



**NCHL-ECC System
(Electronic Cheque Clearing)**

**Frequently Asked Questions
For
BANKs/ FIs**

Version 1.0

July 2011

1. What is cheque truncation system in the context of electronic cheque clearing?

In the cheque truncation system, the physical movement of the cheques will be truncated or stopped at some point in the clearing cycle, either at the level of the presenting bank or at the clearing house or at the paying bank.

In the context of NCHL-ECC System being implemented in Nepal, cheques would be truncated at the level of the presenting bank. In other words, the cheque will not physically travel to the clearing house or to the paying branch as it currently does.

2. Will there be any movement of physical cheques?

No, there will not be any physical movement of cheques. Physical cheques will be truncated at the presenting bank (Bank of First Deposit). The presenting bank has the responsibility to archive the physical cheque for a minimum period of 7 years as prescribed by Nepal Rastra Bank (NRB). In case of need, the physical instrument could be retrieved from the presenting bank through the paying bank. Presenting bank will scan the cheque and the image will be transferred to the paying bank. All necessary processing will be done based on the cheque image.

3. How then would clearing take place and the cheques passed on?

The presenting bank would send an electronic image of the cheque along with the relevant information like the MICR code line data, date of presentation, presenting bank, etc., to the clearing house. The clearing house does some verification and would forward the images along with data files to the drawee/ paying bank. The paying bank branch would take the 'Pay' or 'No-Pay' decision based on the image of the cheque.

Thus, with implementation of NCHL-ECC System, the need to move the instruments physically across branches would not normally be required.

4. How are the images captured?

The electronic images and MICR data of cheques would be captured using scanners by the presenting bank. Prior to scanning by the presenting bank, all cheques are required to be stamped at the back (right hand side) of the cheque with the details of Presenting Bank Name, Branch Name and Date of Presentment. Each cheque is allowed to be presented twice in case of rejection. Amount field needs to be keyed into the system.

5. How will the system ensure that cheque images are transferred securely between the banks and NCHL?

ECC software has inbuilt data encryption and hashing feature which will guarantee the security of the data transfer. Besides, cheque images are transferred securely between the banks and NCHL by the use of the Public Key Infrastructure (PKI). PKI ensures data authenticity, integrity and non-repudiation, adding strength to the entire system. The cheque image and data sent by the presenting

bank will be affixed by its digital signature and it is secured by using the PKI throughout the cycle covering capture system, the presenting bank, clearing house and the paying bank.

6. What care and precautions are to be taken by banks and their customers to ensure quality images and to avoid frauds?

All cheques need to be image friendly. The customers should preferably use dark colored ink while drawing the instruments. Care should be exercised in the use of rubber stamps, so that it would not interfere with the material portions of the cheque. The date of the cheque, payee's name, amount signature and MICR line data are the basic features which are essential in a cheque. The use of rubber stamps, etc., should not overshadow the clear appearance of these basic features in the image. In order to ensure that all essential elements of a cheque are captured in the image during the scanning process, bank customers also need to exercise appropriate care in this regard.

Banks should also be aware of the major security features added in the new MICR format cheques. They should also be aware of any modification, tempering or writing in the secure bands of the cheques.

7. Will the manual clearing process at NRB still continue after NCHL-ECC System coming into operation?

No, current manual clearing process at NRB will cease to operate once NCHL-ECC system comes into operation.

8. Who will maintain and settle the net clearing position of the banks/FIs at the end of the day?

Maintenance and final settlement of the banks/FIs accounts will still be done by NRB. NCHL will only facilitate to electronically present, clear and process the cheques between the banks and provide the net clearing positions at the end of the day of all the banks to the NRB. NCHL will provide a Net Clearing Position (NCP) file to NRB which will be used to settle the accounts of the banks for the session/ day.

9. How long will it take for a cheque to clearing after NCHL-ECC System comes into operation?

All cheques will be cleared and settled on the same day (T+0) provided they are presented before the cut off time. Cheque presented after the cut off time will be cleared and settled the following day (T+1).

10. What are the benefits to the Banks/ FIs after NCHL-ECC System coming into operation?

Some of the direct benefits to the Banks/ FIs after ECC coming into operation are:

- a. Same day clearing and settlement at NRB with minimum settlement time of (T+0) and maximum of (T+1) irrespective of the geographic location of the bank/branch, which currently takes 1-3 days to 1-2 weeks for outstation cheques.

- b. No need to physically move the cheques from the branches to NRB clearing house. Cheques will be truncated at the presenting bank which would speed up the process of settlement and ultimately alter the clearing cycle.
- c. Better reconciliation and cash management / verification process as banks/FIs can know their net position at any point of time.
- d. Limited cheque movement means saving on transportation and manpower cost.
- e. Possibility of reducing manpower required for transfer and handling of cheques, which is a direct reduction on transaction costs.
- f. Reduces operational risk of cheque losses and cheque related frauds by securing the transmission route.
- g. Operational efficiency will benefit the bottom lines of banks/FIs
- h. NCHL-ECC System service can be extended to the entire country with no geographical dependency.

11. What would be the benefits of NCHL-ECC System to the customers of the banks/ FIs?

- a. Faster clearing cycle.
- b. Beneficiary's account gets credited the same day on which the paying account gets debited.
- c. Better customer service – Elongated customer window.
- d. Elimination of float available to cheque issuing bank customers, as they would tend to lose the advantage of utilizing the funds in their account even after issue of cheque till it reaches the counters of the paying bank branch.
- e. Clearing service by NCHL can be extended to the entire country with no geographical dependency.

12. Will there be any change in the current process of cheque clearing for the customers?

No, there will not be any change for the customers in the way they deposit the cheques and it is processed. But customers need to be aware of the new changes in the cheques standards & its security features, deposit and settlement times.

13. What are the differences between Regular Session and Express Session?

Express Session is a special session of short duration for presentment, response from paying bank and NRB settlement. Express session has 2 hours of window for presentment to final settlement. Regular Session is a one full day clearing cycle where by the settlement happens at 3:30 in the afternoon.

14. What will be the clearing session timings?

Presentment for regular session starts from 14:00 (T-1) and ends at 14:00 (T+0); Respond by paying bank ends at 15:00 (T+0); and settlement at NRB ends at 15:30 (T+0). Presentment for Express Session starts from 10:00 (T+0) and ends at 11:00(T+0); Respond by paying bank ends at 11:30 (T+0); and settlement at NRB ends at 12:00 (T+0). In future multiple express sessions can be introduced in a single day. There will be one express session on Friday also.

There will be special session established for accepting non-standard cheques (current cheques in use) for certain period of time till all banks migrate from non-standard cheques to standard MICR based cheques.

15. Will the current cheques already issued by the Banks/FIs to the customers be supported by NCHL-ECC System?

Yes, the cheques which are currently in use by the Banks/FIs will be supported by NCHL-ECC system. But it will be accepted and honored for next 1 year from the date of operation of NCHL-ECC System only. By that time all Banks/FIs need to migrate from current non-standard cheques to standard cheques (with security features as prescribed by NRB). It may however be noted that the use of non-standard cheque will increase the processing time both at presenting and paying banks as the relative data from the cheques will have to be fed into the system manually. It is therefore advisable for all members banks/FIs to migrate to the standard cheques as quickly as possible.

16. How NCHL-ECC System is being implemented in Nepal?

In Nepal, Nepal Clearing House Ltd (NCHL) is implementing ECC in Kathmandu valley in the first phase, replacing the current NRB Thapathali manual clearing. The movement of physical cheques would be truncated at the presenting bank level and only the cheque images would flow to the paying banks/ branches. The paying bank would receive these images along with the particulars of the MICR code line data, which would be used for payment processing.

Once the system is stabilized in Kathmandu valley, the system will be rolled out within 1 year across Nepal to cater to rest of the Banks/FIs in the country.

17. What are the hardware, network and other pre-requisites for Banks/FIs?

Since NCHL will operate as an Application Service Provider, software required for the participating member banks/FIs will be hosted at NCHL's premise. But the members have to purchase the license to use the software as onetime investment. Other investments at the Banks/FIs end are as follows

- a. Scanner per terminal
- b. Firewall Device
- c. Network connectivity through one/two ISPs. You need to inform NCHL to which ISP you want to connect to (from the list of SUBISU and WLINK), rest will be arranged by NCHL.

You will be provided with necessary login ids (along with digital certificate) as per your request which can be used to access the ECC system from your bank/branch. For detailed hardware pre-requisites and their configurations you can refer to 'Nepal Participants Specifications and Requirements V1.2.doc' and 'NCHL ECC Member Prerequisite Details.doc' available in the project wiki site and NRB website.

18. How is the pricing done for using NCHL-ECC System for Banks/FIs?

Pricing components for using NCHL-ECC System for all banks/ FIs are as follows:

Initial Investment:

1. Software License Cost (Includes ECC software license to use for unlimited number of branches)
2. NCHL Membership Fee (Includes NCHL joining, initial setup, training and support)
3. Network Connectivity & Management Fee (Includes 5 Mbps connectivity and management of the network)
4. Per Login Fee (Includes per login id cost per year, issuance of digital certificate)

From 2nd year onwards:

1. Software AMC (Includes AMC of ECC software)
2. NCHL Membership Renewal Fee (Includes support, new setups)
3. Network Connectivity & Management Fee (Includes 5 Mbps connectivity and management of the network)
4. Per Login Fee (Includes per login id cost per year, renewal of digital certificate)

19. Are there any differences in pricing for Commercial Banks, Development Banks and Finance Companies?

Yes, the major differences are in Initial Software license cost, NCHL Membership Fee, Software AMC and NCHL Membership Renewal Fee.

20. Will there be any transaction fee?

Yes, there are transaction fees for each cheque transacted through NCHL-ECC System. Fees will be applicable for Regular Transaction, Express Transaction, Cheque Return. Amount will be communicated by NCHL from time to time to all participating members.

21. Where can I find additional resources on NCHL-ECC System?

Nepal ECC Rule Book, Nepal ECC Operating Rule and ECC Cheque Standard & Specifications are the guiding documents for NCHL and the participating members, which have been drafted by NCHL and review & approved by NRB. These and other documents related to NCHL-ECC system and project are available in the project wiki site (Confluence) and also in the NRB website.

22. Whom should I contact for further information?

You can contact at:

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