RBI/2005-2006/152
Ref DPSS.CO.No. 298 /01.01.18/2005-2006

September 1, 2005

CMDs/CEOs of all scheduled banks

Madam/ Sir,

Pilot Project for Implementation of Cheque Truncation System (CTS)-
<u>**in the National Capital Region**</u>

As you are aware, the Pilot Project for Cheque Truncation in the National Capital Region will go live during the first quarter of 2006. Member banks are advised to get prepared to be in line with the progress of the Project.

2. Banks participating in the Pilot Cheque Truncation Project at New Delhi may note that the current paper based clearing will be replaced by image and data clearing for outward and inward, only data for return item processing. Cheque data and images will be stored in image archives for outward and inward items. The archive at the Clearing House will retain all the clearing images and data for eight years. The paper instruments are required to be retained for eight years till further instructions on the subject.

3. We have been meeting with senior officials of banks at regular intervals in New Delhi and apprising them of the developments in the Project and the preparatory steps to be taken by them. The feedback received from the banks indicates that most member banks have not taken the steps outlined in the circular RBI/2004-2005/28 Ref: DIT.CO.No. 1/09.63.36/2004-05 dated July 1, 2004.

4. Issues requiring urgent action are the following:
   a) All banks who are members of the New Delhi Bankers' Clearing House are required to finalise the "point of truncation" for their outward presentations i.e. the point in the clearing cycle, the physical movement of cheques within the banks shall stop. Banks can choose to truncate and process their cheques at the branches, ATMs, client locations, in central locations or clusters and at Image

Service Bureaus. Some banks may choose to opt for a hybrid model if required. This would help the banks decide on the type of scanners and the networks that are necessary for participation.

b) Similarly, the point of processing for inward payments of the instruments based on images and MICR lines received from the Clearing House needs to be finalized i.e. whether the bank will be going in for Centralised payment processing of inward items or decentralized payment processing or adopt a hybrid approach.

c) Banks are required to amend their existing internal banking and clearing manuals for presentation of images in Clearing and acceptance of images for payment processing. Since payment processing activity is sensitive in any banking organization, there would be a need for policy instructions/ guidelines to flow down to the branches from the Head Office/ Controlling Office.

d) Banks are recommended to use new processing tools to simplify and improve the processing in the Cheque Truncation Clearing system. Banks may decide on the use of automatic or manual/rule based signature verification tools, Fraud Detection tools, Account monitoring tools, Courtesy Amount Recognition(CAR) and Legal Amount Recognition (LAR) tools etc.

e) Banks have to decide on the systems for storage of inward and outward images in an electronic form and their subsequent retrieval, retention period for the outward presentation and inward instruments online in an electronic form based on the retention policy of individual bank (Banks may decide on the online retention period for inward and outward based on their business requirements) and their retention on the suitable media offline as per the legal requirements, networking infrastructure required for transmission of the images and MICR data to the Clearing House and internal networks of the banks.

f) The size and the configurations of the systems to be used for outward and inward processing is a function of the banks' business requirements and may be worked out by the banks based on the volume of inward and outward instruments of the bank, the period of retention of such inward and outward

images and MICR data by the bank and size of the images of the cheques. The exact size of the three prescribed images of each image may vary according to the source instrument of the different banks. However, for the purpose of sizing, banks may choose conservatively 75 (seventy five) KB as the size of the three prescribed images along with the digital signature. The point of truncation and the retention period shall have a bearing on the storage requirements and banks need to suitably work out the storage requirements of their systems accordingly. Banks also need to consider the scalability of their systems depending upon the future requirements.

g) The Reserve Bank will be providing **only** the **Clearing House Interface (CHI)** application software to the member banks. The member banks have to purchase (i) appropriate hardware, (ii) systems software and (iii) networking infrastructure. The CHI will act as a Gateway for outward and inward MICR data and the images of the instruments to be sent to/received from the Clearing House over the network/Media. The Clearing House Interface is a Windows based software with embedded Oracle Relational Database to be loaded on the Gateway Server. The Gateway shall be deployed using the Public Key Infrastructure for all its communication with the Clearing House. The Clearing House Interface shall aggregate the images and MICR data received from the branches for outward presentation and will deliver the inward images and MICR data drawee bank branch-wise to the respective Clearing House Interfaces. The indicative detailed functionality of the CHI is given in the RFP for CTS Project which is available on our website (www.rbi.org.in – Tenders – June1, 2004). Banks are advised to ensure that the images and data sent to the RBI's Clearing House Interface (CHI) comply with all the guidelines that are issued by us. The images may have to pass the required Image Quality Assurance (IQA) and Image Quality Usability (IQU) specifications which will be issued by us, failure to do so may result in rejection of such images.

h) The banks are required to interface their existing clearing and/or banking applications with the requirements for data and image formats to be accepted/delivered by the Clearing House Interface software. For the purpose, each bank needs to finalise a vendor for carrying out the integration of the

current banking applications that are being internally used with the Clearing House Interface (CHI). The Reserve Bank shall be publishing the Interface requirements and the data structures in which the images and MICR data shall be received or sent to the Clearing House Interface.

i) As CTS clearing is based on images it is important that the source documents are **image friendly.** The Cheques have to be printed on the MICR standard stationary given in the MICR procedural guidelines and the size of the cheque remains unchanged. However, banks need to take certain precautions which include:

- the background colour should be light to enhance the text and dark colours in the background may be avoided.
- Features which are heavy on design or excessive use of micro-lettering may be avoided as they reduce the contrast between background and the text. Holograms and Logos and other unique features of an instrument may remain on the face of the instrument.

A detailed circular on new standardized format giving the exact locations of the various fields so as to enable automated processing is being issued separately.

j) A facilitating checklist is attached at the Annexe-1 and a guideline for Image based processing systems is attached in Annexe-2.

5. As the project is scheduled to go live by March 31, 2006, banks are advised to choose the vendor best suitable for their requirements, at the earliest and it may be noted that **the Reserve Bank has not prepared any list of approved vendors for the CTS Project.** The selected vendor has to integrate the CHI output with the software available in the bank, ensure that the outward images are accepted by the CHI, provide modules for payment processing, storage retrieval and other modules as required by the bank concerned. The standards for images have already been announced (Reference No.RBI/2004-05/393/Ref DIT.C.O.No.2218/ 09.63.36/2004-2005 dated 11 March, 2005). and the selected vendor has to meet the required standards**.** It is therefore important that the bank's vendor is selected early, since the success of the project depends on the successful integration of the banks system to RBI CHI. It is

important that the banks carry out stringent and rigorous tests to ensure that the systems comply to the bank's and RBI requirements and the selected system should be tested and proven to seamlessly interface to the CHI. Technical specifications for site preparation for the CHI would be given shortly.

6. The names of the vendors chosen by the bank along with their address and contact numbers may be furnished to us latest by end September, 2005 by e-mail to kazasudhakar@rbi.org.in .

Please acknowledge receipt.

Kaza Sudhakar
General Manager

Pilot Cheque Truncation Project at National Capital Region

Checklist for the Banks

1	Deciding point/s of outward truncation within the bank	September
2	Assessing the networking infrastructure required for transmission of images & MICR data to the Clearing House and internal networks of the bank	September
3	Deciding point/s of inward payment processing of images and MICR data	September
4	Deciding on the systems for storage of inward and outward images in an electronic form and their subsequent retrieval, retention period for the outward presentation and inward instruments online in an electronic form.	September
5	Assessing the hardware & software requirement for outward & inward clearing, storage of outward/inward images/ data etc.	September
6	Deciding on the re-engineering of the payment processing workflow; and training & reorientation of the staff concerned	September
7	Finalising/ shortlising vendor/s for acquisition of necessary hardware/ software and for integration of CHI with the existing banking/ clearing applications of the bank	October
8	Finalisation of the Procedural Guidelines	November
9	Awareness Training Programme for all officers and staff members associated with clearing operations	December
10	Installation of Hardware and Software	January
11	Commencement of Test Runs with dummy cheques	First week of February, 2006
12	"Live Run"	Last Week of March 2006

Guidelines for Image Based Processing Systems of the Banks

As a guide, ideally the bank's imaged based processing system/s must have the following characteristics

    a. Redundancy with no single point of failure

    b. High availability

    c. Flexible to meet the bank's current and future needs (distributed capture, centralized capture, cluster model, Image Service Bureau, ATM/POS, Corporate Customer capture etc)

    d. Seamless Interface to the RBI CHI system

    e. Must meet the clearing window and recovery procedures with the CHI

    f. Images and data to meet the IQA/IQU and security specifications from RBI

    g. Provide web-interfaces at the branches for marking returns and printing of images

    h. Capable of burning CDs for the outward presentation and inward presentation to the paying branches

    i. Track and monitor the sending and receiving of the items from the various points of truncation

    j. Update the bank account processing system