

**FREQUENTLY ASKED QUESTIONS (FAQ) ON
CHEQUE TRUNCATION PROJECT IN THE NATIONAL CAPITAL REGION**



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1. What is Cheque Truncation ?

Truncation is the process of stopping the flow of the physical cheque issued by a drawer to the drawee branch. The physical instrument will be truncated at some point en-route to the drawee branch and an electronic image of the cheque would be sent to the drawee branch along with the relevant information like the MICR fields, date of presentation, presenting banks etc. Thus with the implementation of cheque truncation, the need to move the physical instruments across branches would not be required, except in exceptional circumstances. This would effectively reduce the time required for payment of cheques, the associated cost of transit and delay in processing, etc., thus speeding up the process of collection or realization of the cheques.

2. Why Cheque Truncation in India?

Cheque Truncation speeds up collection of cheques and therefore enhances customer service, reduces the scope for clearing related frauds, minimizes cost of collection of cheques, reduces reconciliation problems, eliminates logistics problems etc. With the other major product offering in the form of RTGS, the Reserve Bank created the capability to enable inter-bank payments online real time and facilitate corporate customer payments. The other product, National Electronic Funds Transfer, is an electronic credit transfer system. However, to wish away cheques is simply not possible and that is the reason why the Bank decided to focus on improving the efficiency of the Cheque Clearing Cycle. Cheque Truncation is the alternative. Moreover contrary to perceptions, Cheque Truncation is a more secure system than the current exchange of physical documents in which the cheque moves from one point to another, thus, not only creating delays but inconvenience to the customer in case the instrument is lost in transit or manipulated during the clearing cycle.

In addition to operational efficiency, Cheque Truncation has several benefits to the banks and customers which includes introduction of new products, re-engineering the total receipts and payments mechanism of the customers, human resource rationalization, cost effectiveness etc.,

Cheque Truncation thus is an important efficiency enhancement initiative in the Payments Systems area, undertaken by RBI.

3. How the uniqueness of the cheque would be imparted to the image?

The images captured at the presenting bank level would be transmitted to the Clearing House and then to the drawee branches with digital signatures of the presenting bank. Thus each image would carry the digital signature, apart from the physical endorsement of the presenting bank, in a prescribed manner. In order to ensure only images of requisite quality reach the drawee branches, there will be a quality check process at the level of the Capture Systems and the Clearing House Interface. This would ensure only images of requisite quality secured with the digital signatures of the presenting banks reach the drawee branches. In addition, drawers could consider using holograms, bar-coding or such other features, which would add to the uniqueness of the images.

4. How RBI is proposing to implement Cheque truncation?

RBI is proposing to implement the project on a PILOT basis in the National Capital Region (NCR), New Delhi. Based on the experienced gathered, it would consider extending the coverage to other centres.

In the process of implementation, banks have been given the freedom to decide the point of truncation. RBI would be installing an interface with its system (CHI) at the service branches of banks, who are members of New-Delhi Bankers Clearing House. Banks have to decide the point of truncation and have to ensure that the images are digitally signed after their capture. It would flow thereafter to the interface (CHI) provided by RBI, from where the images would flow to the clearing House with the digital signatures of the banks. These digitally signed images would reach the service branches of the drawee branches clearing house interface. The service branches have to ensure that these images are moved across their branches to ensure their processing.

5. What kind of services will RBI provide to facilitate cheque truncation?

RBI's services include system development and installation at the clearing house, interfaces at the banks' end, network, handholding, awareness propagation and training.

6. Can you briefly explain the entire process flow envisaged in the CTS?

The CTS project envisages a safe, secured, faster and effective system for clearing of the cheques. In the CTS the presenting bank will capture the data & images of the cheques using their Capture System which is internal to them. They have to meet the

specifications and standards prescribed for data and images. To ensure security, safety and non-repudiation the PKI (Public Key Infrastructure) is being implemented across the system. The banks will send the captured images and data to the central clearing house for onward transmission to the payee/drawee banks. For that purpose RBI will be providing the banks software called the Clearing House Interface (CHI) that will enable them to connect and transmit data in a secure way and with non-repudiation to the Clearing House (CH). The Clearing House will process the data and arrive at the settlement figure for the banks and send the required data to payee/drawee banks for processing at their end. The drawee/payee banks will use the same CHI mentioned earlier for receiving the data and images from the Clearing House. It will be the responsibility of the drawee bank Capture System to process the inward data and images and generate the return file for unpaid instruments.

7. Who can participate in the Cheque truncation system?

The criteria for banks participating in the Cheque truncation system are:

- i. Membership of the clearing house in the NCR.
- ii. Membership of the Indian Financial Network (INFINET)

8. How the non-INFINET member banks can participate in the CTS?

In respect of banks who are not members of the INFINET, the following alternatives are available

- (a) They may become the sub-members of the direct members or
- (b) Such banks may use the infrastructure of the other banks having INFINET membership without being the INFINET members themselves and their clearing settlement can be done either directly or through the member through whom they are participating.

9. Is the infrastructure requirement same for all the banks?

The infrastructure required for CTS from bank's end are connectivity from the bank gateway to the clearing house, hardware and software for the CTS applications.

RBI shall be providing member banks with the CHI and the banks have to procure other hardware and system software for the CHI and the application software for their capture systems on their own.

The hardware requirement is based on the volume of the cheques processed by the banks. Based on the volume the CHI is categorized into four types and the hardware requirement is different for each category.

The band width requirement for each bank is calculated based a number of factors like the peak inward and outward volume of the bank, average size of an image, efficiency factor of the network etc. In addition to that future requirement have been taken into consideration for calculating the band with requirement.

10. What are the image specifications in the CTS?

Imaging of cheques can be based on various technology options. The cheque images can be black and white, Grey Scale or coloured. Black and White images do not reveal all the subtle features that are there in the cheques. Coloured Images increase storage and network bandwidth requirements. So it was decided that the electronic images of truncated cheques will be in gray scale technology. There will be three images of the cheques i.e. front grey, front black & white and back black & white which will be made available to member banks. The image specifications are:

Image Type	Minimum DPI	Format	Compression
Front GrayScale	100 DPI	JFIF	JPEG
Front Black & White	200 DPI	TIFF	CCITT G4
Reverse Black & White	200 DPI	TIFF	CCITT G4

The image quality of the Grey Scale image shall be 8 bits/pixel (256 levels).

11. What is a gray-scale image?

Scanners also function like photo-copiers by reflecting the light passed through narrow passage on to the document. Tiny sensors measure the reflection from each point along the strip of light. Reflectance measurements of each dot is called pixel. Images are classified as black and white, gray-scale or colour based on hoe the pixels are converted into digital values. For getting a gray scale image the pixels are mapped onto a range of gray shades between black and white. The entire image of the original document gets mapped as some shade of gray, lighter or darker, depending on the colour of the source. In the case of black and white images, such mapping is made only to two colours based on the range of values of contrasts. A black and white image is also called a binary image.

12. How the quality of the images will be ensured?

As the payments will be made on the basis of the images, it is essential to ensure the quality of the images. For that purpose the solution proposes Image Quality Audit (IQA) at different level. RBI will be specifying the image standards to the member banks. The presenting bank is required to perform the quality audit during the capture itself. Further quality audit will be done at the gateway before onward transmission to clearing house. Further the drawee bank can ask for the physical instrument if it is not satisfied that the image quality is not good enough for payment processing.

13. How the image and data transmitted over the network is secured?

The security, integrity, non-repudiation and authenticity of the data and image transmitted from the paying bank to payee bank will be ensured using the Public Key Infrastructure (PKI). The CTS is compliant to the requirement of the IT Act, 2000. It has been made mandatory for the presenting bank to sign the image & data from the point of origin itself. The image and data are secured using the PKI through out the entire cycle covering capture system, the presenting bank, the clearing house and the drawee bank. The PKI standards used are in accordance with the appropriate Indian acts and practices of IDRBT which is the certifying authority for banks & financial institutions in India. The standards defined for the PKI are as followed:

- hash algorithm SHA-1
- padding algorithm pkcs#1
- RSA asymmetric encryption with 1024 bit key length
- Triple DES (3DES, TDES) symmetric encryption with 168 bit key length
- Certificates in x.509v3 format

14. What type of cheques can be presented in the CTS?

All the local cheques can be presented in the CTS. Banks may also present cheques on banks situated outside the NCR, but such banks have branches in the NCR region. The CTS also supports the intercity clearing and specialized clearing like high value clearing etc. The on-us instruments where both presenting and drawee banks are same are not

allowed in the CTS. Images of such instruments would be stopped at the Clearing House Interface itself.

15. What are the precautions required to be taken by the bank customers to avoid frauds?

Bank customers should use image friendly cheques. They should preferably use dark coloured ink while drawing the instruments. Care should be exercised in the use of rubber stamp, so that it would not interfere with the material portions of the cheque. The date of the cheque, payees name, amount and signature are the basic features which are essential in a cheque. The use of rubber stamps, etc, should not overshadow the clear appearance of these basic features in image. In order to ensure that all essential elements of a cheque are captured in an image during the scanning process, bank customers have to exercise appropriate care in this regard.

16. Will there be any change in the process for the customers?

There will be no change in the clearing process. Customers would continue to use cheques as at present, except in the use of image friendly coloured ink for making the instruments. Of course, such of those customers, who used to receive the paid instruments, like Government Departments, would only receive cheque images instead of the physical instruments. This will also facilitate in better processing at their end, as they will be able to access online images in addition to the data. As the images are going to be moved across, the time taken for the receipt of paid instruments at their end could be reduced so that better and timely control could be exercised over payments. This will also give an early opportunity to the drawers or issuers of cheques to detect frauds or alterations in their cheques.

It is also possible for cheque issuers to consider newer techniques such as embedded verifiable features such as bar-codes or logos or watermarks, encrypted codes, holograms, etc., which would facilitate early interception of altered/forged instruments.

17. What would be benefit of cheque truncation to customers of banks?

Before we answer this question, we have to understand the present system of cheque clearance. The cheques presented by customers, today, are sent to the clearing house at the drawee centres by the beneficiaries' bank. The cheques at the bigger cities, in

view of the large volume of paper instruments, are subjected encoding and then to mechanical sorting and thereafter reach the drawee branches. As per the existing banking practice, these instruments received at the counters of the drawee branches are paid or returned by them. The returned instruments are passed on to the presenting customers through the process of a return clearing. Only after the return clearing process gets over, banks release the credit to the customers. The beneficiaries' account gets credited on the same day on which the drawees' account gets debited; however, the beneficiary is permitted to use the proceeds only after the return clearing process.

With the introduction of the imaging and truncation, the physical movement of instruments would be stopped and the electronic movement of images of cheques would speed up the process of settlements and ultimately alter the clearing cycles. The clearing cycle could be shortened and it would be possible for customers to realize the proceeds of cheques early. Thus cheque truncation would reduce effectively the time of float, i.e. time from the point of issue of cheque to the point of time the actual debit takes place. In case such clearing is introduced across the cities, it would ensure the realisation of inter-city instruments faster thus ensuring early availability of funds to beneficiaries.

Thus the benefits could be summarized as:

- a) Faster clearing cycle;
- b) Better reconciliation/verification process
- c) Better Customer Service – Enhanced Customer Window
- d) T+0 for Local Clearing and T + 1 for inter-city clearing.
- e) Elimination of Float – Incentive to shift to Credit Push payments.
- f) The jurisdiction of Clearing House can be extended to the entire country – No Geographical Dependence
- g) Operational Efficiency will benefit the bottom lines of banks – Local Clearing activity is a high cost no revenue activity.
- h) Minimises Transaction Costs.
- i) Reduces operational risk by securing the transmission route.

18. What is an IRD?

Under CTS, after the capture of the image, the physical cheque would be warehoused with the presenting bank. In case the beneficiary or any other connected persons require the instrument, the payee bank could issue a copy of the image, under its authentication, which is called Image Replacement document. It is a legally recognized replacement of the original cheque for re-presentation. The provisions of NI act (Section 81(3) of the NI Act as amended) also permit the usage of such IRD.

19. If the customer wants to see the paper cheques for any reason, what are the options available to the customer?

The physical instruments are required to be stored for a statutory period. It would be obligatory for presenting bank to warehouse the physical instruments for that statutory period. In case a customer desires to get a paper instrument back, the instrument can be sourced from the presenting bank through the drawee bank.

20. Whom to ask for further clarifications?

For any further clarification the following officials may be contacted:

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