

**Subcommittee on Electronic Transactions Ordinance
(Amendment of Schedule 1) Order 2014**

**Supplementary information in relation to the discussion
at the meeting on 2 January 2015**

This paper provides supplementary information in relation to the discussion at the meeting of Subcommittee on Electronic Transactions Ordinance (Amendment of Schedule 1) Order 2014 held on 2 January 2015.

Item (a) - the comparison between the proposed system for the clearance of e-cheques in Hong Kong and the clearing system used in the United States involving the use of the image files of paper-based cheques

2. Under the proposed e-cheque model to be adopted in Hong Kong, e-cheque will be created, signed, issued, delivered and presented through electronic means. Such an e-cheque model is an “end-to-end” electronic payment instrument without the use of paper or the need of physical delivery or presentment throughout the process.

3. We understand that the operating model adopted in the United States (“the US”), which is commonly known as remote cheque deposit, requires a payer to issue and deliver the paper cheque to a payee. Upon receipt of the paper cheque physically, the payee is allowed to take a scanned image of the paper cheque and present the electronic image to his bank (i.e. the payee bank or commonly known as the collecting bank) through either a mobile application or over the internet, instead of depositing the cheque at a bank branch.

Item (b) - the legal basis under the Clearing and Settlement Systems Ordinance (Cap. 584) requiring the use of the same technical standard to create the image file of the e-cheque by local banks

4. Pursuant to section 4(1) of the Clearing and Settlement Systems Ordinance (“CSSO”), the HKMA has designated HKD, USD, RMB and euro Real-Time Gross Settlement (“RTGS”) systems to settle, among other types of payments, cheques.

5. Section 7(1)(b) of the CSSO specifies that every system operator and settlement institution of a designated system shall ensure that there are operating rules that provide for the system to be operated in accordance with the Ordinance. In addition, section 14 of the Ordinance provides the HKMA as the payment systems regulator with the power to oversee and direct the system operator and settlement institution to amend the operating rules in such manner as the HKMA considers necessary to bring the operating rules into compliance with section 7(1)(b).

6. In this connection, Hong Kong Interbank Clearing Limited (“HKICL”), the system operator of the RTGS systems, has promulgated the Clearing House Rules to govern the formats, standards and manners of payments settled in the RTGS systems. Such rules have to be approved by the HKMA and the settlement institution of the respective RTGS systems. All participating banks of the RTGS systems are obliged to observe the requirements set out therein.

7. For the purpose of e-cheque, HKICL will specify the requirements, including the file format and standard of e-cheque, in the Clearing House Rules.

Item (c) - the legal basis under the Bills of Exchange Ordinance (Cap. 19) justifying the clearing of e-cheques on the next working day

8. Section 73(1) of Bills of Exchange Ordinance states that a cheque is a bill of exchange drawn on a banker payable on demand. The presentment of a cheque by the collecting bank to the paying bank follows the overall framework for bills of exchange. The paying bank is obliged to pay after it has a chance to ascertain the genuineness of cheque (including the written signature of the drawer) and the adequacy of funds in the payer's bank account before paying to the collecting bank on behalf of the payer. Under the normal practice, the paying bank requires the payer to have sufficient funds in the payer's account by the close of play on the date of cheque presentment. Thus good funds can only be made available to the payee on the next business day. Since e-cheque is an electronic counterpart of paper cheque, it is crucial to ensure that the user experience in using e-cheque is similar to the paper cheque. This includes the time needed by banks to clear cheques, and thus, the day on which cheque deposit becomes good fund. Therefore, e-cheque payment will also be effected on the next day of cheque presentment.

Item (d) - the channels for members of the public who were unfamiliar with the use of e-cheques to seek assistance

9. Prior to the launch of the e-cheque service, the HKMA and participating banks will conduct a series of promotional and educational activities geared towards a wide audience. If payees are willing to accept e-cheques, the online centralized presentment portal operated by the HKICL allows payees or other persons appointed by them to deposit e-cheques to the payee's bank account only.

10. Alternatively, payees may always visit any bank branches of a collecting bank and seek assistance from customer service officers in depositing the e-cheque to their bank account through the online centralised presentment portal. They may also call the banking service hotline of the banks concerned for assistance if required. In all circumstances, participating banks will make resources and channels available, including the internet banking, mobile banking, phone banking and bank branches to provide assistance to customers in handling any enquiries and possible operational issues of e-cheques.

11. If any members of the public choose not to accept e-cheques, they should not give consent or their email addresses to the prospective payer, who would need such information to issue e-cheques. As part of the planned education programme, the HKMA and Hong Kong Association of Banks will formulate guidelines and best practices which specify that payers can only issue e-cheques to payees only if the payers have obtained the consent and valid email address from the payees.

Item (e) - the number of Internet banking accounts which were created and in use in the banking system of Hong Kong

12. At the end of June 2014, the number of personal internet banking accounts and business internet banking accounts were 9.1 million and 821,000 respectively. In the first half of 2014, an average of 8.3 million financial transactions amounting to HK\$363 billion were conducted through personal internet banking accounts per month, whereas an average of 5.8 million financial transactions amounting to HK\$5,640 billion were conducted through business internet banking accounts per month.

Item (f) - responses to the issues regarding the Amendment Order raised in the email dated 2 January 2015 from Hon Charles Peter MOK

(1) To cater for different customers' needs, will arrangements be made at bank branch counter, ATM machine and cheque deposit machine to provide additional channels for payees to deposit e-cheques besides the internet platform? If yes, what are the detailed arrangements?

13. E-cheque can only be presented online through an internet banking platform or the online centralized presentment portal. Thus, no enhancement is needed to be made to any ATM machine or cheque deposit machine for e-cheque deposit. Please also refer to our response to item (d) above on the assistance and educational programme to be provided to bank customers.

(2) Will e-cheque carry time stamp, and if yes, what are the measures that will be implemented by the administration to ensure that the time stamp is trustworthy and cannot be tampered?

14. E-cheque will be digitally signed by the payer and certified by the paying bank using the digital certificates issued by the recognized certification authorities under the Electronic Transactions Ordinance. Such digital signatures show both the date and time of an e-cheque. According to the requirements of HKICL, paying banks should use a trustworthy time source (e.g. the time published by the Hong Kong Observatory) to generate the time stamp on e-cheque. Since e-cheque is digitally signed using Public Key Infrastructure ("PKI") technology, based on the current technology, it is not possible to alter any information on the e-cheque, including the time stamp, without being detected. Any attempt to tamper an e-cheque will cause it to become invalid and not presentable to any banks.

(3) *Is it possible for a person aged below 18 to deposit an e-cheque into his/ her bank account? What are the measures that will be implemented to protect a person aged below 18 from the usage of e-cheque? Will banks make reference to the prevailing practice for paper cheque when processing e-cheque deposit for a person aged below 18?*

15. E-cheque is simply an electronic counterpart of paper cheque and will not alter banks' usual practice in dealing with their customers. Banks will continue to follow their guidelines and procedures when processing e-cheque deposit for a person aged below 18.

(4) *Can e-cheque be issued or presented through mobile device in order to enhance the convenience for and the attractiveness to the general public to use?*

16. E-cheque can be issued and presented through mobile devices. It is the discretion of individual banks to determine the scope of the e-cheque service that will be offered on their mobile channel. To facilitate the general public to deposit e-cheque to their bank accounts, HKICL will develop a mobile version and desktop version of the centralized presentment portal, both of which will be launched in December 2015.

(5) *What are the data protection measures of e-cheque?*

17. Similar to paper cheque, e-cheque contains minimal sensitive information and does not require payee to disclose the bank account number to the payer. When sending an e-cheque to a payee, the payer should use a secured channel (e.g. secured email system) and encrypt an e-cheque (e.g. password protected) where necessary before delivery.

(6) Under what circumstances will e-cheque become invalid? How will the system handle invalid e-cheque, returned e-cheque or e-cheque with stop payment instruction?

18. According to the Code of Banking Practice, a cheque which has been issued more than six months is regarded as an out of date (stale) cheque. Similar to the prevailing practice for paper cheque, collecting banks may decline a customer's request to deposit an out of date e-cheque into his/ her bank account. Separately, banks will follow the existing practice when handling returned e-cheque or e-cheque with stop payment instructions.

Hong Kong Monetary Authority
5 January 2015