEFT and ECS / NECS in Bhutan. Examining the feasibility of extending NFS to cover banks operating in Bhutan.
- 15. Examining inter-bank funds transfer using CFMS.
- 16. Implementing grid-based clearing.
- 17. Strengthening and standardising security features on cheques to enable straight-through-processing.

#### During the year July 2011-June 2012

- 1. Extending electronic payment products to cover all branches of banks, including RRBs.
- 2. Facilitating government transactions through RTGS / NEFT for RBI-based payments / receipts.
- 3. Enabling NECS coverage to all core-banking branches in the country. NECS (Debit) operationalisation to be separately pursued.
- 4. Exploring implementation of RECS (Debit) in a few locations.
- 5. Migrating all cheques in the country to the new MICR standards.
- 6. Encouraging NPCI to start India Card, PoS Switch and Mobile Payments Settlement Network.



#### Vision 2005-08 – Statements Vs Accomplishments

#### I Introduction

- 1.1 The Bank has published two Vision Documents for payment systems the first Vision Document in 2001 and the second Vision Document 2005-08 in May 2005. Achievements of the Vision set in 2001 were highlighted in the Vision Document 2005-08.
- 1.2 The Vision Statement for 2005-08 proclaimed, "the establishment of safe, secure, sound and efficient payment and settlement systems for the country" as its Mission. The key role of financial markets and the significance of strategic planning were highlighted. Accordingly, the direction and activities of the Bank had started with the Vision approach to realise the Mission.

# II Vision Document 2005-08 – Accomplishments

- 2.1 The roadmap set out in the Vision Document 2005-08 has been by and large accomplished.
- 2.2 The Payment and Settlement Systems Act, 2007 (the Act) has been enacted and the Regulations under the Act viz., the Board for Regulation and Supervision of Payment and Settlement Systems Regulations, 2008 and the Payment and Settlement Systems Regulations, 2008 have come into effect from August 12, 2008.
- 2.3 National Payments Corporation of India Ltd. (NPCI), a company to operate retail payments, has been set-up.
- 2.4 Centralised Funds Management System (CFMS), which facilitates own account funds transfer across offices of the Bank, has been operationalised at all the RBI centres. Use of CFMS as a mode of funds transfer to achieve National Settlement System (NSS) was recommended by the Committee set-up to finalise the modalities for implementation of NSS.
- 2.5 Availability of RTGS and National Electronic Funds Transfer (NEFT) Systems at more than 55,000 branches across the country has surpassed the target of 500 capital market intensive centres identified by the two stock exchanges (Bombay Stock Exchange and National Stock Exchange).
- 2.6 NEFT settlement timings were rationalised It is now available from 9.00 am to 5.00 pm on weekdays and from 9.00 am to 12 noon on Saturdays. High end new servers for NEFT Production and Gateway services were installed at NCC-Nariman Point. A

separate new Gateway for NEFT was also successfully operationalised at NCC-Nariman Point. Back-up arrangements at the RBI Data Centre were activated. Extending NEFT beyond India was also achieved with the implementation of Indo-Nepal Remittance Facility Scheme, a low-cost alternative to Nepali migrants in India for remitting periodic sums back to Nepal.

- 2.7 National-ECS (NECS) was successfully launched during September 2008. NECS leverages on the core banking enabled network of bank branches with access from a centralised location (at Mumbai) thus providing pan-India coverage. Launch of NECS was yet another attempt to provide a national character to critical and popular payment systems.
- 2.8 Local ECS availability was extended to 76 major locations in the country. The clearing cycle for Local ECS was successfully brought down from T+5 to T+1. T+1 clearing cycle is operational uniformly at all ECS centres in the country.
- 2.9 The Cheque Truncation System (CTS) was successfully implemented in the National Capital Region of New Delhi. All member banks of New Delhi Bankers' Clearing House are participating in CTS. MICR clearing in New Delhi has since been discontinued.
- 2.10 MICR-Cheque Processing Centres (MICR-CPCs) were set-up at 31 more centres during the period, taking the total number of MICR-CPC locations to 66 and the number of MICR-CPCs to 71.
- 2.11 At centres with lesser cheque volume but where there are five or more bank branches or at district headquarters where there are three or more bank branches, Clearing Houses (CHs) have been opened with settlement arrived at by using the Magnetic Media Based Clearing System (MMBCS). Computerisation of CHs at over 90% of the locations has been achieved.
- 2.12 Improvements in Outstation cheque collection Operationalisation of Speed Clearing to provide a facility for realisation of outstation cheques at the local centre-of-deposit was conceptualised and implemented during 2008. This facility is now available at 64 of the 66 MICR-CPC locations.
- 2.13 Minimum Standards of Operational Efficiency at MICR-CPCs and other CHs operating with the MMBCS package were framed and put in place. All CHs are required

to submit quarterly / half yearly Self Assessment Reports to respective Regional Offices of the Bank.

- 2.14 Benchmark Indicators of Efficiency for ECS (Credit and Debit) operations were formulated.
- 2.15 Apart from the mechanism of Banking Ombudsmen to handle payment systemrelated complaints, arrangements were put in place to look into queries and redress grievances of stakeholders by way of – a NEFT Help Desk at NCC-Nariman Point, placing contact details of RTGS participants on the Bank's website, etc.
- 2.16 List of centres offering ECS, locations where Speed Clearing is operational, consolidated links to Cheque Collection Policies (CCPs) of banks, comprehensive list of CHs, details of branches with IFSC and MICR codes, particulars of branches offering RTGS and NEFT products, FAQs on various payment system products, etc., were placed on the Bank's website for wider dissemination and stakeholder awareness.
- 2.17 The Department also participated effectively in various International & National events relating to payments systems. The Bank was actively represented in the SAARC Payments Council deliberations and a meeting of the Council was also organised in the country.
- 2.18 A world class Data Centre with an on-city and off-city back-up has been set-up. Testing of the back-up site is done periodically. Back-up arrangements for RTGS, CFMS, NEFT and other critical payment systems have been put in place.

#### III Payments System Infrastructure and Current Status

- 3.1 The Payment and Settlement Systems Act, 2007 along with the Board for Regulation and Supervision of Payment and Settlement Systems Regulations, 2008 and the Payment and Settlement Systems Regulations, 2008 provide the legal framework and the base for smooth operations of the payment systems in the country. Our payment systems are now compliant with Principle 1 of the Core Principles for Systemically Important Payment Systems.
- 3.2 There are significant developments in payment systems apart from the accomplishment of the vision set for 2005-08. There is a shift towards use of electronic modes of payments, though in the retail payment systems, in terms of volume, cheque clearing continues to dominate.

- 3.3 In the large-value payment systems, post-implementation of Real Time Gross Settlement (RTGS) System, the Securities Settlement System (SSS) implemented in RBI has facilitated seamless transfer of funds and securities for liquidity management purposes.
- 3.4 Steps were taken towards encouraging migration towards electronic payment mode; simultaneously efforts were made for bringing in efficiency and putting in place risk mitigation measures for paper-based clearing and settlement system by way of implementation of CTS and computerisation of settlement at Non-MICR Clearing Houses. For smooth operations of the payment systems, the centres with more than 5 banks but with no Clearing Houses were advised to set-up Clearing Houses. There are at present 1138 Clearing Houses operating in the country. Automated cheque processing using Magnetic Ink Character Technology (MICR) technology is now available at 66 locations. At centres where the daily volume of cheques cleared is not substantial, Clearing House operations are being automated using Magnetic Media Based Clearing System (MMBCS) software. This has facilitated faster settlement and reduction in errors and reconciliation.
- 3.5 Increasing use of mobile phones necessitated issuance of Mobile Payment Guidelines for banks providing this facility, which was done in October 2008.
- 3.6 For bringing in transparency in the payment services offered and the charges levied from customers, banks have been advised to display the same on their website; link to the respective banks' website has also been provided on the Bank's website. Charges for electronic payment products viz. NEFT / RTGS, and outstation cheque collection have also been prescribed.
- 3.7 Free withdrawals at non-home bank ATMs: Automated Teller Machines (ATMs) have become an important delivery channel for banking transactions in India, particularly for cash withdrawal and account balance enquiry. The charges levied on the customers for use of ATMs of other banks varied from bank to bank and from network to network. To bring greater transparency and reasonableness in charges being levied by banks on their customers for such transactions, the Bank has freed charges for cash withdrawal and balance enquiry from April 2009.
- 3.8 Cash Withdrawal at Points of Sale (PoS) Terminals: Cash being predominantly used for small value payments and in rural / under-banked areas, the need for arrangements for dispensation of currency at more number of outlets was examined.

Initiatives were taken to permit cash withdrawal at PoS terminals using debit cards up to a maximum of Rs.1000/-.

- 3.9 Commencement of authorisation of payment systems: The Payment and Settlement Systems Act, 2007 has cast the responsibility of regulation and supervision of payment systems on the Bank. The Act has come into effect from August 12, 2008 and the process of authorising payment systems and issuing approvals to payment system products / operators has commenced.
- 3.10 Discontinuation of inter-city clearing: With the introduction of Speed Clearing to enable 'local' clearing of outstation cheques, the Inter-city Clearing facility provided by the Bank at 15 locations in the country is being discontinued in a phased manner.
- 3.11 Increase in threshold of high value cheques and discontinuation of high value clearing: In view of the various risks associated with use of paper-based instruments for clearing and settlement of large-value transactions, the process of migration of large-value payments to the electronic mode was initiated. The threshold limit for cheques eligible to be presented in High Value Clearing has been enhanced from the present Rs.1 lakh to Rs.10 lakh and the high value clearing has been discontinued at a couple of locations.