

**Brihan-Mumbai Bankers' Clearing
House
(BBCH)**

**Procedural Guidelines
For
Grid-based
Cheque Truncation System
(CTS)**

Version 1.0

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Contents

Sl. No.	Chapter	Subject	Page	
			From	To
1	I	Introduction	4	7
		Jurisdiction	5	5
		Clearing Timings	5	6
		Applicability of Guidelines	6	7
		Audit by NPCI	7	7
2	II	Overview of Clearing Procedure under Truncation Environment	8	10
		Point of Truncation	8	8
		Settlement	8	8
		Government Cheques	8	8
		Digital Signatures	8	8
		Use of Dedicated Secure Network	9	9
		Storage and Archiving System	9	9
		Scanning Standards	9	10
3	III	Presentation Clearing – Procedure at the Presenting Branch	11	19
		Preliminary Verification	11	11
		Sorting of Instruments	11	12
		Crossing	12	12
		Capture of Images and Data	12	12
		Reject Repair and Balancing	12	13
		Endorsement	13	13
		Represented Cheques	13	14
		Validations	14	14
		Government Cheque Validation	14	14
		Master Table Synchronization	14	14
		Image Quality Checking	15	15
		Handing IQA Failure	15	15
		Use of PKI	15	15
		Transmission of Images / Data	15	16
		Service Bureau	16	16
		Return Processing	16	16
		Post Return Clearing	16	16
		Storage of Physical Instruments	17	17
		Posting of Transaction / Crediting Customers' Account	17	17
		Extension Handling	17	17
		Paper to Follow (P2F)	18	18
		Internal Control	18	19
4	IV	Outward Clearings - Processing at the Clearing House Interface (CHI)	20	24
		Clearing House Interface	20	20
		Receiving Outward Presentment	20	20
		Image Quality Analysis and Failure Handling	20	20
		Item Processing	20	21
		Clearing Length	21	21
		Establishment of Session	21	21

		Session Attachment	21	22
		Transmission of Files to Clearing House	22	22
		Use of PKI	22	23
		Downloading Certificate Revocation List (CRL)	23	23
		Media Based Transmission of Exchange Files	23	23
		Regional Holiday and Blockage	23	24
		Reconciliation of Outward Presentation	24	24
5	V	Inward Clearing – Processing at Clearing House Interface (CHI)	25	26
		Receipt of Inward Data / Images	25	25
		Validation	25	25
		Control Mechanism	25	25
		Generation of Posting File	25	26
		Posting Files for Designated Branches	26	26
		Settlement Timings	26	26
6	VI	Processing at Branches / Bank's In-clearing System	27	30
		Transmission of Posting Files	27	27
		Duplication Checking	27	27
		Digital Signature Validation	27	27
		Payment Processing	27	27
		Return Request File	27	28
		Return Processing at CHI	28	28
		Transmission Discipline	28	28
		Extension Request for Returns	28	28
		Requests for Physical Cheque	29	29
		Internal Control	29	30
		Reconciliation of Clearing Differences	30	30
7	VII	Special Processing at Clearing House (CH)	31	32
		Session Extension	31	31
		Regional Holiday	31	31
		Return by CH	31	31
		Bank Exclusion	31	31
		Different Status of CHI / Bank	32	32
		Default Handling	32	32
8	VIII	Dispute Resolution Mechanism	33	34
	Annexure I	Legal Status of Cheque Truncation	35	37
	Annexure II	Special Crossing	38	38
	Annexure III	Return Reason Codes	39	42
	Annexure IV	Rescheduling of Items	43	43
	Annexure V	Illustrative time-line drawing of the clearing cycle for CTS in Brihan-Mumbai Bankers' Clearing House (BBCH)	44	44
	Annexure VI	RBI Circular on Dispute Resolution Mechanism	45	48
	Annexure VII	RBI Circular on Settlement & Default Handling Procedures	49	54
	Annexure VIII	Indicative checklist for presenting banks to verify under CTS	55	55

Chapter I

Introduction

1.1 Cheques represent a significant segment of payment instruments in India. In the year 2011-12, more than a 1.30 billion cheques were processed at around 1200 Clearing Houses across the country. The Reserve Bank has been playing the role of the catalyst in ensuring efficiency in the clearance of cheques.

1.2 The present system of MICR cheque clearing system requires the cheques to be physically moved from place to place and the time involved in their processing at various intermediate stages increases the length of the clearing cycle of cheques. This was also due to the fact that the cheques require their presentment at the branch where they were payable. The restraining factor was the Negotiable Instruments Act, 1881 under which the physical instrument had to be presented to the drawee branch for payment.

The law was amended during the year 2002 paving the way for the presentment of electronic images instead of the physical instrument. With suitable amendments (Annexure I) to The Negotiable Instruments (NI) Act, 1881, The Information Technology (IT) Act, 2000 and The Bankers' Book Evidence (BBE) Act, 1891, the legal framework was put in place for the introduction of cheque truncation and e-cheques in India.

1.3 The NI Act defines a truncated cheque to mean "***a cheque which is truncated during the course of a clearing cycle, either by the Clearing House or by the bank, whether paying or receiving payment, immediately on generation of an electronic image for transmission, substituting the further physical movement of the cheque in writing***" (cf. Section 6 of the NI Act, 1881).

1.4 Thus cheque truncation involves the stoppage of the physical movement of the cheque and the replacement of physical instrument by the image/s of the instrument and the corresponding data contained in MICR line.

1.5 The Reserve Bank of India (RBI) constituted an industry Working Group on Cheque Truncation under the Chairmanship of its Executive Director, Dr. R.B. Barman, to *inter-alia* suggest an appropriate model for cheque truncation in India. The Working Group submitted its recommendations in July 2003, and suggested a presenting bank based truncation model. RBI implemented cheque truncation project on a Pilot basis in the National Capital Region, New Delhi (NCR). RBI mandated National Payments Corporation of India (NPCI) to operationalise the Grid-based Cheque Truncation System in Mumbai. Grid means expanding the jurisdiction of Brihan-Mumbai Bankers' Clearing House in due course of time to cover other MICR cheque processing centres / other centres of States of Maharashtra, Gujarat, Goa, Madhya Pradesh and Chhattisgarh such as Nagpur, Ahmedabad, Panaji, Bhopal, Raipur etc. under Mumbai CTS.

1.6 Jurisdiction

For the present the Grid-based Cheque Truncation System is proposed to be implemented in Mumbai and subject to the jurisdiction of Brihan-Mumbai Bankers' Clearing House. The jurisdiction of Grid CTS at Mumbai will be as decided by RBI from time to time.

1.7 Clearing Timings

The CTS is capable of supporting different types of clearing. Each type of clearing will have a separate clearing window known as clearing session. Initially there will be one presentation clearing session and one corresponding return clearing session per day. The clearing timings for these sessions are as follows:

BBCH-Clearing Session	Weekdays	Saturdays
	Timings	
Presentation Clearing Session-I	1630 – 1930 hrs	1430 – 1630 hrs
Return Clearing Session-I (Return Clearing of Presentation Clearing-I)	1630 – 1730 hrs	1530 – 1630 hrs
Paper to Follow (P2F)	1930 – 2030 hrs	1630 – 1730 hrs

The details of the different clearing sessions shall be worked out by the Standing Committee and communicated to member banks by the Clearing House from time to time.

After closure of the prescribed clearing window, the Clearing House shall arrive at the net settlement position for each bank. This is based on all the instruments that have been accepted by the Clearing House for arriving at the net settlement position.

Please refer Annexure VII: RBI Circular dated 29th September, 2010 on Settlement & Default Handling Procedures

1.8 Applicability of Guidelines

The term 'cheque' in this guideline shall have the same meaning as given in Section 6 of amended NI Act, 1881* and include all types of clearing instruments including cheques, drafts, pay orders, 'at par' instruments, etc. Suitable provisions have been made in the Negotiable Instruments (Amendment & Miscellaneous Provisions) Act, 2002 and also The Information Technology Act, 2000 for recognition of images as valid instrument for payment by the drawee banks.

(* a "cheque" is a bill of exchange drawn on a specified banker and not expressed to be payable otherwise than on demand and it includes the electronic image of a truncated cheque and a cheque in electronic form).

1.9 These guidelines deal mainly with the operations of image based cheque processing and have to be read with and subject to the Uniform Regulations and Rules for Bankers' Clearing Houses. These guidelines also include Dispute Resolution Mechanism of BBCH as per RBI Circular dated 24th September 2010 (ref no. [RBI/2010-2011/213 DPSS.CO.CHD.No. 654 / 03.01.03 / 2010-2011](#)) and Settlement and Default Handling Procedures of BBCH as per RBI Circular dated 29th September 2010 (ref No. [RBI/2010-2011/218 DPSS.CO.CHD.No.695 / 03.01.03 / 2010-2011](#)).

1.10 RBI's directives on Standardisation and Enhancement of Security Features in Cheque Forms known as CTS-2010 as per RBI Circular dated 22nd February 2010 (ref no. [RBI/2009-2010/323 DPSS.CO.CHD.No. 1832 / 04.07.05 / 2009-10](#)) and 22nd June 2010 (ref no. [RBI/2009-2010/503DPSS.CO.CHD.No. 2806 / 04.07.05 / 2009-10](#)) have also been covered under these procedural guidelines along with NPCI's guidance note on implementation of CTS-2010 dated 21st September 2010 (ref no. NPCI/CTS/2010-11/1304).

1.11 Audit by NPCI

It is obligatory for all BBCH member banks to strictly follow the CTS Procedural Guidelines. RBI / NPCI reserves the right to conduct audit of the CTS-related infrastructure of a member bank (including Hardware, Software & networking equipment), carried out either by them or through any other entity. Each member bank should conduct annual internal audits of itself (or of outsourced agents) in order to comply with the CTS Procedural Guidelines and submit a report to NPCI which would be shared with RBI.

1.12 NPCI's role is to operationalise the Grid-based CTS at Mumbai. NPCI will act as a Clearing House / Cheque Processing Centre (CPC). Management of Clearing House will remain with the President of Clearing House. RBI (or any bank identified by RBI) will continue to be the president of the Clearing House. The President and the Clearing House will continue to retain their roles and responsibilities as provided for in the URRBCH. Settlement related activity will be undertaken by Reserve Bank of India only. NPCI will be submitting session-wise settlement files to RBI in a specified format as suggested by RBI.

1.13 It is understood and accepted by all members of the Clearing House that the bank / entity conducting the Clearing House operations, in the conduct and settlement of clearing, shall incur no other liability or responsibility than that falling upon other member banks.

Chapter II

Overview of Clearing Procedure under Truncation Environment

2.1 Point of Truncation

The point of truncation is left to the discretion of the presenting bank. However, in accordance with Section 131 of the NI Act, the banks must put in a process of proper authorization, with regard to ensuring due diligence on all the instruments presented by it.

2.2 Settlement

Settlement shall be generated on the basis of the existing MICR code line. The amount will have to be captured / keyed in separately. The specifications of the cheques detailed for MICR clearing have to be adhered to. The existing E13 B Font for the code line structure shall continue to be used. Member banks are not required to encode the amount of the cheque on the MICR line of the cheque.

2.3 Government Cheques

For a limited period Government Cheques (Defined in 3.11) will have to be sent along with their images to the drawee banks, with the “Paper to Follow” type.

2.4 Digital Signatures

The use of the Public Key Infrastructure (PKI) ensures data authenticity, integrity and non-repudiation, adding strength to the entire system. The presenting bank is required to affix digital signature on the images and data from the point of truncation itself. The image and data are secured using the PKI throughout the entire cycle covering capture system, the presenting bank, the Clearing House and the drawee bank.

2.5 Use of Dedicated Secure Network

Images accompanied by the MICR line data, duly encrypted and digitally signed, will travel over a dedicated network-NPCInet (or any other network or mode as permitted by the Clearing House) connecting all the CHIs with the Clearing House.

2.6 Storage and Archiving System

A sound storage and archiving system of images is an integral part of CTS which takes care of disputes, complaints, reconciliation, etc. The present legal requirement for preservation of physical paid cheques is 10 (Ten) years as mandated by Reserve Bank of India. So the physical instruments and the images have to be preserved for the statutory period.

2.7 Scanning Standards

The scanning will conform to the prescribed standards which are, for front side, grey scale 100 DPI 8 bit (256 level) in JFIF format with JPEG compression, and front and back bi-tonal (black and white), 200 DPI TIFF image. Compression techniques used are jpeg for grey scale image and CCITT G4 standards for the bi-tonal. The image quality assurance is required at the scanning stage so that the images meet the processing quality standards. The image specifications are as follows:

Sl. No.	Image Type	Minimum DPI	Format	Compression
1	Front Grey Scale	100 DPI	JFIF	JPEG
2	Front Black & White	200 DPI	TIFF	CCITT G4
3	Reverse Black & White	200 DPI	TIFF	CCITT G4

The background of the cheques should be image-friendly (There should be no dark background). Moreover image should also confirm to CTS-2010 cheque standard issued by Reserve Bank of India dated 22nd February 2010 (ref no. [RBI/2009-2010/323 DPSS.CO.CHD.No.1832 / 04.07.05 / 2009-10](#)) implementation of which is explained in NPCI's guidance note on implementation of CTS 2010 dated 21st September 2010 (ref no. NPCI/CTS/2010-11/1304). It may be noted that till the period permitted by RBI, non-

CTS-2010 complaint cheques will continue to be processed in CTS. Banks presenting non-CTS-2010 complaint cheques need to follow the presentation requirements, if any, as prescribed by RBI.

Chapter III

Presentation Clearing – Procedure at the Presenting Branch

3.1 Preliminary Verification

As the payment processing is done on the basis of images, the onus of due diligence shifts to the Presenting Bank, as *provided under explanation II to Section 131 of Negotiable Instruments Act*. The member banks have to enforce KYC (Know Your Customer) norms in letter and spirit. The banks should observe all precautions which a prudent banker does under normal circumstances, e.g., to check the apparent tenor of the instrument, physical feel of the instrument, any tampering visible to the naked eye with reasonable care, etc. For enhanced attention, based on exceptions, the banks may employ suitable risk management techniques like scrutiny of high value transactions, limit based checking by officials, new accounts alerts, etc. The presenting bank takes full responsibility for collecting on behalf of the intended payee and exercises due diligence as per the conditions laid down in the amended Negotiable Instruments Act.

It is to be noted that as per RBI circular [DPSS.CO.CHD.No.1832 / 04.07.05 / 2009-10 dated February 22, 2010](#) on “Standardisation and Enhancement of Security Features in Cheque Forms” and specifically to Paragraph 1.8 contained in the annexure thereto on 'prohibiting alterations / corrections on cheques', collecting banks should ensure, ab initio, that such cheques are not accepted for presentment in CTS. This prescription is effective from December 1, 2010.

Please Refer Annexure VIII for an indicative checklist for presenting banks to verify under the CTS environment.

3.2 Sorting of Instruments

“Drawn on Self” or “On-Us” instruments should be settled internally. The CHIs are configured to reject On-Us items. However, certain CHIs handling indirect members and sub-members may be allowed On-Us items.

Apart from segregating “drawn on self” cheques, the banks should also segregate instruments which are being re-presented (primarily for adjusting endorsement at the

back of the instrument (Refer to paras 3.9, 4.3), as also the instruments which are required to be sent physically to the drawee banks (Paper to Follow – Refer to para 3.24), as these categories of instruments would require separate process of handling by the bank.

3.3 Crossing

All cheques received for collection over the bank's counters are required to be branded with the bank's special crossing stamp prior to scanning. The suggested dimension and the position of the Special Crossing Stamp are given in **Annexure II**. Banks should take care so as not to interfere with any material portion of the cheque, and the drawee banks are able to process their inwards without any undue problem on this account. **Special Crossing Stamp should have Bank's Name + MICR code of the branch only.**

3.4 Capture of Images and Data

The images of all the instruments in a batch / file must be duly captured along with MICR data using scanners set up for the purpose. The amount needs to be captured / keyed in to complete the data record. The ideal number of instruments in one capture file should be about 200 for easier balancing.

3.5 Reject Repair and Balancing

The banks should have proper systems and procedures in place to ensure that the rejects of the MICR line are appropriately repaired and the batch file is balanced before the same is uploaded from the capture system to the CHI. Banks are required to pass on the value in the MICR repair tag for any correction / changes / rejects on the MICR band of the cheques in the capture files. E.g. If a Cheque bearing MICR code **400005002 (State Bank of Indore)** has been repaired by presenting bank user with **400002273 (after merger with SBI)** then the presenting bank's capture system should have capability to populate such MICR Repair through specific field to CHI to be further communicated to the drawee bank. As per CHI specifications, such MICR repair will be populated through flag code "**010001**" so as to provide to the drawee bank's capture system an indication that the MICR Code has been repaired by the presenting bank.

Please refer CHI specifications version 1.17 shared with BBCH member banks for MICR repair flags.

3.6 Endorsement

At the time of scanning the instruments, the reader sorter / scanner will print a single line endorsement on the back of each instrument which shall be the unique identifier for the instrument. It shall consist of Presentment Date of the item (8 digit) in DDMMYYYY format, the Clearing Type (2 digit), Item Sequence Number (14 digit consisting of Sorter ID 6 digit, Run Number 2 digit, Sequence Number 6 digit), MICR Code of the Branch of First Deposit (9 digit) and IFSC Code of the Presenting Branch (11 digit) of the Presenting CHI. It is optional for the bank to use the MICR and IFSC code of the presenting branch or branch where truncation is done; however in case instruments belonging to another bank is scanned for presentation in the clearing (who is participating as an indirect member), the MICR / IFSC code of the Branch of First Deposit (i.e., indirect member) should be used.

3.7 The printing of the endorsement implies that the collecting bank undertakes to credit the payee's account on realisation of the cheque and that the instrument deposited is a genuine one and is being collected for a bonafide customer of the bank.

3.8 As regards the confirmation / certification of endorsements, the attention of the member banks is invited to the provisions of URRBCH providing that the clearing stamp affixed would be considered as the collecting banks' confirmation of all the previous endorsements and that it undertakes to credit the beneficiaries' account on realization and no additional / specific endorsement / certificate of confirmation to this effect on the instrument is considered necessary.

3.9 Represented Cheques

In the case of represented instruments (i.e., after having been returned once), the endorsement will be made in a different position to avoid overlapping. Stickers may be used to cover the previous endorsement to avoid smudging. The capture systems should have control procedure to monitor such representations, as a fraud prevention

measure. The first / original presenting bank has to cancel the earlier stamps by marking “All our Stamps Cancelled”.

3.10 Validations

The data captured by the banks' capture system should be validated using the CH Master generated by the CHI to avoid rejection at the CHI.

3.11 Government Cheque Validation

The capture system must detect the special case for Government Cheque account numbers as detailed in the CHI specifications document. The special cases are:

- 7 digit account number and a 3 digit transaction code
- 6 digit account number and transaction code in the range 20-27 and 49.

3.12 Capture shall ensure appropriate “doctype” i.e., Paper to Follow is attached to such instruments and arrangements are made to deliver it to the drawee bank / branch as per the Clearing House rules.

3.13 Master Table Synchronization

The master table information such as sort codes, transaction codes, branch codes, bank codes, city codes, calendar, designated branches, etc., of the capture system should be synchronised with that of Clearing House Master Table. Any changes in the clearing house table shall get automatically updated on the online CHIs, and it shall be the bank's responsibility to update its capture system immediately. CHI supervisors should monitor whether the CH Table has been updated successfully or not. Any error related to CH Table updates is reflected in the system monitor screen of the CHIs.

It will be the responsibility of the offline CHIs (CHIs which are not connected to CH over network) to ascertain any updation in the Master Tables, before the commencement of any session. Offline CHIs may have to approach the Clearing House for any updates.

3.14 Image Quality Checking

The banks need to perform Image Quality Analysis (IQA) validations at the capture system. Each image shall have an IQA indicator tag indicating the outcome of the IQA test carried out by the capture system.

The threshold values for different IQA parameters shall be intimated to the banks by the Clearing House from time to time. The banks should take care to synchronize the IQA parameters at the capture system, to avoid excessive rejection at the CHI.

3.15 Handling IQA Failure

Instruments that fail IQA test may be rescanned. Instruments (images) which do not pass the IQA test need to be handled through “Paper to Follow” model, with IQA indicator flag ‘off’ (Refer para 3.24 on Paper to Follow). However, this option should be used only in extreme circumstances when it is not possible to meet the IQA standards by rescanning and not as a matter of routine. The IQA Fail & IQA Pass report is made by CHI as a daily report. The capture system of the bank may also generate an IQA report for its enhanced control.

The President of the Clearing House retains the right to define threshold limits on items failing IQA, and invoke penal provisions for its violations.

3.16 Use of PKI

The banks are required to apply digital signatures to individual images and MICR data at the point of capture. They should also ensure that the digital signatures used for the processing activity has unexpired life of at least one month. Member Banks are required to submit / provide periodical certificate to its compliance.

3.17 Transmission of Images / Data

The capture system will transmit the MICR data and images of the cheques to its CHI electronically and / or on the media. Banks may have procedures in place to optimise bandwidth and ensure that the branches upload their presentation in over a period of

time rather than sending all the images and data relating to the day's clearing of the branch at the end of the day or at a given point of time.

3.18 Service Bureau

In case the services of a Service Bureau are utilized for capturing images and MICR data by any bank / branch, there would be appropriate controls and agreement between the concerned Service Bureau and the concerned bank/s. The scope of the services undertaken by the Service Bureau would have to be agreed upon between the bank and the Service Bureau by way of a contract. The internal security including the digital signatures is left to the agreement between the Service Bureau and the banks while that used for transmission of the file/s from the CHI to the CH shall follow the prescribed standards as per the CHI Specifications document.

3.19 Return Processing

Presenting bank CHI shall receive the return exchange file/s for each return session containing the returns on the presentation lodged by them. As per system design, a return session may not necessarily have a direct one-to-one corresponding relationship to any particular presentation session. An item may be returned as long as its clearing length has not expired, and a session is available for the particular clearing type. The return file shall contain the item detail and return reason code. It shall be the responsibility of the presenting bank to generate the return memo from the information in the return file.

3.20 Post Return Clearing

After completion of the return settlement, the passed / paid instruments are required to be branded “**CLEARED**” boldly on the face of the instrument. The stamping / branding in the bottom middle portion of the instrument (above the MICR line - as per Annexure II) should be done in such a way that no material part of the cheque is affected in order to ensure that the material portions of the cheque are appropriately preserved for any future use.

3.21 Storage of Physical Instruments

The presenting banks need to put in place arrangements to physically archive the cleared instruments for ready retrieval, whenever required at a later date. The physical instruments must be stored for the required mandated period, as mentioned in para 2.6.

3.22 Posting of Transaction / Crediting Customers' Account

The banks should pass debit / credit to their customers on the Value Date of the transaction (the date on which the settlement is posted in the settlement bank's account). However, permitting the customers to utilize the proceeds would be subject to internal rules of the presenting banks.

As mentioned in para 3.19 above, in CTS, the return sessions need not correspond to any particular presentation session. The drawee bank may return an item provided the clearing length for the item has not expired and there exists an appropriate return session for returning the item. Before releasing the credit to the customer, the presenting bank should ensure that either the clearing length of the item has expired or there is no appropriate return session available to the drawee bank to return it, within the clearing length of the item (For clarifications on clearing length please refer to section 4.5).

3.23 Extension Handling

The Grid based CTS supports extension requests for city / bank / branch. The clearing length of the item/s, for which extension has been given, increases by extension hours. Such items can be returned in the due session, supporting the appropriate clearing type, within the extended period (Refer para 6.8 for extension handling).

The CHI of the presenting bank shall receive inward extension exchange file/s containing list of items for which extension has been given to the drawee banks, the reason code and the extension hours. CHI in turn will generate extension files for use of the capture system. It is the responsibility of bank's capture system to track those items for further processing / action.

3.24 Paper to Follow (P2F)

The banks would be required to send physical instruments (paper) along with the scanned images in the following situations:

- (a) Government Cheques (para 3.11 & 3.12)
- (b) IQA Failure (para 3.15)
- (c) When the instrument has been returned by the drawee bank with reason code 39 (Image not clear, present again with paper) or reason code 40 (Present with document) (Refer to para 6.9 for details)

The physical instruments, along with separate bank-wise lists generated from CHI, should be dropped in the respective drawee banks' receptacles at the clearing house. Banks can exchange the P2F type of clearing instruments at Clearing House during pre-determined time slot agreed upon by the member banks. (Refer to Annexure V for details on the Clearing Session timings and exchange of "Paper to Follow" items).

Under the Grid scenario the presenting bank and the drawee bank should be in the same city for exchange of P2F.

3.25 A record of instruments transmitted with 'paper to follow' flag shall be maintained by both the banks, in order to have appropriate control over the movement of paper instruments. As per the provisions of the NI Act, the drawee bank shall retain and preserve the physical instrument after making the payment thereof.

3.26 Internal Control

The banks should document the process flow and ensure that adequate control mechanisms are in place. Special care and adequate physical checks should be taken during rescanning of instruments and representation of instruments.

The banks must have a mechanism to generate internal control reports at the end of the session / day to effectively reconcile the presentation made it and the credit received by it from the CH. In case of any discrepancy, the same should be sorted out immediately.

The service branches of the banks following distributed outward model may keep the branch clearing control reports for verification of actual credit received from the Clearing House.

Chapter IV

Outward Clearings - Processing at Clearing House Interface (CHI)

4.1 Clearing House Interface

The CTS CHI provides connectivity between the capture / drawee bank systems of a bank on the one hand and the Clearing House (CH) on the other. It provides a gateway for transmission of data and cheque images. It does the required validations to ensure that the data entering the CH from the bank's capture system is free of operational errors.

4.2 Receiving Outward Presentment

CHI will receive the duly balanced outward clearing cxf files (containing MICR data) and cibf files (containing images) from the capture system of the bank.

4.3 Image Quality Analysis and Failure Handling

The incoming images are subjected to IQA validations. The images which fail IQA validations are rejected with an appropriate response file. The bank may rescan the instrument and present it with a changed / different UDK (Unique Document Key) depending upon bank's internal processes / control procedures. The member banks have to maintain control over such re-presentments.

4.4 Item Processing

The CXF and CIBF files presented by the capture system are validated by the CHI against the file and item level validations indicated in the CHI Specifications, as released by the CH from time to time. The CHI after validations generates response files which contain information related to acceptance or rejection of each file and the items present in each file with appropriate reason codes. Sometimes there may be multiple response files for a CXF and CIBF file. It is the responsibility of the capture system to take these response files and take appropriate actions.

The CHI then sorts the MICR data and their related images into bundles as per drawee bank and bundle collection type and creates exchange files internally and validates these bundles against the session window to which they will be attached at the CH. CHI before attaching the items to the session, digitally signs MICR data as well as image views. It also digitally signs and encrypts the exchange files before transmission to CH.

4.5 Clearing Length

The clearing length of a session is calculated from the close receiving time defined for a presentment session irrespective of when the session is actually closed. The clearing length of the item is dependent on the bundle collection type, and other factors like holidays, extension granted to the drawee bank / branch, general extension granted to a session, extension resulting from blockage and any other activity by Clearing House.

4.6 Establishment of Session

The session information is configured in the Master Tables. The scheduled sessions for the day are displayed on the 'Session Monitor Screen' at the CHI. However, in case of version mismatch of CHT (at CH and CHI), exchange files cannot be uploaded to CH and the same would be rejected. In that case the CHI operator shall update the Clearing House Table of CHI, un-build the exchange files and then revalidate the items for onward processing.

4.7 Session Attachment

The items are assigned to an appropriate clearing session that is open based on parameters fixed for a session by the CH. These parameters are passed on to the capture system through the CHI. The item inherits 'session date' that is the business date of the session. If there is no appropriate session that is open, the items / bundles wait at the CHI until such a session opens.

A validation of the item's Presentment Date versus the item's Session Date is performed and items that exceed a prescribed limit (7 working days) shall be rejected by the

Clearing House. The Clearing House shall from time to time prescribe this parameter. CHI will build exchange files for the MICR data and the cheque images for onward transmission to Clearing House.

4.8 Transmission of Files to Clearing House

Each exchange file is digitally signed and encrypted by CHI before it is transmitted to the CH.

4.9 Banks should plan transmission of their outward presentation by taking into account presentation volume, the bandwidth of network with the Clearing House, and the session window. Invariably, the time demarcation at the CHI shall be in synchronization with the CH in order to avoid the rejection of clearing files by the CH due to closure of a session. However, it may sometimes happen that a bundle / exchange file, after being transmitted within a session time, gets delayed in transit due to unforeseen circumstances like network congestion, etc., and is not able to reach the CH system before close of the session. In such a situation, the CHI will need to un-build the exchange file, and reattach to a new session.

It shall be the responsibility of the Presenting Bank to verify and ensure that all the items presented / transmitted by it have been included in the settlement and reconcile the total credits with the presentation made by it.

4.10 Use of PKI

The PKI standards used are in accordance with the appropriate Indian Acts and practices of IDRBT, which is the certifying authority for banks and financial institutions in India. There will be two different certificates – one for encryption and one for signing.

The standards defined for the PKI are as follows:

- hash algorithm SHA-2
- padding algorithm pkcs#1

- RSA asymmetric encryption with 2048 bit key length
- Triple DES (3DES, TDES) symmetric encryption with 2048 bit key length
- Certificates in x.509v3 format

It shall be the responsibility of bank to monitor the expiry period of digital certificates used by the CHI. They shall initiate action for renewal of digital certificates at least one month prior to expiry date of digital certificates as indicated in para 3.16. The Office of the Controller of the Certifying Authorities has come out with interoperability guidelines for migration from SHA1 to SHA2 Hash algorithms.

4.11 Downloading the Certificate Revocation List (CRL)

CH shall download the CRL from the certifying authority i.e., IDRBT on a regular basis. CH shall in turn update the Working Certificate Store which contains all the certificate related information and distribute among the CHIs.

4.12 Media Based Transmission of Exchange Files

In the event of a network failure or in case of an offline CHI, the application allows for data and image files to be exchanged with the CH using different types of electronic media. The same PKI infrastructure that is used during network transmission is used to create the files for transfer using physical media options.

4.13 Regional Holiday and Blockage

Under Grid-based CTS, the jurisdiction of BBCH would fall under different states, and they have different holiday calendars. “Blockage” and “Holiday Marking” function in the system has been designed to handle different state holidays, for a ‘value date’. The blockage prevents other banks to present any cheques on the branch / bank put under blockage. In addition, it gives extension to all unexpired items drawn on such branches

and banks for the blockage period. The branches / banks under blockage cannot lodge any fresh presentation during the blockage period. Banks seeking to block their branches or the entire bank may request the CH for doing so. Alternatively, the banks may themselves put their branches in blockage from CHI. The CHI in turn will send these requests to CH for its approval. The information related to blockage is passed on to other CHIs using the CHT updation.

This functionality may also be extended to address other operational situations as deemed necessary by CH.

4.14 Reconciliation of Outward Presentation

After End of Session at the CH, CHI generates an OACK file containing the details of Items that have been taken up for settlement at the CH. It shall be the responsibility of presenting bank to reconcile their entire presentation by collating the information from OACK file and various response files.

Chapter V

Inward Clearing - Processing at Clearing House Interface (CHI)

5.1 Receipt of Inward Data / Images

The Inward processing deals with accepting inward presentment data and images from the CH and providing data in the form of files for use within the bank's in-clearing (drawee bank) system. The CHI receives digitally signed inward financial data exchange files and image exchange files from the CH.

5.2 Validation

The CHI shall authenticate and load the exchange file data into the system and send an error exchange file to the CH if the inward financial data exchange file or image exchange file failed decryption or authentication. The CHI will send an acknowledgement exchange file to the CH if the inward financial data exchange file or image exchange file gets successfully loaded.

5.3 Control Mechanism

The Service / Main Branch should verify that all the inward bundles / items have been received by it to ensure that there has been no data loss in the transmission from Clearing House to the CHI. The CHI supervisor may compare the relevant information available at the 'Clearing House Processing Monitor' and 'Inward Exchange File Screen' for the purpose. The drawee bank would not be able to generate pxf / posting files unless all the inward bundles / items have been actually received at the CHI.

If any files are lost in transmission the bank may request the CH for retransmission of images and data.

5.4 Generation of Posting File

CHI, for each session, shall generate files for interfacing with the bank's in-clearing or exception processing system.

CHI is capable of creating posting files (both image and data files) for payment processing in one of the following three ways:

- i. Bank-wise for the entire bank
- ii. Branch-wise within each bank
- iii. Branch and transaction code-wise for each branch
- iv. City-wise- Bank-Branch wise within Grid jurisdiction

The type of posting file drawee bank requires is configurable at CHI.

5.5 Posting Files for Designated Branches

The drawee bank may designate any particular branch for receiving transactions that do not pertain to any sorted category. Besides drawee bank may also designate any particular branch for different transaction codes. By default, the service branch is considered as a designated branch also for all purposes.

5.6 Settlement timings

Applicable settlement timings will be decided by the president of the CH. In case of inability of a member bank to fund its settlement account to meet the clearing obligations, the shortfall in the settlement account shall be dealt with as a default situation and the default handling procedure as per RBI circular ref no. DPSS.CO.CHD.No. 695 / 03.01.03 / 2010-2011 Dated September 29, 2010 shall be put into operation (Refer to Annexure VII for complete details).

Chapter VI

Processing at Branches / Bank's In-clearing System

6.1 Transmission of Posting Files

It will be the responsibility of the drawee bank module to fetch the posting files from CHI and do the payment processing.

6.2 Duplication Checking

The CHI detects duplicate items based on MICR code line on the data for the configured number of days. The duplicate items are indicated in the posting (pxf) files generated by the drawee bank's CHI, and it is the responsibility of drawee bank module to have processes in place to take necessary caution / control while processing such items. Additionally, CHI also generates a report of duplicate items for each CHI after each session, and is available for CHIs to access the same and download, if required.

6.3 Digital Signature Validation

Drawee CHI shall verify the digital signature of presenting CHI. Whereas it has been made mandatory for presenting banks to apply digital signatures at the capture point itself; it is left to the drawee banks to decide whether they want to validate the digital signature coming from capture system of the presenting bank.

In case validation of digital signature of presenting bank fails, drawee bank may return such items with appropriate return reason codes.

6.4 Payment Processing

The banks shall do the payment processing based on images of the instruments following all the prudent practices.

6.5 Return Request File

It will be the responsibility of the drawee bank's in-clearing system to collate all the return items from different branches and create Return Request Files (RRFs) as per

specifications provided in CHI Specifications document. The drawee bank's in-clearing system shall put such RRFs to CHI for onward transmission to the CH.

6.6 Return Processing at CHI

CHI shall receive RRFs from the drawee bank system containing all the outgoing returns along with return reason codes (Annexure III). CHI shall validate the file for file integrity and data integrity. CHI then processes the data and generates exchange file for the CH. (Refer para 3.19 for details). During return clearing images would not travel. The return clearing is based on the UDK (Unique Document Key). Each exchange file is digitally signed and encrypted before it is transmitted to CH. Physical instruments will have to be returned in case the same have been received by the bank, under "Paper to Follow" type.

6.7 Transmission Discipline

CHI shall transmit the Outward Return Exchange Files within the given return window. As there may be a time lag during transmission of a file from CHI to CH, the drawee bank should ensure that the return exchange files reach the Clearing House within the timeframe before the closure of the return session.

6.8 Extension Request for Returns

A drawee bank can request an extension on the return period for a branch / bank by requesting to the President of the Clearing House. The President of the Clearing House, depending on the situation, may grant extension as per the request. On grant of extension to a bank / branch, the clearing length of all the items drawn on it would correspondingly increase by the extension hours.

Extension can be requested / granted to / by the president of clearing house before the session closure.

The CH shall provide an 'extension exchange file' to each CHI listing all of its items affected by the extension, along with extension time and reason. (Refer para 3.23 for details).

6.9 Requests for Physical Cheque

In terms of Section 64(2) of the Negotiable Instruments Act, “where an electronic image of a truncated cheque is presented for payment, the drawee bank is entitled to demand any further information regarding the truncated cheque from the bank holding the physical cheque in case of any reasonable suspicion about the genuineness of the apparent tenor of instrument, and if the suspicion is that of any fraud, forgery, tampering or destruction of the instrument, it is entitled to further demand the presentment of the physical cheque itself for verification. The cheque so demanded will be retained by the drawee bank if the payment is made accordingly”.

However, for operational reasons, the banks requiring physical instruments may return the item through the appropriate return clearing with the return reason code - 39 or 40, as the case may be. The presenting banks will re-present such instruments with document type ‘C’ (Paper to follow). For details on exchange of instruments please refer section 3.24.

6.10 Along with the inward data / image files containing the appropriate flags for “paper to follow” instruments, a separate report as a part of Branch-wise Clearing Report having details of such P2F instruments, will be received at the drawee bank CHIs.

The drawee bank would be entitled to lodge return in the CH, if the instrument in the “paper to follow” mode has not been delivered within the stipulated time, as mentioned in para 3.24. In case a “Paper to Follow” item gets returned due to reason - “Paper not Received”, the flag would be removed automatically by the system. However, as mentioned in para 6.6, physical instruments will have to be returned in case the same have been received by the bank, under “Paper to Follow” type.

6.11 Internal Control

While handling the inward clearing, the banks should keep into account the feature / functionality of ‘duplicate MICR’ checking, as mentioned in detail in para 6.2 above.

The banks would also need to reconcile / track the receipt of paper in case of 'Paper to Follow' model, as mentioned in detail in para 3.24 earlier.

In addition to the inward instruments drawn on branches of a bank, the reports generated by the CH would contain the summary position of the total number of instruments and the total value thereof. After the processing of inward clearing, branches should verify the inward clearing figures branch-wise.

6.12 Reconciliation of Clearing Differences

In CTS Clearing the images and data will be received together in the same envelope and hence the possibility of a bank being debited without receiving an image shall not normally arise. In the case of a bank being debited with the cheque image of another bank (on account of data entry error or so) the same should be returned to the presenting bank with appropriate return reason code.

In case of a cheque listed for a value different from the actual value of the cheque (on account of data entry error), the cheque should be passed, if otherwise in order, and debited to the customer's account for the actual value of the cheque and difference between the actual amount and listed amount should be sorted out with the presenting bank. An instrument shall not be rejected only for the reason of wrong encoding / listing of the amount. Concerned Banks need to settle such difference outside CH arrangement.

Chapter VII

Special Processing at Clearing House (CH)

7.1 Session Extension

Under exceptional circumstances, the CH may use the 'session extension' feature resulting in extension of the clearing length for that session. Under exceptional circumstances, the value date may also be changed i.e., the day on which banks' account with settlement bank will be operated. Such extensions shall be passed on to the CHIs along with the posting file and no separate extension files will be generated.

7.2 Regional Holiday

Regional holiday shall be handled using holiday marking & blockage facility (covered in detail in para 4.13) and in case uniform holidays will be defined for CTS on the lines of National Systems Like RTGS, the functionalities will be modified appropriately on due notification.

7.3 Return by CH

Under special circumstances, the CH may return items to the presenting bank before the final settlement for the session is generated. Such returns are called "pre-settlement returns".

7.4 Bank Exclusion

Under exceptional circumstances, the CH may exclude a bank from settlement. The bank exclusion may be of three types - All, Debit Only, Credit Only. In 'exclude All', all items presented by and drawn on the bank (for which exclusion is being done) are excluded from the settlement and returned. In 'Debit Only exclusion', all the items drawn on the bank (for which exclusion is being done) will be excluded from the settlement and returned. In 'Credit Only exclusion', all the items presented by the bank (for which exclusion is being done) will be excluded from the settlement and returned.

Exclusion shall generate RF (Return files) for all the presenting banks with reason code 'bank excluded by CH'.

7.5 Different Status of CHI / Bank

Suspended: CH shall change the status of a bank from 'in clearing' to 'suspended' under exceptional circumstances like moratorium or unwinding, etc. In such a scenario, the suspended bank shall not be able to participate in any clearing. But banks may return and seek extension on items presented by the suspended bank in the suspended period.

Not in Clearing: CH shall put a bank in 'not clearing' mode when a bank does not participate in clearing. Once set as 'not clearing' the bank cannot make or receive any presentations during the 'not clearing' period. Other banks also cannot return and seek extension on items presented on / by the bank.

7.6 Default Handling

The CH shall perform default handling as per RBI's directive on Settlement and Default Handling Procedures in Multilateral and Deferred Net Settlement Systems, vide, Circular dated 29th September 2010 ref No. RBI/2010-2011/218_DPSS.CO.CHD.No.695 / 03.01.03 / 2010-2011 .

Chapter VIII

Dispute Resolution Mechanism

As per the RBI directive on Dispute Resolution Mechanism issued under the Payment and Settlement Systems Act, 2007 (PSS Act), vide, Circular dated 24th September 2010 (ref no. [RBI/2010-2011/213 DPSS.CO.CHD.No.654 / 03.01.03 / 2010-2011](#)).

- a. "Panel for Resolution of Disputes" (PRD) consisting of five members - four member banks from the Steering Committee of the Brihan-Mumbai Bankers' Clearing House and the President of the Clearing House will be formed - to look into all the clearing-related disputes.
- b. The PRD shall be chaired by the President of the Clearing House.
- c. In case of specific disputes involving system participants (member banks) that are members of the PRD, the members concerned shall be replaced by other system participants for the limited purpose of looking into the specific dispute.
- d. The PRD shall dispose of the dispute within 15 working days of submitting the dispute.
- e. If any of the aggrieved parties to the dispute are not satisfied with the decision of the PRD, the dispute shall be referred to the Appellate Authority at the Reserve Bank of India who shall be the Officer-in-Charge of the Department of Payment and Settlement Systems at the Central Office of the Reserve Bank of India as provided under Sub-section (3) of Section 24 of the PSS Act.
- f. The Appellate Authority shall dispose of the appeal within 15 working days of submitting the appeal.
- g. Any dispute between the member banks and the Clearing House as provided under Sub-section (3) of Section 24 of the PSS Act, shall be referred to the Reserve Bank of India as indicated above. The dispute shall be disposed of within 15 working days of submitting the dispute.

- h. In case of disputes where the Reserve Bank of India is an involved party (either as a system participant or as a system provider), the dispute shall be referred to the Central Government which will authorise an officer not below the rank of Joint Secretary for settlement of the dispute and the decision of such officer shall be final and binding on all parties.

Legal status for Cheque Truncation

Legal status for Cheque Truncation derives from the amendments that were made to the Negotiable Instruments Act, 1881. The following are the relevant clauses of the amended NI Act -

Section 6

‘6. “Cheque” - A “cheque” is a bill of exchange drawn on a specified banker and not expressed to be payable otherwise than on demand and it includes the electronic image of a truncated cheque and a cheque in the electronic form.

Explanation I. - For the purposes of this section, the expression -

(a) “a cheque in the electronic form” means a cheque which contains the exact mirror image of a paper cheque, and is generated, written and signed in a secure system ensuring the minimum safety standards with the use of digital signature (with or without biometrics signature) and asymmetric crypto system;

(b) “a truncated cheque” means a cheque which is truncated during the course of a clearing cycle, either by the clearing house or by the bank whether paying or receiving payment, immediately on generation of an electronic image for transmission, substituting the further physical movement of the cheque in writing.

Explanation II - For the purposes of this section, the expression “clearing house” means the clearing house managed by the Reserve Bank of India or a clearing house recognised as such by the Reserve Bank of India.’

Section 64

Amendment of section 64 - Section 64 of the principal Act shall be re-numbered as sub-section (1) thereof, and after sub-section (1) as so re-numbered, the following sub-section shall be inserted, namely:-

“(2) Notwithstanding anything contained in section 6, where an electronic image of a truncated cheque is presented for payment, the drawee bank is entitled to demand any further information regarding the truncated cheque from the bank holding the truncated cheque in case of any reasonable suspicion about the genuineness of the apparent tenor of instrument, and if the suspicion is that of any fraud, forgery, tampering or destruction of the

instrument, it is entitled to further demand the presentment of the truncated cheque itself for verification:

Provided that the truncated cheque so demanded by the drawee bank shall be retained by it, if the payment is made accordingly.”.

Section 81

Amendment of section 81 - Section 81 of the principal Act shall be re-numbered as sub-section (1) thereof, and after sub-section (1) as so re-numbered, the following sub-sections shall be inserted, namely:-

“(2) Where the cheque is an electronic image of a truncated cheque, even after the payment the banker who received the payment shall be entitled to retain the truncated cheque.

(3) A certificate issued on the foot of the printout of the electronic image of a truncated cheque by the banker who paid the instrument, shall be *prima facie* proof of such payment.”.

Section 89

Amendment of section 89 - Section 89 of the principal Act shall be re-numbered as sub-section (1) thereof, and after sub-section (1) as so re-numbered, the following sub-sections shall be inserted, namely:-

“(2) Where the cheque is an electronic image of a truncated cheque, any difference in apparent tenor of such electronic image and the truncated cheque shall be a material alteration and it shall be the duty of the bank or the clearing house, as the case may be, to ensure the exactness of the apparent tenor of electronic image of the truncated cheque while truncating and transmitting the image.

(3) Any bank or a clearing house which receives a transmitted electronic image of a truncated cheque, shall verify from the party who transmitted the image to it, that the image so transmitted to it and received by it, is exactly the same.”

Section 131

Amendment of section 131 - In section 131 of the principal Act, *Explanation* shall be re-numbered as *Explanation I* thereof, and after *Explanation I* as so re-numbered, the following *Explanation* shall be inserted, namely:-

*“Explanation II. - It shall be the duty of the banker who receives payment based on an electronic image of a truncated cheque held with him, to verify the *prima facie* genuineness of the cheque to be truncated and any fraud, forgery or tampering apparent on the face of the instrument that can be verified with due diligence and ordinary care.”.*

All the other related laws including the Bankers' Book Evidence Act and the IT Act have been amended along with the Negotiable Instruments Act to support the cheque truncation process viz. enabling the banker to pay or reject the images of the cheques in lieu of the physical paper.

Special Crossing

Special Crossing Stamp and CLEARED Stamp

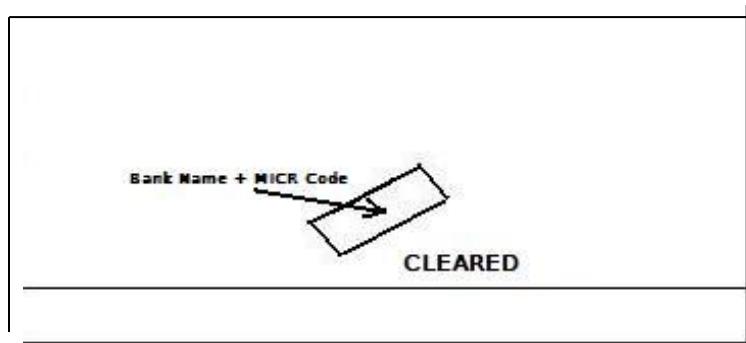
(i) Dimension of Special Crossing Stamp

Two parallel lines of length up to 2 inches at a distance of 1/2 inch in between them. The name of the bank and MICR Code of the branch to be incorporated in the enclosed space.

(ii) Position of Special Crossing Stamp

Preferably at the lower middle portion with a slanting of 60 degrees to the base for Special Crossing Stamp. And horizontally just above MICR line at the lower middle portion for **CLEARED** Stamp.

(iii) Suggested specimen of Special Crossing Stamp and CLEARED Stamp



(iv) Additional Safeguard

The crossing stamp should be affixed in such a manner that to the extent possible it does not deface any material information such as the name of the payee, 'A/C payee' crossing, etc., made by the customer.

Annexure III

Return Reason Codes

<u>Code No.</u>	<u>Reason for Return</u>
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(01-03) Funds

- 01 Funds insufficient
- 02 Exceeds arrangement
- 03 Effects not cleared, present again.

(04-09) Reference to Drawer

- 04 Refer to drawer
- 05 Kindly contact Drawer/ Drawee Bank and please present again

(10-19) Signature

- 10 Drawer's signature incomplete
- 11 Drawer's signature illegible
- 12 Drawer's signature differs
- 13 Drawer's signature required
- 14 Drawer's signature not as per mandate
- 15 Drawer's signature to operate account not received
- 16 Drawer's authority to operate account not received
- 17 Alteration require drawer's authentication

(20-29) Stop Payment

- 20 Payment stopped by drawer
- 21 Payment stopped by attachment order
- 22 Payment stopped by court order
- 23 Withdrawal stopped owing to death of account holder
- 24 Withdrawal stopped owing to lunacy of account holder
- 25 Withdrawal stopped owing to insolvency of account holder

(30-49) Instrument

- 30 Instrument post dated
- 31 Instrument out dated / stale
- 32 Instrument undated / without proper date
- 33 *Instrument mutilated; requires Bank's guarantee*
- 34 Cheque irregularly drawn / **amount in words and figures differ**
- 35 *Clearing House stamp / date required*
- 36 *Wrongly delivered / Not drawn on us*
- 37 Present in proper zone
- 38 *Instrument contains extraneous matter*
- 39 Image not clear, present again with paper
- 40 Present with document
- 41 Item listed twice

42 Paper not received

(50-59) Account

- 50 Account closed
- 51 Account transferred to another branch
- 52 No such account
- 53 Title of account required
- 54 Title of account wrong / incomplete
- 55 Account blocked (situation covered in 21-25)

(60-69) Crossing / Endorsement

- 60 Crossed to two banks
- 61 Crossing stamp not cancelled
- 62 Clearing stamp not cancelled
- 63 Instrument specially crossed to another bank
- 64 Amount in protective crossing incorrect
- 65 Amount in protective crossing required/ illegible
- 66 Payee's endorsement required
- 67 Payee's endorsement irregular / requires collecting bank's confirmation
- 68 Endorsement by mark / thumb impression requires attestation by Magistrate with seal.

(70-79) RBI / Government

- 69 Advice not received
- 70 Amount / Name differs on advice
- 71 Drawee bank's funds with sponsor bank insufficient
- 72 Payee's separate discharge to bank required
- 73 Not payable till 1st proximo
- 74 Pay order / cheque requires counter signature
- 75 Required information not legible/ correct

(80-99) Miscellaneous

- 80 Bank's certificate ambiguous / incomplete / required
- 81 Draft lost by issuing office / confirmation required from issuing office
- 82 Bank/ Branch blocked
- 83 Digital Certificate Validation failure
- 84 Other reason- connectivity failure
- 85 Alterations on Instrument - Other than "Date" field (Alteration/correction on instruments are prohibited under CTS)
- 86 Fake/Forged/Stolen-draft/ cheque /cash order /interest warrant/dividend warrant
- 87 'Payee's a/c credited-Stamp required
- 88 Other reasons
- 92 Bank Excluded

Rescheduling of items

Different cases of handling items not attached to session are as under -

Session is closed when item reaches the CHI from capture system

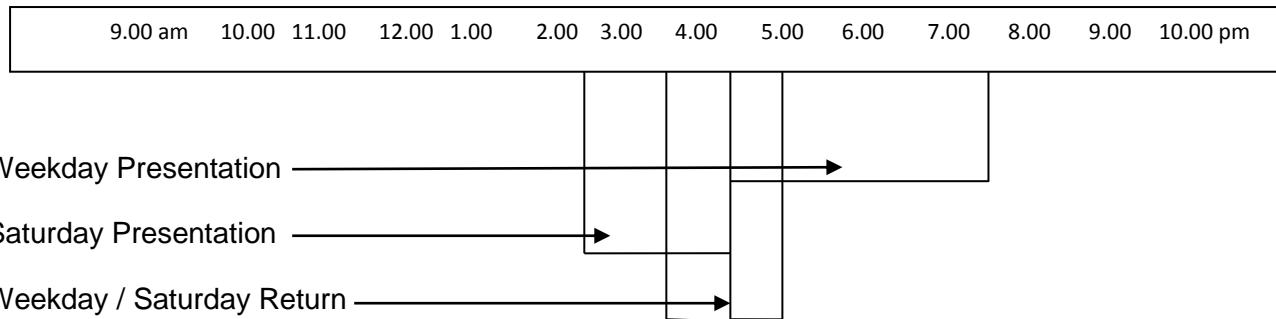
Transaction with one Clearing Type came to the Presenting Bank CHI from the capture system. No Session was open for that Clearing Type. The transaction shall have the following status on CHI “Awaiting Session”. The transaction shall reside in the CHI and will automatically get attached to next available clearing session with same Clearing Type. In case the bank wants to present the item/s in another session (with a different clearing type) and if the item satisfies requirement of that Clearing Type, the operator shall have to delete the item manually. Once the item is deleted at the CHI, an Auto Response File gets generated and shall be available to Capture for Pull. The Capture system of the bank shall then have to import the Response File and Re-Scan the instrument, change the endorsement and re-submit the transaction with the other Clearing Type.

Session is closed when item reaches the CH from CHI

CH shall reject the bundle and send it back to Presenting Bank CHI. In such a situation, the CHI will need to un-build the exchange file, and reattach to a new session. The bank may take appropriate action as explained in para above.

Annexure V

Illustrative time-line drawing of the clearing cycle for CTS in Brihan-Mumbai Bankers' Clearing House (BBCH)



Weekdays

Presentation: **1630-1930 hrs**

Return: **1630-1700 hrs next working day**

Saturdays

Presentation: **1430-1630 hrs**

Return: **1530-1600 hrs**

Note: Paper to follow (P2F) documents to be dropped in the Clearing House -

Cut off time: **2030 hrs** on weekdays & **1730 hrs** on Saturday

Droppings in the boxes / Physical Exchanges of P2F to be regulated under supervision by NPCI

- The timeline is illustrative in nature. The actual timelines will be as prescribed by the Clearing House.

RBI Circular on Dispute Resolution Mechanism

RBI/2010-11/213

DPSS.CO.CHD.No.654/ 03.01.03 / 2010-2011 September 24, 2010

The Chairman and Managing Director / Chief Executive Officer
System Providers and System Participants of All Authorised Payment Systems

Madam / Dear Sir

Dispute Resolution Mechanism under the Payment and Settlement Systems Act, 2007

References are being received from system providers and system participants of payment systems seeking clarity, scope and uniformity while dealing with clearing and settlement-related disputes in various payment systems. Speedy and timely resolution of disputes is required for ensuring smooth conduct of payment system operations, providing the requisite authority to the system provider, fixing accountability for failure to adhere to expected discipline, penalising disruptive behaviour, etc. The absence of a structured and formal dispute redressal framework acts as a hindrance in the timely resolution of disputes between system participants, between system participants and the system provider, between the system providers, etc., apart from lacking necessary requirements of transparency and uniformity in such situations.

2. Enactment of the Payment and Settlement Systems Act, 2007 (PSS Act) provides the legal backing for putting in place a formal dispute resolution framework. A Dispute Resolution Mechanism has accordingly been drawn up (enclosed) for adherence by system providers and system participants of all Payment Systems authorised to operate in the country.
3. Scope of the Dispute Resolution Mechanism will generally be limited to interpretation, scrutiny and resolution of disputes within the ambit of rules, regulations, operational and procedural guidelines relating to the payment products, various instructions issued by the system providers, instructions and directions issued by RBI, etc., from time to time.
4. Use of the mechanism will not be resorted to deal with aspects relating to acts of system participants (or providers) that are *prima facie* fraudulent or are internal to their operations or outside the payment and settlement system infrastructure.
5. The Dispute Resolution Mechanism will also not cover disputes between system participants and their customers (ultimate users), between members of the payment systems and their sub-members or between sub-members themselves.
6. These instructions are being issued under the powers conferred on the Reserve Bank of India by the PSS Act (Act 51 of 2007). All Authorised Payment System Providers are hereby directed to put in place the Dispute Resolution Mechanism within three months from the date of this circular.

Yours faithfully

(G Padmanabhan)
Chief General Manager

Encl.: Dispute Resolution Mechanism

Dated September 24, 2010

Dispute Resolution Mechanism

The Dispute Resolution Mechanism for all payment systems, in line with the provisions of the Payment and Settlement Systems Act, 2007 (PSS Act), is advised as under –

1. For all Clearing House-related activities, including paper (cheques) and retail electronic (ECS) payment products -

- a. All Clearing Houses shall constitute a “Panel for Resolution of Disputes” (PRD) consisting of five members - four members (system participants) from the Standing Committee of the Clearing House and the President of the Clearing House - to look into all the clearing-related disputes. The four system participants shall be different from the system provider (bank managing the Clearing House).
- b. The PRD shall be chaired by the President of the Clearing House.
- c. In case of specific disputes involving system participants that are members of the PRD, the members concerned shall be replaced by other system participants for the limited purpose of looking into the specific dispute.
- d. The PRD shall dispose of the dispute within 15 working days of submitting the dispute.
- e. At Clearing Houses where there are fewer members (system participants), five or less in all, including the system provider, and / or where, by virtue of (c) above, the number of members in the PRD becomes less than five, clearing-related disputes between system participants may be submitted voluntarily (by the concerned system participants) for arbitration under The Arbitration and Conciliation Act, 1996.
- f. If any of the aggrieved parties to the dispute are not satisfied with the decision of the PRD, the dispute shall be referred to the Appellate Authority at the Reserve Bank of India, as provided under Sub-section (3) of Section 24 of the PSS Act. The reference shall be to the Regional Office of the Reserve Bank of India (RBI) having administrative control over the activities of the Clearing House concerned. Such references will be disposed of by an officer not below the rank of a Deputy General Manager as may be specially authorised in this behalf by the concerned Regional Office of Reserve Bank of India. With respect to RBI managed clearing centres at the four metro locations, the Officer-in-Charge of Department of Payment and Settlement Systems at the Central Office of the Reserve Bank of India shall be the Appellate Authority for any aggrieved party to approach if not satisfied with the decision of the Panel.
- g. The Appellate Authority shall dispose of the appeal within 15 working days of submitting the appeal.
- h. Any dispute between the system participants and system provider or between the system providers, as provided under Sub-section (3) of Section 24 of the PSS Act, shall be referred to the Reserve Bank of India as indicated above. The dispute shall be disposed of within 15 working days of submitting the dispute.
- i. In case of disputes where the Reserve Bank of India is an involved party (either as a system participant or as a system provider), the dispute shall be referred to the Central Government which will authorise an officer not below the rank of Joint Secretary for settlement of the dispute and the decision of such officer shall be final and binding on all parties.

2. **For all products that are national in character viz. National Electronic Clearing Service (NECS), National Electronic Funds Transfer (NEFT) and Real Time Gross Settlement (RTGS) system –**
 - a. The PRD as highlighted at 1(a) above shall consist of members from the Steering Committee (or Standing Committee as applicable) and the Chairman of the Steering Committee (or Standing Committee as applicable) shall be the Chairman of the PRD. The process highlighted at 1(c) above shall also be followed.
 - b. The PRD shall dispose of the dispute within 15 working days of submitting the dispute.
 - c. If any of the aggrieved parties to the dispute are not satisfied with the decision of the PRD, the dispute shall be referred to the Appellate Authority at the Reserve Bank of India, as provided under Sub-section (3) of Section 24 of the PSS Act. The reference to the Reserve Bank shall be to the Department of Payment and Settlement Systems, Central Office of the Reserve Bank of India. The Officer-in-Charge of the Department shall be the Appellate Authority, for any aggrieved party to approach if not satisfied with the decision of the Panel.
 - d. The Appellate Authority shall dispose of the appeal within 15 working days of submitting the appeal.
 - e. In case of disputes where the Reserve Bank of India is an involved party (either as a system participant or as a system provider), the dispute shall be referred to the Central Government which will authorise an officer not below the rank of Joint Secretary for settlement of the dispute and the decision of such officer shall be final and binding on all parties.
3. **For all other payment systems (other than those operated by RBI) like CCIL, NPCI, ATM networks, cross border money transfers, cards, etc.**
 - a. The PRD as highlighted at 1(a) above shall consist of members from the Steering / Standing / Users / Members Committee (as applicable) and the Chairman of the Committee (as applicable) shall be the Chairman of the PRD. The process highlighted at 1(c) above shall also be followed.
 - b. In case there is no provision for Steering / Standing / Users / Members Committee, the PRD shall consist of five members - four system participants and the payment system provider. The payment system provider shall be the chairman of the PRD. The tenure of membership of the members in the PRD shall be one year.
 - c. The PRD shall dispose of the dispute within 15 working days of submitting the dispute.
 - d. If any of the aggrieved parties to the dispute are not satisfied with the decision of the PRD, the dispute shall be referred to the Appellate Authority at the Reserve Bank of India, as provided under Sub-section (3) of Section 24 of the PSS Act. The reference shall be to the Department of Payment and Settlement Systems, Central Office of the Reserve Bank of India. The Officer-in-Charge of the Department shall be the Appellate Authority, for any aggrieved party to approach if not satisfied with the decision of the Panel.
 - e. The Appellate Authority shall dispose of the appeal within 15 working days of submitting the appeal.
 - f. Any dispute between the system participants and system provider or between the system providers, as provided under Sub-section (3) of Section 24 of the PSS Act,

shall be referred to the Reserve Bank of India as indicated above. The dispute shall be disposed of within 15 working days of submitting the dispute.

g. In case of disputes where the Reserve Bank of India is an involved party, the dispute shall be referred to the Central Government which may authorise an officer not below the rank of Joint Secretary for settlement of the dispute and the decision of such officer shall be final and binding on all parties.

4. Enforcement of decisions of the PRD

The PRD shall stipulate the period within which the order of the PRD is to be complied with by the system providers / system participants concerned. In case of non-compliance, the aggrieved party can approach the Appellate Authority for redressal. Non-compliance of the order of the Appellate Authority would attract the penalty prescribed under Sub-section (6) of Section 26 of the PSS Act.

However, in cases where any party aggrieved by the order of the PRD approaches the Appellate Authority for review, the order passed by the PRD would be held in abeyance. It shall, however, be appropriate for the PRD to decide levy of the refund / compensation and for such amounts to be held in an interim account or in trust, until disposal of the appeal by the Appellate Authority, only after which shall the amount be accordingly appropriated.

(Note: The term system participant has been used interchangeably with the term member banks, member of payment networks / systems. System provider means the bank operating / managing the Clearing House or entity operating the payment system).

RBI Circular on Settlement & Default Handling Procedures

RBI/2010-11/218

DPSS.CO.CHD.No. 695 / 03.01.03 / 2010-2011

September 29, 2010

The Chairman and Managing Director / Chief Executive Officer
Banks and Authorised Payment Systems

Madam / Dear Sir

Directive on Settlement and Default Handling Procedures in Multilateral and Deferred Net Settlement Systems under the Payment and Settlement Systems Act, 2007

A firm legal basis provides certainty and predictability which is important for the smooth functioning of payment systems. The systems and procedures in place need to have a legal basis, especially the method of determining settlement obligations of the participants and the point at which the settlement of obligations is deemed final and irrevocable. It is essential for all multilateral and deferred net settlement systems (both paper based and electronic) to have legal certainty for netting and settlement arrangements since there is a time gap between clearing (or processing) and settlement.

The Payment and Settlement Systems Act, 2007 (the PSS Act) and Regulations framed thereunder, has provided a firm legal basis for the process of netting and settlement finality. To amplify this, it has been decided to issue a directive on Settlement and Default Handling Procedures (enclosed) for compliance by all payment system providers and system participants covering all multilateral and deferred net settlement systems authorised by the Reserve Bank of India. This covers all the Bankers' Clearing Houses managed by various banks across the country.

Amendments to the Procedural Guidelines are being effected to reflect the changes necessitated by this directive.

These instructions are being issued under the powers conferred on the Reserve Bank of India by the PSS Act (Act 51 of 2007).

Yours faithfully

(G Padmanabhan)
Chief General Manager

Encl.: Directive on Settlement and Default Handling Procedures in Multilateral and Deferred Net Settlement Systems

Enclosure to Circular DPSS.CO.CHD.No. 695 / 03.01.03 / 2010-2011
Dated September 29, 2010

**Directive on Settlement and Default Handling Procedures
In Multilateral and Deferred Net Settlement Systems**
(Issued under section 10(2) of the Payment and Settlement Systems Act, 2007)

1. Introduction

- 1.1.** Multilateral and deferred net settlement systems (like Cheques, ECS or NEFT) are critical payment system components handling substantial volumes and are popular among customers (because of convenience) and bankers (because of lower liquidity requirements). Netting also benefits the regulators, by virtue of reducing the size of credit and liquidity exposure of participant banks, thereby leading to containment of systemic risk.
- 1.2.** It is essential for all such net settlement systems to have legal certainty for netting and settlement arrangements. It is also crucial for the transactions settled through such a system to have finality encompassing the relevant statutory prescriptions.
- 1.3.** Finality, till recently, was achieved by way of adoption of Uniform Regulations and Rules for Bankers' Clearing Houses (URRBCH) and bilateral agreements entered into by the system providers with the system participants.
- 1.4.** With the coming into force of the Payment & Settlement Systems Act, 2007 (the Act) and the framing of Regulations there under, the process of netting has got statutory recognition. Section 23 of the Act, provides for finality and irrevocability of settlement effected in accordance with such procedure as soon as the payment obligation, as a result of such settlement, is determined irrespective of whether or not such obligation is actually paid or not.
- 1.5.** To amplify the aspect of finality of settlement and secure the multilateral and deferred net settlement systems with a default handling procedure, it is considered necessary to issue a directive on settlement and default handling procedures. Apart from clarifying the finality of settlement aspects, the directive will also bring in transparency in the default handling procedures and uniformity in default handling procedures across all the multilateral and deferred net settlement systems approved by the Reserve Bank of India (the Bank).
- 1.6.** The directive also intends to provide adequate protection from settlement risk in multilateral and deferred net settlement systems, as also ensure compliance with international minimum standards for netting schemes.
- 1.7.** This directive on settlement and default handling procedures in multilateral and deferred net settlement systems is being issued in exercise of the powers conferred on the Bank by section 10(2), read with section 23 of the Act.

2. Definitions

In this Directive, unless the context otherwise require,

- 2.1.** “Clearing house” means a collective entity of member banks for speedy and economic collection and clearance of cheques or electronic instructions, which is governed by the URRBCH / Procedural Guidelines issued by the Bank.
- 2.2.** “Recalculation” means a default handling mechanism in respect of payment obligations that are not settled after their record in the books of the settlement bank. In case of resort to recalculation all dues to and obligations of the defaulting bank will be reversed by the Clearing House (on a request from the settlement bank) as if the defaulting bank did not participate in clearing.
- 2.3.** “Settlement bank” means the bank which maintains the settlement accounts of all the member banks for settlement of clearing and / or other obligations.
- 2.4.** Other words and expressions wherever used in this directive shall have the meanings and intent assigned to them in the Act.

3. Procedure for determining settlement in multilateral and deferred net settlement systems

3.1. Determination of settlement

- 3.1.1.** In case of cheque clearing, after closure of the prescribed clearing window, Clearing Houses shall arrive at the net settlement position for each bank. This is based on all the instruments that have been accepted by the Clearing House for arriving at the net settlement position.
- 3.1.2.** At Clearing Houses where processing operations are carried out in the night or at a time when the settlement bank is not open for operations, the time for arriving at the net settlement position shall be one hour before the opening of the settlement bank for daily operations. The time available between the time of completion of processing and the time of arriving at the net settlement position, is to complete the administrative requirements, including ensuring that the net settlement position has been carried out correctly, the figures are accurately posted in the vouchers (to be sent to the settlement bank), the amounts are properly conveyed to the settlement bank and the like.
- 3.1.3.** After opening of the settlement bank, a time window of thirty minutes shall be provided to the settlement bank for posting the settlement position. This time window of thirty minutes would enable banks to fund their accounts with the settlement bank so that the clearing obligations are smoothly settled.

3.1.4. For Clearing Houses where processing operations are carried out when the settlement bank is open for operations, the maximum time window from the time of arriving at the net settlement position by the Clearing House till the time of posting the settlement position in the books of the settlement bank for settlement of clearing obligations shall be thirty minutes.

3.1.5. In case of electronic multilateral and deferred net settlement systems (like Electronic Clearing Service, National Electronic Funds Transfer and the associated variants) where processing operations are carried out in night or at a time when settlement bank is not open for operations, the time for arriving at the net settlement position shall be one hour before the opening of the settlement bank for daily operations (as specified at 3.1.2 above). The clearing obligations will be taken up immediately for settlement as soon as the settlement bank is open for operations. The additional time window of thirty minutes provided at 3.1.3 above will not be available for electronic multilateral and deferred net settlement systems.

3.1.6. In case of electronic multilateral and deferred net settlement systems where processing operations are carried out when settlement bank is open for operations, the net settlement position after being arrived at, will be conveyed immediately to the settlement bank for settlement of clearing obligations. The time window of thirty minutes provided at 3.1.4 above will not be available for electronic multilateral and deferred net settlement systems.

3.1.7. Each Clearing House shall publicise the time at which the net settlement position will be arrived at by the Clearing House and the time at which the settlement will be posted in the books of the settlement bank for settlement. Member banks shall ensure availability of funds in their settlement account at the time of posting of the settlement position in the books of the settlement bank to meet their clearing obligations, and in any case within the time window, if any, stipulated by the settlement bank for settlement of the obligations.

3.2. *Posting of net settlement position in the books of the settlement bank*

3.2.1. The time between arriving at the net settlement position and the time of posting of the net settlement position in the books of the settlement bank shall, however, be as minimum as possible. This is to ensure early completion of settlement.

3.3. Default handling procedure

- 3.3.1.** In case of inability of a member bank to fund its settlement account to meet the net settlement obligations, it is open for the settlement bank to extend clearing overdraft or accommodation (temporary or otherwise) at the request of the member banks so that the clearing obligations are settled in the books of the settlement bank. The process of extending the overdraft shall, however, be a bilateral arrangement between the defaulting member bank and the settlement bank. It shall also be open for a member bank to have bilateral arrangements for liquidity with other member banks as well. Such bilateral arrangements shall have to operate and be completed within the time window (specified at 3.1.3 and 3.1.4), stipulated by the settlement bank for settlement of the obligations.
- 3.3.2.** In case of inability of a member bank to fund its settlement account to meet the clearing obligations, the shortfall in the settlement account shall be dealt with as a default situation and the default handling procedure shall be put into operation.
- 3.3.3.** In case the settlement is guaranteed, the default handling procedure shall involve utilising the margin money, invoking the line of credit extended to the defaulting bank, activating the loss sharing mechanism or any other guaranteed mechanism. Nuances of operationalising the default handling procedure shall be as per the procedural guidelines of the individual multilateral and deferred net settlement systems.
- 3.3.4.** In situations where the settlement is non-guaranteed in nature, the mechanism of recalculation of settlement shall be applied. As part of this procedure, the settlement bank will request the Clearing House (with appropriate consent from the President of the Clearing House) to recalculate the settlement.
- 3.3.5.** As part of the process of recalculating the settlement, the Clearing House shall 'exclude' all the transactions (both receivables and payables) of the defaulting member bank as if the said bank did not participate in clearing.
- 3.3.6.** The recalculated position shall be immediately conveyed to the settlement bank and posted in the books of the settlement bank.
- 3.3.7.** In case any other member bank is unable to meet its clearing obligations consequent to recalculating of the settlement, the steps at 3.3.3, 3.3.4 and 3.3.5 above will be repeated.
- 3.3.8.** The process of recalculation of settlement as above is considered part of the settlement procedure.
- 3.3.9.** In case of default and consequent recalculation of settlement, if insolvency arises during the interregnum, the immediately preceding settlement reached shall be treated as final and binding.

4. Others

- 4.1.** The series of steps outlined at Para 3 above shall have to be fully complied with until the entire process of settlement from the time of arriving at the net settlement position by the Clearing House till the time the settlement obligations of member banks in their accounts with the settlement bank are fully met has been completed.
- 4.2.** If it is decided by the Clearing House to extend the clearing settlement for any reason, the Clearing House shall announce at the time of acceptance of instruments / instructions for settlement, the time up to which extension has been considered and the time at which the net settlement position is intended to be arrived at and communicated to the settlement bank.
- 4.3.** Individual Clearing Houses may prescribe with the approval of the President of the Clearing House other measures such as net debit caps, presentation limits, etc., for mitigating risk of default by member banks. Such measures shall in no way impact the process of settlement as prescribed at Para 3 above.

5. Application of the directive

- 5.1.** The directive shall be applicable to all multilateral and deferred net settlement systems like Cheques (at MICR-Cheque Processing Centres and other Clearing Houses, including Cheque Truncation System), Electronic Clearing Service (Debit, Credit and related equivalents, if any), National Electronic Funds Transfer system and the like.
- 5.2.** With immediate effect, the directive shall be applicable and binding on all Clearing Houses, system providers, member banks of Clearing Houses, members of payment systems operated by the system providers and the banks maintaining settlement accounts of member banks. The directive shall be applicable to other payment and settlement products as determined by the Reserve Bank of India from time to time.
- 5.3.** URRBCH and Procedural Guidelines as they exist for various multilateral and deferred net settlement systems shall, wherever a reference is contained, also mean and include the directive on settlement and default handling procedures contained herein.

Annexure VIII

Indicative Checklist for Presenting Banks to Verify under CTS

Serial No.	Description	Yes/No
1	Drawee bank cheque / instrument participation under BBCH	
2	Speed Clearing participation	
3	Date of Instrument (If processing Post Dated Cheques-PDC should not payable later than 7 days)	
4	Alteration on other than date of the cheque (Prohibited under CTS)	
5	Amount in words-figures (CAR-LAR) is matching	
6	Banks' Logo in Ultra Violet (UV) ink as a security feature	
7	Checking of CTS INDIA watermark for CTS-2010 complaint cheque	
8	Checking of CTS-2010 printed along with Printers Details (Printed vertically at extreme right side of cheque)	
9	KYC checking for High Value Transactions, Inactive account transactions and abnormal pattern of transactions.	
10	Any other material or chemical alteration on the cheque / instrument.	
11	Use of Microlettering on the cheque	