

## Cheque Truncation System (Cts): An Overview

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### Abstract

The banking sector and its new technology play an important role and its stand as the backbone of the country. Without bank nothing is possible in this world. The modern technology in banking sector develops their nation one step ahead and it will increase easy access to the customers. The modern technology in banking include E-corner, Automatic teller machine (ATMs), Cash Deposit Machine(CDM), Mobile banking, Internet banking system and efficient services available even after banking hours. Integration with existing large banking systems- Legacy systems are a major IT and operational investment for banks. Most Banks have already invested on legacy systems and therefore it becomes vital that the new system has the capability to integrate seamlessly with the existing systems. This paper particularly implies Cheque Truncation System (CTS). This paper proposes the new implementation in cheque, Benefits of which are enjoyed by both the banker and customer.

**Key words:** Cheque Truncation System (CTS), Cheque clearing, Bank, New Technology, Customer, MICR.

### Introduction

Truncation is the process of stopping the flow of the physical cheque issued by a drawer at some point by the presenting bank en-route to the drawee bank branch. In its place an electronic image of the cheque is transmitted to the drawee branch through the clearing house, along with relevant information like data on the MICR band, date of presentation, presenting bank, etc. Cheque truncation thus obviates the need to move the physical instruments across branches, other than in exceptional circumstances for clearing purposes. This effectively eliminates the associated cost of movement of the physical cheques, reduces the time required for their collection and brings elegance to the entire activity of cheque processing. In simple words Cheque Truncation System (CTS) is a cheque clearing system undertaken by the Reserve Bank of India (RBI) for faster clearing of cheques. CTS stands for Cheque Truncation System and essentially means that instead of sending the cheque in physical form by the collecting bank to the paying bank, an electronic image of the cheque is transmitted to the drawee branch for payment through the clearing house, thereby eliminating the cumbersome physical presentation of the cheque to the paying bank, thus saving in time and costs involved in traditional clearing system. Under CTS the physical cheques are retained at the presenting bank level and do not move to the paying banks. In case a customer desires, banks can provide images of cheques duly authenticated. In case, however, a customer desires to see / get the physical cheque, it would need to be sourced from the presenting bank, for which a request should be made to his/her bank. An element of cost / charge may also be involved for the purpose. To meet legal requirements, the presenting banks which truncate the cheques need to preserve the physical instruments for a period of 10 years.

### MICR code:

MICR = Magnetic Ink Character Recognition.

By seeing the PIN code, a postman can know the destination of an envelope. Same way by using the MICR code, RBI (clearing house) can know the name of a bank, location of its branch from where the cheque was issued faster clearing of cheques. At the bottom of every cheque, the black colored numbers with weird looking fonts is the MICR code. These numbers are printed with a special ink containing iron oxide, so that it can be automatically read by a special machine.

Under the old paper cheque based clearing, the SBI bank will send the paper cheque to the clearing house and get the money and then transfer it to the account. The cheque then moves physically from one bank to another bank which involves a lot of time and risk. RBI

recognised the disadvantages of this old system and brought about CTS, where instead of the physical movement of the cheque, an electronic image of the cheque is transmitted to the drawee branch. So RBI came up with a new idea known as 'Cheque Truncation System (CTS)'. In this Cheque Truncation System (CTS), SBI branch will not send the paper cheque to the clearing house, but instead, it would merely scan the cheque, and electronically send the image + MICR data, to the clearing house. From the clearing house, the data would go to the paying bank (Citibank in our example), they will inspect the MICR data, signature on the scanned image and release the money to SBI. This process is faster and safer than the conventional paper-cheque clearing method.

### **Truncation in India**

As explained above, Cheque Truncation speeds up the process of collection of cheques resulting in better service to customers, reduces the scope for clearing-related frauds or loss of instruments in transit, lowers the cost of collection of cheques, and removes reconciliation-related and logistics-related problems, thus benefitting the system as a whole. With the other major products being offered in the form of RTGS and NEFT, the Reserve Bank has created the capability to enable inter-bank and customer payments online and in near-real time. However, as cheques are still the prominent modes of payments in the country. Reserve Bank of India has therefore decided to focus on improving the efficiency of the cheque clearing cycle, offering Cheque Truncation System (CTS) as an alternative. As highlighted earlier, CTS is a more secure system vis-a-vis the exchange of physical documents.

In addition to operational efficiency, CTS offers several benefits to banks and customers, including human resource rationalisation, cost effectiveness, business process re-engineering, better service, adoption of latest technology, etc. CTS, thus, has emerged as an important efficiency enhancement initiative undertaken by Reserve Bank in the Payments Systems area.

### **The status of CTS implementation in the country**

The Reserve Bank has implemented CTS in the National Capital Region (NCR), New Delhi, Chennai and Mumbai with effect from February 1, 2008, September 24, 2011 and April 27, 2013 respectively. After migration of the entire cheque volume from MICR system to CTS, the traditional MICR-based cheque processing has been discontinued in these three locations. . Based on the advantages realised by the stakeholders and the experience gained from the roll-out in these centres, it has been decided to operationalise CTS across the country. Accordingly, Grid based CTS clearing has been launched in these three locations.

The new approach envisioned as part of the national roll-out is the grid-based approach. Under this approach the entire cheque volume in the country cleared across numerous MICR Cheque Processing locations will be consolidated into the three grids as mentioned above.

Each grid will provide processing and clearing services to all the banks under its jurisdiction, Banks, branches and customers based at small / remote locations falling under the jurisdiction of a grid would be benefitted, irrespective of whether there exists at present a formal arrangement for cheque clearing or otherwise. The illustrative jurisdictions of the three grids are indicated below:

**New Delhi Grid:** National Capital Region of New Delhi, Haryana, Punjab, Uttar Pradesh, Uttarakhand, Bihar, Jharkhand and the Union Territory of Chandigarh.

**Mumbai Grid:** Maharashtra, Goa, Gujarat, Madhya Pradesh and Chattisgarh.

**Chennai Grid:** Andhra Pradesh, Telangana, Karnataka, Kerala, Tamilnadu, Odisha, West Bengal, Assam and the Union Territory of Puducherry.

### **Image specifications in CTS**

Imaging of cheques can be based on various technology options. The cheque images can be Black & White, Gray Scale or Coloured. These have their associated advantages and disadvantages. Black & White images are light in terms of image-size, but do not reveal all the subtle features that are there in the cheques. Coloured images are ideal but increase storage and network bandwidth requirements. Gray Scale images are mid-way. CTS in India use a combination of Gray Scale and Black & White images. There are three images of each cheque

that need to be taken - front Gray Scale, front Black & White and back Black & White.

The security, integrity, non-repudiation and authenticity of the data and image transmitted from the paying bank to the payee bank are ensured using the Public Key Infrastructure (PKI). CTS is compliant to the requirements of the IT Act, 2000. It has been made mandatory for the presenting bank to sign the images and data from the point of origin itself. PKI is used throughout 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 notifications of Controller of Certifying Authority (CCA)

### **Features of CTS**

The CTS-2010 is not just a change in the process of cheque clearing. The change in the system is apparent even on the cheque leaf used. A CTS compliant cheque leaf is different from a normal cheque leaf currently used, and has certain distinct features.

**Cheque printer details:** This is printed on the extreme left hand side of the cheque. The printer details along with the words 'CTS-2010' is mentioned along the area where the leaf from the cheque book is tore off.

**Rupee symbol:** The new symbol of the Indian rupee is printed beside the area where the amount in figures needs to be written.

**Details of the bank and its logo:** The bank details and its logo are printed on the face of the cheque. However, it is printed in invisible ink.

**Signature space indicator:** The words 'please sign above' are mentioned indicating the space where one needs to sign the cheque.

**VOID pantograph:** This is a wavelike design, which is visible to the naked eye and seen below the area where the account number is printed.

CTS-compliant cheques are safer than old cheques.

### **The precautions required to be taken by the banks and customers to avoid frauds**

Banks and Customers should use "CTS 2010" cheque which are not only image friendly but also have more security features. Customers may request/insist their banks for cheque forms that are compliant with the "CTS 2010" standard. They should preferably use image-friendly colored inks while writing cheque and avoid any alterations / corrections thereon. Preferably, a new cheque leaf may be used in the event of any alterations / corrections as the cheque may be cleared through image based clearing system. Banks should exercise care while affixing stamps on the cheque forms, so that it does not interfere with the material portions such as date, payee's name, amount and signature. The use of rubber stamps, etc, should not overshadow the clear appearance of these basic features in image. It is necessary to ensure that all essential elements of a cheque are captured in an image during the scanning process and banks / customers have to exercise appropriate care in this regard. **Expected Benefits of CTS**

**For Banks:** Banks can expect multiple benefits through the implementation of CTS, like faster clearing cycle means realization of proceeds of cheque possible within the same day. It offers better reconciliation/verification process, better customer service and enhanced customer window. Operational efficiency will provide a direct boost to bottom lines of banks as clearing of local cheques is a high cost low revenue activity. Besides, it reduces operational risk by securing the transmission route. Centralized image archival system ensures data storage and retrieval is easy. Reduction of manual tasks leads to reduction of errors. Customer satisfaction will be enhanced, due to the reduced turnaround time (TAT). Real-time tracking and visibility of the cheques, less fraudulent cases with secured transfer of images to the RBI are other possible benefits that banks may derive from this solution.

**For Customers:** CTS / ICS substantially reduces the time taken to clear the cheques as well enables banks to offer better customer services and increases operational efficiency by cutting down on overheads involved in the physical cheque clearing process. In addition, it also offers better reconciliation and fraud prevention. CTS / ICS uses cheque image, instead of the physical cheque itself, for cheque clearance thus reducing the turnaround time

drastically.

- The main feature of the CTS 2010 cheque is that the physical movement of the cheque is stopped and the images of cheque are transmitted electronically thereby speeding up the process of cheque clearance and settlement between banks. This obviously means quicker clearance, shorter clearing cycle and speedier credit of the amount to the accounts.
- With the movement of cheque from one bank to another having been stopped, there is no fear of loss of cheque in transit and chances of cheque being lost due to mishandling, etc are totally avoided.
- At present clearing is restricted to banks operating within a city or within a restricted geographical area. Under the CTS, it is proposed to integrate multiple clearing locations managed by different banks in different centres so that cheques drawn on upcountry banks too can be cleared electronically without any geographical restrictions. Eventually, this will result in integration of clearing houses into a nation-wide standard clearing system, thereby making clearance of cheques drawn on any bank in India within 24 hours possible.
- The cheques in transit are most susceptible to frauds and customers of banks are the worst sufferers in the present system of physical movement of cheques from one place to another. Under the CTS system moving of physical cheques at different points is obviated as only electronic images are transmitted between banks, and this will considerably reduce the scope for perpetuation of frauds inherent in paper instruments.
- With the introduction of homogeneity in security features under CTS standards 2010 such as embedded verifiable features like bar codes, encrypted codes, logos, watermarks, holograms, etc in every cheque leaf, it is now possible to detect frauds easily through interception of altered and forged instruments while passing through the electronic imaging system. This is expected to considerably reduce operational risks and risks associated with paper clearing for the benefit of all bank customers.
- The CTS is expected to improve operational efficiency of the entire banking system, resulting in better customer service, improved liquidity position for banks' customers and safe and secure banking for the entire banking public.
- In the words of RBI, CTS brings elegance to the entire activity of cheque processing and clearing and offers several benefits to banks in terms of cost and time savings, including human resource rationalization, cost effectiveness, business process re-engineering and better customer service.

### **Conclusion**

The bank should effort to educate customer through media, Advertisement like brochure, Awareness programme etc., the scope for committing frauds is greatly reduced due to the various security checks in place. Further, the absence of physical movement also eliminates the risk of loss of cheque in transit. The different locations are proposed to be integrated under this system in order to cut geographical restrictions in cheque clearing. Standardisation of cheque forms (leaves) in terms of size, MICR band, quality of paper, etc., was one of the key factors that enabled mechanisation of cheque processing. Over a period of time, banks have added a variety of patterns and design of cheque forms to aid segmentation, branding, identification, etc., as also incorporated therein a number of security features to reduce the incidence of cheque misuse, tampering, alterations, etc. Growing use of multi-city and payable-at-par cheques for handling of cheques at any branches of a bank, introduction of Cheque Truncation System (CTS), increasing popularity of Speed Clearing, etc., were a few aspects that led to prescription of certain common minimum security features in cheques printed, issued and handled by banks and customers uniformly across the banking industry.

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