Principles for Financial Market Infrastructures: Disclosure for RMB CHATS

Responding Institution(s):	Jointly prepared by BOCHK in the capacity of the Clearing Bank for the Renminbi Business in Hong Kong as well as the Settlement Institution of RMB CHATS, and
	HKICL in the capacity of the System Operator of RMB CHATS
Jurisdiction in which the FMI operates:	Hong Kong
Authority overseeing the FMI:	HKMA empowered under the PSSVFO
The date of this disclosure:	23 June 2023
The website on which the disclosure is posted:	BOCHK website
	http://www.bochk.com
	HKICL website
	https://www.hkicl.com.hk
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List of abbreviations used in this Disclosure

Al Authorized Institution

BOCHK Bank of China (Hong Kong) Limited

BCP Business Continuity Plan

CB Clearing Bank CCP Central Counterparty

CCASS Central Clearing and Settlement System

CE Chief Executive
CFO Chief Financial Officer

CHATS Clearing House Automated Transfer System

CHATS Rules Clearing House Rules
CP Clearing Participant

CIPS Cross-border Interbank Payment System

CMU Central Moneymarkets Unit

CNAPS China National Advanced Payment System

CPMI Committee on Payments and Market Infrastructures

CRO Chief Risk Officer

CSSO Clearing and Settlement Systems Ordinance

DvP Delivery versus Payment

EUR Euro

FMIO Financial Market Infrastructure Oversight

FMIs Financial Market Infrastructures

FPS Faster Payment System

FPS Rules Faster Payment System Rules HKAB Hong Kong Association of Banks

HKD Hong Kong Dollar

HKICL Hong Kong Interbank Clearing Limited

HKMA Hong Kong Monetary Authority
INEDs Independent non-executive directors

IOSCO International Organization of Securities Commissions

LBs Licensed Banks
OTC Over-the-counter

OTCC OTC Clearing Hong Kong Limited (CCP for OTC derivatives)

PBOC People's Bank of China Procedures Operating Procedures

PFMI Principles for Financial Market Infrastructures

PSSVFO Payment Systems and Stored Value Facilities Ordinance

PvP Payment versus Payment

RC Risk Committee RMB Renminbi

RMC Risk Management Committee
RLBs Restricted Licence Banks
RPO Retail Payment Oversight
RSS Renminbi Settlement System
Rules CHATS Rules and FPS Rules
RTGS Real Time Gross Settlement

SI Settlement Institution
SP Settlement Participant
SO System Operator
SVFs Stored Value Facilities

SZFSS Shenzhen Financial Settlement System

USD US Dollar

I. Executive summary

- 1. Bank of China (Hong Kong) Limited (BOCHK) was appointed by the People's Bank of China (PBOC) as the Clearing Bank (CB)¹ for Renminbi (RMB) business in Hong Kong in 2003. Specifically, the CB provides clearing and settlement services in relation to RMB business as well as cross-border RMB business between Hong Kong and the Mainland of China. BOCHK was reappointed as the CB for RMB business in Hong Kong by the PBOC in 2006, 2011, 2017 and 2022 respectively.
- 2. RMB CHATS is the interbank payment system in Hong Kong for settling RMB transactions on an RTGS basis. It has been operating smoothly since its launch on 6 March 2006. The settlement institution (SI) of RMB CHATS is BOCHK and the system operator (SO) is Hong Kong Interbank Clearing Limited (HKICL).
- 3. RMB CHATS was designated under the Clearing and Settlement Systems Ordinance (CSSO)² in 2008 and granted a certificate of finality to provide settlement finality for transactions settled in the system. On 13 November 2015, the CSSO was amended and retitled as the Payment Systems and Stored Value Facilities Ordinance (PSSVFO)³. The designation of RMB CHATS and certificate of finality granted under the pre-amended CSSO continue to have effect under the PSSVFO. RMB CHATS is subject to the oversight of the HKMA (via the Financial Market Infrastructure Oversight Team (FMIO Team)).
- 4. Apart from settling large-value interbank payments, RMB CHATS also provides clearing and settlement of small-value retail payments on a multilateral netting basis, and settlement of PvP and DvP transactions via links with other local RTGS systems, the CMU (debt securities settlement system) and CCASS (equities settlement system) in Hong Kong. RMB CHATS is also linked to China's China National Advanced Payment System (CNAPS), Cross-border Interbank Payment System (CIPS) and Shenzhen Financial Settlement System (SZFSS) for RMB cross-border payments between Hong Kong and the Mainland of China. The system features and the turnover statistics are publicly disclosed.
- 5. To further enhance the efficiency of retail payment services, RMB FPS was launched on 17 September 2018⁴ as an extension of RMB CHATS to enable the public to make instant retail fund transfers and payments across different banks or stored

¹ The term "Settlement Institution" (SI) used in the PSSVFO has similar meaning as "Clearing Bank" (CB) and the two terms will be used interchangeably hereafter in this report.

³ The PSSVFO, which came into effect on 13 November 2015, introduces a regulatory regime for stored value facilities and retail payment systems in addition to the existing oversight framework for clearing and settlement systems under the pre-amended CSSO. The empowerment and statutory regime established for the HKMA to designate and oversee clearing and settlement systems remain unchanged.

² The CSSO, which came into effect on 4 November 2004, provides a statutory regime for the HKMA to designate and oversee clearing and settlement systems which are material to the monetary or financial stability of Hong Kong or to the functioning of Hong Kong as an international financial centre. It also empowers the HKMA to issue guidelines to explain its role, policies and requirements in relation to the oversight of systems designated under the CSSO. The purpose of the CSSO is to promote the general safety and efficiency of clearing and settlement systems designated under the Ordinance.

⁴ The FPS was launched on 17 September 2018 for a period of staff pilot run, and it was fully activated on 30 September 2018. Since then the public can make or receive real-time payments through the FPS. The FPS supports the use of phone numbers, email addresses, FPS Identifiers, Hong Kong Identity Card (HKID) number or QR codes for receiving payments in HKD and RMB.

value facilities (SVFs) on a round-the-clock basis. Similar to RMB CHATS, RMB FPS is subject to the oversight of FMIO team of the HKMA under the PSSVFO, which also provides statutory backing to the settlement finality for transactions made through RMB FPS.

- Participation in RMB CHATS and RMB FPS is voluntary. Direct participants 6. (DPs) of RMB CHATS consist of not only local authorized institutions (Als), i.e. licensed banks (LBs), restricted licence banks (RLBs) and deposit-taking companies, but also other local and overseas financial institutions. Each DP shall open and keep a settlement account (which may comprise a CHATS ledger account and an FPS ledger account) with the SI. To promote safe and efficient payment exchange through RMB CHATS, financial institutions other than DPs can choose to join RMB CHATS as global users (GUs), each of which must engage a DP as its settlement service provider to settle its payments on RMB CHATS via its DP's RMB CHATS ledger account. A DP of RMB CHATS can opt to join RMB FPS directly as a settlement participant (SP). To promote healthy competition between banks and non-banks, SVF licensees licensed under the PSSVFO can join RMB FPS as clearing participants (CPs), each of which must engage an RMB FPS SP as its settlement service provider to settle its payments on RMB FPS via its SP's RMB FPS ledger account. RMB CHATS and RMB FPS are not CCP and do not guarantee settlement of payments. DPs and SPs have to ensure that they have adequate liquidity to meet the payment obligations of their own and their GUs or CPs, if any.
- 7. RMB CHATS has a sound risk-management framework for comprehensively managing legal, credit, liquidity, operational and other risks. The risks of operating RMB CHATS are identified, measured, monitored, managed and controlled comprehensively and prudently under a sound risk assessment and management framework of BOCHK.
- 8. To facilitate liquidity management by participants, the SI provides liquidity to participants through fully collateralized intraday repurchase arrangements (intraday repo). A number of liquidity management tools have been built in to RMB CHATS and real-time information is available to facilitate liquidity management by participants. A robust operational risk management framework, supported by appropriate system designs and features, IT policies, procedures and controls, is in place to ensure operational reliability and security. On-site resilience, a hot back up site, together with a second back up site for the FPS and a comprehensive disaster recovery plan which is regularly reviewed and rehearsed, help ensure the critical operations of SI and SO can be resumed in a timely manner under various disruption scenarios.

II. Summary of major changes since the last update of the disclosure

9. This version has been updated with 2022 payment figures.

III. General background on the FMI

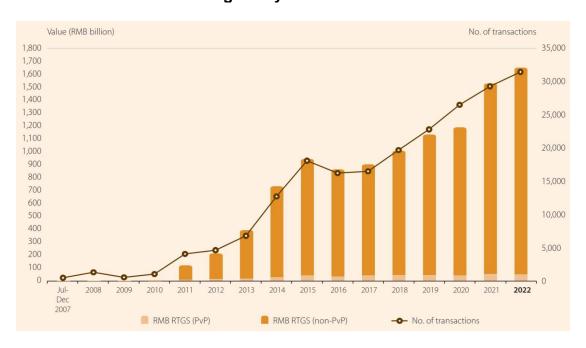
General description of the RMB CHATS and the markets it serves

10. The system was known as the Renminbi Settlement System (RSS) when it first launched operation on 6 March 2006. It was later transformed into a full-fledged RMB real-time gross settlement system, i.e. RMB CHATS, to support the operation of the RMB business in Hong Kong on 18 June 2007.

- 11. RMB CHATS provides a safe and efficient settlement platform for RMB interbank payments. Interbank payments are settled continuously on a gross deal-by-deal basis across the book of BOCHK as long as there are sufficient funds in the settlement accounts of the RMB CHATS participants. Settlements are irrevocable and enjoy immediate finality with the statutory backing of the PSSVFO. To help enhance participants' liquidity management, BOCHK offers intraday repo facility to participants of RMB CHATS and has introduced a number of liquidity management tools to RMB CHATS.
- 12. In addition to settling large-value payments between banks, the system also handles bulk settlement of paper cheques, e-Cheques, stock market and OTC derivatives-related payments, electronic bill payments and other small-value bulk electronic payments, such as electronic point of sale payments, auto-credit and auto-debit transactions (collectively "bulk items"). These bulk items are settled on a multilateral netting basis.
- 13. RMB CHATS also settles transactions that involve the settlement of two linked obligations simultaneously, thus eliminating principal risks arising from the settlement time lag between the two obligations. It supports PvP for RMB/EUR, RMB/USD, and RMB/HKD foreign exchange transactions via the links with the USD, EUR and HKD CHATS in Hong Kong, and DvP for debt and equities transactions via the links with CMU and CCASS respectively. In addition, the CB provides incoming and outgoing RMB cross-border remittance services to participants via the links with the CNAPS, the CIPS and the SZFSS.
- RMB FPS, as an extension of RMB CHATS, operating on a 24x7 basis with full connectivity among banks and SVF accounts on the same platform, enables almost instantaneous fund transfers and retail payments, anytime, anywhere, across banks or SVFs. It supports real-time person-to-person, person-to-business, including bill payments and other merchant payments, and business-to-business payments across banks or SVFs and e-wallet top-up from bank accounts etc. An addressing service is available to link phone number, email address or FPS identifier to an account for receiving funds. FPS also supports the use of HKID number as an account proxy to facilitate institutions' payments to the general public (for example, disbursing salaries). Similar to RMB CHATS, interbank payments are settled continuously on a gross dealby-deal basis across the book of BOCHK as long as there are sufficient funds in the RMB FPS ledger accounts of RMB FPS SPs. Settlements are irrevocable and enjoy immediate finality with the statutory backing of the PSSVFO. For liquidity management, sweeping mechanism is in place in RMB CHATS and RMB FPS to support liquidity transfer between RMB CHATS ledger accounts and RMB FPS ledger accounts of SPs during the CHATS operating hours.
- 15. There is no loss-sharing arrangement in RMB CHATS. In other words, in case of a failed settlement, the defaulting party will be fully liable for the failed payment. In this connection, each participant has a responsibility to ensure that it has sufficient liquidity to effect its payments in a timely and orderly manner. Default procedures are in place and regularly drilled to minimise the impact of a default on the system and the participants.
- 16. In view of the increasing amount of RMB deposits participants place with the CB, the CB launched the RMB fiduciary account service in 2011 which provides participants with an option to transfer the RMB funds placed with the CB to a CB's custody account at the PBOC. The fiduciary account service facilitates participants to better manage their credit exposure to the CB.

17. RMB CHATS, as well as RMB FPS, have been operating safely and smoothly since their launch. RMB CHATS is subject to a system availability target of 99.9%⁵ for prime time and 99.5% for non-prime time for components within the control of the system operator. The prime time and non-prime time system availability rates were both met in 2022. In 2022 RMB CHATS settled on average around 31,481 transactions (excluding bulk items) each operating day, with an average daily value of RMB 1,654.0 billion (Chart 1). It also processed on average around 6,977 bulk items each operating day, involving an average daily value of RMB 12.2 billion. The system availability target of RMB FPS is 99.5% for components within the control of the system operator. In 2022, RMB FPS availability rate was met. It settled on average around 938 real-time payment transactions each day in 2022, with an average daily value of RMB 205 million (Chart 2).

Chart 1: RMB CHATS average daily turnover



⁵ There are other target measurements for HKICL's monitoring.

Chart 2: RMB FPS average daily turnover of real-time payments by months



General organisation of the RMB CHATS

- 18. The SI of RMB CHATS (including RMB FPS as an extension of RMB CHATS) is BOCHK. The SI has appointed HKICL as the SO of RMB CHATS (including RMB FPS) after consulting with the HKMA. HKICL is jointly owned by the HKMA and Hong Kong Association of Banks (HKAB). The HKAB is the association of the banks in Hong Kong which represents the interests of the banking community. The SI and SO have developed policies and procedures for the safe and efficient operation of RMB CHATS (including RMB FPS), which is subject to the oversight of the HKMA (via the FMIO Team).
- 19. The SI function of BOCHK is subject to bank-level governance, decision-making, audit and control processes. Moreover, BOCHK as the SI of RMB CHATS (including RMB FPS) is subject to the oversight of the HKMA (pursuant to provisions of the PSSVFO). Further details of the governance structure of BOCHK are available on BOCHK website as well as the annual report of BOCHK.
- 20. HKICL is responsible for the day-to-day computer and data operations, clearing services and management of RMB CHATS (including RMB FPS) on the terms and conditions set out in the service agreement signed between BOCHK and HKICL. It is also responsible for system development as well as any equipment upgrade and maintenance. HKICL is operated as a separate legal entity, with its own Board of Directors and management team. The Board of Directors of HKICL comprises representatives of the HKMA, representatives of HKAB and two independent non-executive directors (INEDs). The operation of HKICL is managed by the CEO, who is accountable to the Board. HKICL, as the SO, is also accountable to the SI. Further details of the governance structure of HKICL are available at HKICL website.

Legal and regulatory framework

21. The laws of Hong Kong form the legal basis for the operations of RMB CHATS, supplemented by various statutes, regulations and contractual provisions. All the

relevant documents are governed by Hong Kong law and are legally binding and enforceable.

- 22. There are other legal documents (e.g. Agreement for Clearing and Settlement of Renminbi Business, Account Opening Form for Renminbi Settlement Account, Master Sale and Repurchase Agreements, Account Opening Form for Renminbi Fiduciary Account) setting out terms and conditions for the settlement accounts and fiduciary accounts of participants with BOCHK, as well as repurchase arrangements between BOCHK and participants. BOCHK has appointed HKICL as the SO under the terms and conditions of the service agreement between BOCHK and HKICL.
- 23. The RMB Clearing House Rules and Operating Procedures (RMB CHATS Rules and Procedures) set out rights and obligations for participation of RMB CHATS. The RMB FPS Rules and Procedures set out rights and obligations for participation in RMB FPS. These documents are made available to each participant when joining the systems. The RMB CHATS and RMB FPS participants are required to adhere to the Rules and Procedures of RMB CHATS and RMB FPS respectively, and comply with the terms and conditions in the account opening form and other documents as specified by the HKMA and HKICL. These Rules are available on the website of HKICL.
- 24. RMB CHATS was designated and granted a certificate of finality under the CSSO on 11 July 2008. CSSO was retitled as PSSVFO on 13 November 2015, under which the designation of RMB CHATS and certificate of finality continue to have effect under the PSSVFO. The certificate of finality provides statutory backing for the finality of settlement of transactions settled through the system. This finality is protected from insolvency laws and other laws by the PSSVFO. This ensures that transactions settled through RMB CHATS are final and irrevocable and will not be reversed in circumstances, including the insolvency of a system participant, whereas any rights resulting from the underlying transaction of any such transaction will be preserved. RMB FPS launched as an extension of RMB CHATS in September 2018 enjoys the same designation and settlement finality of RMB CHATS under the PSSVFO. Both the SI and SO of RMB CHATS (including RMB FPS) are required to comply with the safety and efficiency requirements stipulated in the PSSVFO and other guidelines or requirements specified by the HKMA (as overseer) from time to time.

System design and operations

Operating hours

25. RMB CHATS opens for settlement from 08:30 to 05:00 (next day) every working day, Monday to Friday, except Saturdays, Sundays and 1 January, and opens on special Saturdays and Sundays which are designated as working days in Mainland China from 08:30 to 21:00. Meanwhile, it is available around-the-clock during Monday to Sunday for transaction input (or cancellation), except during pre-scheduled system housekeeping tasks. RMB FPS operates on a 24x7 basis, except during scheduled housekeeping and maintenance announced to participants from time to time, if required.

Communication mode

26. Since May 2009, RMB CHATS has been operating on SWIFT's messaging network (SWIFTNet), which helps enhance interoperability between domestic and international messages for payment instructions and remove operational barriers for overseas institutions to join the system.

Clearing and settlement processes

- 27. All payments submitted to RMB CHATS have to go through a validation process. Payment instructions with input errors will be automatically rejected. All validated transactions will be settled immediately if there is sufficient balance in the RMB CHATS ledger account of the paying participant. Otherwise, payment instructions will be queued in the system and settled on a first-in-first-out basis until there are sufficient funds in the respective RMB CHATS ledger account to settle all the instructions in the queue. If a RMB CHATS payment valued on the same day is not settled by the cut-off time of the system, it will be automatically cancelled by the system.
- 28. RMB CHATS provides participants with real-time enquiry functions to monitor the account status and has queue management functions to re-sequence outstanding payments in payment queues.

Clearing and settlement of bulk items

29. In addition to settling large-value interbank payments in RTGS mode, RMB CHATS also handles clearings for bulk items mentioned above. These bulk items are cleared through HKICL and settled through the bulk settlement runs on a multilateral netting basis. Each type of the bulk items has its own set of operating procedures, which describes comprehensively the clearing and settlement processing flow and requirements and contingency measures.

Clearing and settlement of RMB FPS items

30. All payments submitted to RMB FPS will be validated. Payment instructions with input errors will be automatically rejected. Different from RMB CHATS, RMB FPS has no queueing mechanism in place. All validated transactions will be settled immediately on an RTGS basis if there is sufficient balance in the RMB FPS ledger account of the paying participant and rejected in the case of insufficient balance. Similar to RMB CHATS, RMB FPS provides participants with real-time enquiry functions to monitor the account status.

Liquidity management system features

For RMB CHATS

- 31. As interbank transactions are settled on an RTGS mode, to reduce the chance of payment gridlocks and to smooth payment flows, the SI has implemented various measures including the provision of credit facilities in the form of intraday repo, and development of liquidity saving devices for the RMB CHATS. The key tools are summarized as follows:
 - a. <u>Intraday repo facility</u>: Participants can arrange with BOCHK to obtain intraday liquidity through interest-free intraday repo facility. Intraday repos that cannot be repurchased before the close of the system will be automatically rolled into overnight repo on which interest is charged by BOCHK.
 - b. Queuing mechanism: If a participant does not have sufficient balance in its RMB CHATS ledger account to effect a payment, the transaction is queued in the RMB CHATS. Participants can make use of the re-sequencing function to move transactions up or down their list of queued payments. The queuing mechanism allows the banks to manage their own queues of outstanding payment instructions.

- c. Real-time balance enquiry function and pre-notification of bulk settlement flows: Participants are able to view the balance in their RMB CHATS ledger accounts on a real-time basis. They also have access to the net amounts they need to pay (or receive) for each of the bulk clearing runs that take place during the day so that they can arrange funding in advance for settlement if necessary.
- d. <u>Liquidity saving devices (liquidity optimisers)</u>: Two types of liquidity saving devices riding on the multilateral offsetting mechanism have been developed to help RMB CHATS participants manage intraday liquidity efficiently. One is a built-in optimiser triggered automatically by RMB CHATS at regular intervals during the day or, if needed, by the SI for periodic multilateral offsetting of payment instructions queued in RMB CHATS. The other optimiser may also be triggered by a participant netting with the bulk settlement payments in the bulk settlement runs involving paper cheques, e-Cheques, auto-debit items and equities transactions.
- e. <u>CHATS Throughput guidelines</u>: To encourage banks to make payments in a timely and an orderly manner throughout the day, each bank is required to release and settle no less than 30% of their interbank payments by 14:30, and 60% by 17:30 based on the value of its total CHATS payments for the day.
- f. <u>Monitoring</u>: To ensure the smooth processing of the payment system, the SI closely monitors the payment condition of each participant during the day.
- g. <u>Interbank Intraday Liquidity Facility</u>: It serves to enhance efficiency of the liquidity provision mechanism between Liquidity Provider(s) (i.e. lending participant(s)) and its registered Liquidity Consumer(s) (i.e. borrowing participant(s)) in RMB CHATS on commercial terms.

For RMB FPS

- 32. Similar to RMB CHATS, RMB FPS interbank transactions are settled on a gross deal-by-deal basis on the book of the SI. To ensure RMB FPS SPs have adequate liquidity for the settlement of FPS transactions on an RTGS mode around-the-clock, the following liquidity management tools are built in RMB FPS:
 - a. Account balance sweeping during the RMB CHATS operating hours: Account balance sweeping functions are provided to RMB FPS SPs to manage their liquidity positions of the RMB CHATS ledger accounts and RMB FPS ledger accounts. During the operating hours of RMB CHATS, a SP can transfer funds from its RMB CHATS ledger account to RMB FPS ledger account, and vice versa, through manual operation or automatic balance sweeping function. The automatic account balance sweeping function operates according to the threshold values (maximum, optimal and minimum balance) set by individual SPs while the manual account balance sweeping requests are initiated by SPs on their discretion based on their own operational needs.
 - b. Account balance sweeping at the opening and close of RMB CHATS: At the closure of RMB CHATS, the closing balance in the RMB CHATS ledger account in excess of the preserved amount set by individual SPs will be transferred to the RMB FPS ledger account automatically. At the opening of RMB CHATS next value day, the balance in the RMB FPS ledger account in excess of the optimal balance as pre-defined by individual SPs will be transferred from the RMB FPS ledger account to the RMB CHATS ledger account.

IV. Principle-by-principle summary narrative disclosure

Principle 1: Legal basis	An FMI should have a well-founded, clear, transparent, and enforceable legal basis for each material aspect of its activities in all relevant jurisdictions.
Summary disclosure	RMB CHATS (including RMB FPS) has a well-founded, clear, transparent, and enforceable legal basis for each material aspect of its activities in all relevant jurisdictions.
	 2. For the SI⁶: The laws of Hong Kong provide the legal basis of the operation of the RMB CHATS/FPS and the contracts underlying the system. The PSSVFO ensures the settlement finality of payments made on the RMB CHATS, including the RMB FPS which is an extended service of RMB CHATS.
	 BOCHK was appointed by the PBOC as the CB for RMB business in Hong Kong. The appointment is supported by the Settlement Agreement on the Clearing of RMB Businesses signed between BOCHK and PBOC.
	 BOCHK as the CB appointed HKICL as the SO to perform the day-to- day computer operations and clearing services. The appointment is supported by proper legal documentation and governed by laws in Hong Kong.
	Agreement for Clearing and Settlement of Renminbi Business and Account Opening Form for Renminbi Settlement Account set out the terms and conditions for the settlement accounts of participants with SI.
	 The Master Sale and Repurchase Agreement sets out the terms and conditions for SI to provide liquidity to RMB CHATS participants through repo arrangements.
	 The Account Opening Form for Renminbi Fiduciary Account sets out the terms and conditions for SI to provide the RMB fiduciary account service.
	 3. For the SO⁷: Appointment of HKICL as the SO of the RMB CHATS, including RMB FPS, is known to the public via the website of the HKMA and HKICL. Appointment of HKICL as the SO to perform the day-to-day computer operations and clearing services is supported by proper legal documentation, including a Services Agreement and various addendums (Services Agreement) between the BOCHK and HKICL. All participants of RMB CHATS and RMB FPS are required to observe the RMB CHATS Rules and Procedures and RMB FPS Rules and Procedures promulgated by HKICL, which set out the terms and conditions of the clearing arrangements for the RMB CHATS and RMB FPS respectively. The Rules are governed by the Hong Kong law. The Services Agreement, RMB CHATS Rules and RMB FPS Rules
	cover all material aspects of the operations of HKICL and are all

The SI refers to BOCHK.
 The SO refers to HKICL.

Principle 1: Legal basis	An FMI should have a well-founded, clear, transparent, and enforceable legal basis for each material aspect of its activities in all relevant jurisdictions.
	clear, understandable and consistent with relevant laws and regulations.

Principle 2: Governance	An FMI should have governance arrangements that are clear and transparent, promote the safety and efficiency of the FMI, and support the stability of the broader financial system, other relevant public interest considerations, and the objectives of relevant stakeholders.
Summary disclosure	1. RMB CHATS (including RMB FPS) has governance arrangements that are clear and transparent, promote the safety and efficiency of the FMI, and support the stability of the broader financial system, other relevant public interest considerations, and the objectives of relevant stakeholders.
	 For the SI: The SI function within BOCHK has clear and direct lines of responsibility and accountability. The SI function is subject to the oversight of the HKMA (pursuant to provisions of the PSSVFO) as well as to the internal audit and risk management processes of BOCHK. At the bank level, BOCHK has a clear, publicly-communicated governance structure. More details are available in the annual report and the website of BOCHK. HKICL, as SO of RMB CHATS (including RMB FPS), is accountable to BOCHK pursuant to the terms and conditions for its appointment.
	 3. For the SO: HKICL is a private company jointly owned by the HKMA and the HKAB. HKICL has a clear, publicly communicated governance structure. Its Board of Directors, Board Sub-Committee and Risk Management Committee (RMC) comprise representatives of the HKMA, representatives of HKAB, and INEDs. HKICL has clear, publicly-communicated mission of providing reliable, quality, efficient, cost-effective and innovative clearing and settlement services in Hong Kong. The SO function is subject to the oversight of the FMIO Team in the HKMA (pursuant to provisions of the PSSVFO). As the SO, HKICL is accountable to BOCHK, as the SI of the RMB CHATS (including RMB FPS), under a contract (Services Agreement). HKICL has implemented a mechanism for regular reviews of both the overall Board performance and performance of individual Board members. Internal audit function is in place to assess the effectiveness of HKICL's risk management and internal controls system on an ongoing basis. All material changes affecting the operations of the RMB CHATS (including RMB FPS) are made available to participants via various means, including the amendment of the relevant documentation and communication to the participants via documents available on the website.

Drinciple 2:	EMI should have a sound risk management framework for comprehensively
Principle 3: Framework for the comprehensive management of risks	FMI should have a sound risk-management framework for comprehensively managing legal, credit, liquidity, operational, and other risks.
_	 RMB CHATS (including RMB FPS) has a sound risk-management framework for comprehensively managing legal, credit, liquidity, operational, and other risks. For the SI: At the bank level, BOCHK has a sound risk management organisational structure as well as comprehensive policies and procedures to identify, measure, monitor and control various risks within the organisation. These risk management policies and procedures are regularly reviewed and modified to reflect the latest changes. Specifically:
	 Details of the risk management organisational structure of BOCHK are available in the annual report and the website of BOCHK. BOCHK is refining a risk management framework which specifically identifies policies and measures for comprehensively managing legal, credit, liquidity, operational, and other risks arising in relation to its capacity as the SI of RMB CHATS. This risk management framework will be subject to regular review. For the SO: The HKICL Board, Board Sub-Committee and RMC oversee the
	implementation of a sound and comprehensive risk management framework in HKICL with focus on information technology, operational resilience and business continuity. A risk management

Principle 3: Framework for the comprehensive management of risks	FMI should have a sound risk-management framework for comprehensively managing legal, credit, liquidity, operational, and other risks.
	framework is in place to identify, measure, monitor, and manage effectively the risks for RMB CHATS (including RMB FPS). There are stringent requirements on information technology and operational risk management. External and/or internal audits are organised to assess critical aspects of the company by carrying out, where applicable, regular information technology audits, operations audits, compliance assessments of the Cheque Imaging and Truncation System (CITS) system, cyber resilience assessments and financial audits. Pre-launch system audits are conducted prior to the introduction of major systems (including FPS) to ensure quality and integrity. Contingency drills and rehearsals of disaster recovery arrangements are carried out to ensure business continuity in disaster scenarios. HKICL has implemented a recovery plan based on the international standard on FMI recovery published in October 2014 (revised in July 2017) and updated the same as appropriate. HKICL has obtained certification under two ISO systems and established associated risk management frameworks: the ISO27001 standards for Information Security Management System and ISO9001 for Quality Management System. Under these frameworks, HKICL adopts organised methodologies to effectively identify, measure, monitor and manage all facets of risks that arise in or are borne by HKICL.

Principle 4: An FMI should effectively measure, monitor, and manage its credit exposure Credit Risk to participants and those arising from its payment, clearing, and settlement processes. An FMI should maintain sufficient financial resources to cover its credit exposure to each participant fully with a high degree of confidence. Summary The RMB CHATS has effective credit risk management processes to disclosure measure, monitor and manage its credit exposures to participants. 2. For the SI: - RMB CHATS (including RMB FPS) is not a CCP, the SI does not guarantee settlement, and thus will not incur credit exposure to payer banks in terms of payments made to payee banks not being recoverable from the payer banks. - The SI manages its risks in a way similar to the way a commercial bank manages its counterparty risk. - On managing the credit risks of participants against the SI. participants are not required to maintain any minimum balance in the settlement accounts. - On managing the credit risks of the SI associated with RMB CHATS, the settlement account opening agreement and the Master Sale & Repurchase Agreement have specified clearly the arrangement and the terms and conditions for the usage of the settlement account or the intraday repo facility. The SI may incur credit exposure to participants due to the provision of liquidity to participants through securities repo (intraday and overnight) if there is any shortfall after liquidation of pledged securities either due to price drop or worsened marketability of the pledged securities. - Only HKD and RMB-denominated securities that are of high liquidity and marketability are accepted as collaterals by the CB. Specifically, these include Exchange Fund Bills and Notes, Hong Kong SAR Government Bonds, RMB-denominated bonds issued in Hong Kong by Ministry of Finance of the People's Republic of China and national policy banks of the People's Republic of China, RMB-denominated bills issued in Hong Kong by the PBOC, and designated RMBdenominated bonds issued overseas by Ministry of Finance of the People's Republic of China. In addition, any collateral posted is subject to prudent haircuts to address adverse effect on collateral's valuation changes. - The granting of intraday repo lines is discretionary and is subject to review on an ongoing basis taking into consideration various cost and risk factors. For the SO: 3. - Not applicable. As the SO, HKICL does not incur any credit exposure to participants of RMB CHATS (including RMB FPS).

Principle 5: Collateral	An FMI that requires collateral to manage its or its participants' credit exposure should accept collateral with low credit, liquidity, and market risks. An FMI should also set and enforce appropriately conservative haircuts and concentration limits.
Summary disclosure	The RMB CHATS only accepts highly liquid and marketable securities as collateral, which, when pledged, are subject to prudent haircut to address adverse effect on their valuation changes.
	 For the SI: The SI may incur credit exposure to participants due to the provision of liquidity to participants through securities repo (intraday and overnight) if there is any shortfall after liquidation of pledged securities either due to price drop or worsened marketability of the pledged securities. Only HKD and RMB-denominated securities that are of high credit quality, high liquidity and marketability are accepted as collaterals by the CB. Specifically, these include Exchange Fund Bills and Notes, Hong Kong SAR Government Bonds, RMB-denominated bonds issued in Hong Kong by Ministry of Finance of the People's Republic of China and national policy banks of the People's Republic of China, RMB-denominated bills issued in Hong Kong by the PBOC, and designated RMB-denominated bonds issued overseas by Ministry of Finance of the People's Republic of China. In addition, any collateral posted is subject to prudent haircuts to address adverse effect on collateral's valuation changes. The collateral management system used for securities repo, the CMU, is well designed and operationally flexible. For the SO: Not applicable. As the SO, HKICL does not incur any credit exposure to participants of RMB CHATS (including RMB FPS), and hence does not impose any collateral requirement on participants.

Principle 6: Margin	A CCP should cover its credit exposures to its participants for all products through an effective margin system that is risk-based and regularly reviewed.
Summary disclosure	Not applicable to RMB CHATS (including RMB FPS) as this principle is not applied to a payment system according to the PFMI.

Principle 7: Liquidity Risk

An FMI should effectively measure, monitor, and manage its liquidity risk. An FMI should maintain sufficient liquid resources in all relevant currencies to effect same-day and, where appropriate, intraday and multiday settlement of payment obligations with a high degree of confidence under a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would generate the largest aggregate liquidity obligation for the FMI in extreme but plausible market conditions.

Summary disclosure

1. The RMB CHATS (including RMB FPS) measures, monitors and manages its liquidity risk effectively. Sufficient liquid resources in the relevant currency (RMB) are available to meet its payment obligations under potential stress scenarios.

2. For the SI:

- RMB CHATS (including RMB FPS) is not a CCP, the SI does not guarantee settlement, and thus will not incur liquidity risk in terms of obligations to make payments to payee banks.
- The SI assists participants in the management of their liquidity requirements through the liquidity-efficient design of the RMB CHATS, the provision of liquidity via repo, and provision of real-time information on transactions and settlement account balances of participants.
- Liquidity need of the SI arises in the provision of cross-border remittances. The SI applies a stringent liquidity risk management framework where a number of measures are used to ensure that RMB liquidity available to the CB is always sufficient to meet the withdrawal demand of the participants in the form of outward crossborder remittances. These measures include (but are not limited to) cash flow projections, stress testing, real-time monitoring intraday and independent risk monitoring. The SI's risk management of its own liquidity position is subject to prudent supervision of the HKMA.
- Liquidity need of the SI also arises in the provision of liquidity to participants through intraday or overnight repo. The CB only accepts highly liquid and marketable securities as collateral, which, when pledged, are subject to prudent haircuts to address adverse effects of valuation changes. See Principle 5 for more details.
- Participants are expected to follow the CHATS throughput guidelines to ensure their payments are cleared and settled in a timely and an orderly manner throughout the day.

3. For the SO:

 Not applicable. HKICL is not a participant in the RMB CHATS (including RMB FPS) nor would it provide liquidity to participants.

Principle 8: Settlement finality	An FMI should provide clear and certain final settlement, at a minimum by the end of the value date. Where necessary or preferable, an FMI should provide final settlement intraday or in real time.
Summary disclosure	The RMB CHATS (including RMB FPS) provides clear and certain final settlement in both intraday and real time modes.
	For the SI: The PSSVFO confers settlement finality to all the payments settled in the RMB CHATS, including RMB FPS which is an extended service of RMB CHATS, including payments settled real-time or payments settled in batch mode (at scheduled bulk settlement runs).
	3. For the SO: - As stipulated in the RMB CHATS Rules and RMB FPS Rules, the settlement of a payment is deemed made, completed, irrevocable and final once it is debited from or credited to the RMB settlement account that a participant maintains with the SI.

Principle 9: Money settlements	An FMI should conduct its money settlements in central bank money where practical and available. If central bank money is not used, an FMI should minimise and strictly control the credit and liquidity risk arising from the use of commercial bank money.
Summary disclosure	 The RMB CHATS (including RMB FPS) conducts money settlement in commercial bank money across the book of BOCHK. For the SI: BOCHK is one of the three note-issuing banks in Hong Kong under the direct supervision of the HKMA, and has continuously obtained very high credit ratings. BOCHK managed to withstand the recent world-wide financial crisis on its own without the need for government support, which reaffirms its credit position. Although the transactions are not settled in the form of central bank money, a number of measures have been put in place to manage and minimize the credit risk and the liquidity risk involved (see Principles 4 and 7). The risks, if any, are known to the participants who choose to join the system voluntarily. The SI provides the RMB Fiduciary Account Service under which participants can open a RMB Fiduciary Account with the SI according to their own needs, and the CB in turn has opened a segregated cash account with PBOC (Omnibus PB Account) in the name of the CB on behalf of participants. Participants are free to transfer funds between the RMB Fiduciary Account and the RMB settlement account. The SI, as a custodian, is restrained from undertaking any investment with the funds placed in the Omnibus PB Account. The RMB Fiduciary Account Service effectively reduces participants' counterparty risk exposure to the CB.
	For the SO: Not applicable. HKICL is not a participant in the RMB CHATS nor would it provide credit facilities/liquidity to participants.

Principle 10: Physical deliveries	An FMI should clearly state its obligations with respect to the delivery of physical instruments or commodities and should identify, monitor, and manage the risks associated with such physical deliveries.
Summary disclosure	Not applicable to RMB CHATS (including RMB FPS) as this principle is not applied to a payment system according to the PFMI.

Principle 11: Central securities depositories	A CSD should have appropriate rules and procedures to help ensure the integrity of securities issues and minimise and manage the risks associated with the safekeeping and transfer of securities. A CSD should maintain securities in an immobilised or dematerialised form for their transfer by book entry.
Summary disclosure	Not applicable to RMB CHATS (including RMB FPS) as this principle is not applied to a payment system according to the PFMI.

Principle 12: Exchange-of- value settlement systems	If an FMI settles transactions that involve the settlement of two linked obligations (for example, securities or foreign exchange transactions), it should eliminate principal risk by conditioning the final settlement of one obligation upon the final settlement of the other.
Summary disclosure	 RMB CHATS has implemented arrangements to eliminate principal risk for the settlement of RMB payments with a linked obligation. For the SI: PvP arrangements have been implemented for settling RMB/USD, RMB/HKD and RMB/EUR foreign exchange transactions. DvP arrangements have been implemented for settling debt and equity transactions at the CMU and CCASS.
	 For the SO: Automatic mechanisms and linkages have been implemented in the relevant CHATS and securities settlement systems to support effective and efficient PvP and DvP settlements, the mechanisms will help match the PvP or DvP related obligations in the respective systems and synchronize the settlement of the obligations in the respective systems to achieve PvP or DvP settlement.

Default ma Management de	n FMI should have effective and clearly defined rules and procedures to anage a participant default. These rules and procedures should be esigned to ensure that the FMI can take timely action to contain losses and quidity pressures and continue to meet its obligations.
Summary 1. disclosure	The RMB CHATS (including RMB FPS) has effective and clearly defined rules and procedures to manage a participant default.
3.	 RMB CHATS (including RMB FPS) is not a CCP, the SI does not guarantee settlement of payments, and thus will not incur any loss or liquidity risk in terms of payments made to payee banks not being able to be recovered from the payer banks. Loss may arise only in the context of a defaulting participant not being able to repay the liquidity provided by the SI through securities repo, and the value of the collateral having dropped below the amount of liquidity provided. A prudent risk management framework has been implemented to guard against the credit and collateral risks (see Principles 4 and 5). The rules and procedures for managing a participant default have been set out in the RMB CHATS Rules and Procedures and RMB FPS Rules and Procedures issued by HKICL, the SO of the RMB CHATS (including RMB FPS).

Principle 14: Segregation and portability	A CCP should have rules and procedures that enable the segregation and portability of positions of a participant's customers and the collateral provided to the CCP with respect to those positions.
Summary disclosure	Not applicable to RMB CHATS (including RMB FPS) as this principle is not applied to a payment system according to the PFMI.

Principle 15: General Business Risk

An FMI should identify, monitor, and manage its general business risk and hold sufficient liquid net assets funded by equity to cover potential general business losses so that it can continue operations and services as a going concern if those losses materialise. Further, liquid net assets should at all times be sufficient to ensure a recovery or orderly wind-down of critical operations and services.

Summary disclosure

1. For the SI:

- At the bank level, BOCHK adopts Internal Capital Adequacy Assessment Process (ICAAP) to identify and measure all material risks faced by the bank, and assess how much capital is required to withstand those risks. Through ICAAP, capital adequacy targets are established to ensure the bank maintains sufficient capital to absorb unexpected losses and continue operating as a going concern, to comply with the statutory and regulatory requirements on capital adequacy, as well as to support future business development.
- Reports on BOCHK's financial position are regularly submitted to the Board and the Management. Furthermore, BOCHK makes use of Asset and Liability Management to achieve balanced development between assets and liabilities, with an aim of maintaining the financial risks within safe levels and under BOCHK's risk appetite.
- At the CB level, as CB is one of BOCHK's key roles, the formulation of the CB-related activities budget will strictly comply with the guidelines set out by regulatory authorities and the requirements of internal risk management, so as to ensure smooth and uninterrupted provision of clearing services to participants. For the implementation of the annual budget plan, BOCHK has internal policies to monitor the actual financial and business performance against targets periodically.
- BOCHK has procedures in place for the approval of budget adjustment arising from unexpected and significant changes in business conditions.
- The risk management policies and procedures of BOCHK are regularly reviewed and updated to reflect changes in markets and business strategies.

2. For the SO:

- HKICL has a robust management and control system to identify, monitor and manage general business risk.
- HKICL manages its financial and cash flow position prudently and continuously to operate the company as a going concern. It adheres to commonly adopted corporate governance standards and has a Board of Directors which sets the strategic direction of the company, makes major decisions affecting the business risk profile of the company, and reviews the financial position of the company on a regular basis.
- HKICL operates on a cost-recovery basis and HKICL balances its financial position by covering all operating costs from the income it generates. It regularly evaluates the clearing house tariff, which provides income to HKICL, against projected costs.
- Based on approved development plans, the company always maintains sufficient cash flow to meet daily operational needs and high quality liquid financial resources equivalent to six months'

Principle 15: General Business Risk	An FMI should identify, monitor, and manage its general business risk and hold sufficient liquid net assets funded by equity to cover potential general business losses so that it can continue operations and services as a going concern if those losses materialise. Further, liquid net assets should at all times be sufficient to ensure a recovery or orderly wind-down of critical operations and services.
	operating expenses funded by equity in the form of retained earnings. Viable plans are also available to meet additional ad hoc or persistent liquidity needs. - HKICL has implemented a recovery plan based on the international standard on FMI recovery published in October 2014 (revised in July 2017) and updated the same as appropriate.

Principle 16: Custody and investment risks	An FMI should safeguard its own and its participants' assets and minimise the risk of loss on and delay in access to these assets. An FMI's investments should be in instruments with minimal credit, market, and liquidity risks.
Summary disclosure	The RMB CHATS (including RMB FPS) has prudent investment and risk management policies and procedures to safeguard its own and its participants' assets.
	 For the SI: At the CB level, the CB only invests in securities that entail minimal credit, market, and liquidity risks. Moreover, as mentioned in Principle 7, the SI's risk management for its own liquidity position is subject to prudent supervision by the HKMA. Collateral posted by participants to the CB under repo for liquidity provision is custodised with the CMU operated by the HKMA. CB will not use the collateral unless the participant is default or cannot cover its short balance. Collaterals posted by participants to the CB under repo for liquidity provision is custodised with the CMU operated by the HKMA, which is immediately accessible and free from any credit risk. For the SO: As the SO, HKICL does not hold any assets for the participants of RMB CHATS (including RMB FPS). Liquid assets of HKICL are mainly held in deposits with banks in Hong Kong. All banks in Hong Kong are under the prudential

Principle 17: Operational risks

An FMI should identify the plausible sources of operational risk, both internal and external, and mitigate their impact through the use of appropriate systems, policies, procedures, and controls. Systems should be designed to ensure a high degree of security and operational reliability and should have adequate, scalable capacity. Business continuity management should aim for timely recovery of operations and fulfilment of the FMI's obligations, including in the event of a wide-scale or major disruption.

Summary disclosure

 Plausible sources of operational risk have been identified by the RMB CHATS (including RMB FPS) and appropriate systems, policies, procedures and controls have been designed and implemented to address such risks.

2. For the SI:

- The operation of the SI function of BOCHK is subject to the operational risk management framework of the bank.
- Business Continuity Plan (BCP) is established to ensure timely recovery of the SI function of BOCHK. Provision of clearing services to participants is targeted to recover at full capacity under the BCP. The secondary operational site supporting the BCP is located at a considerable distance to minimize its interdependency with the primary site.
- Assessment on operational readiness and contingency planning are conducted prior to launch of new service or major system enhancement.
- Testing or assessment on system capacity is carried out before launch of new applications/ systems, or implementation of system enhancements which involve significant changes. The estimated system capacity is matched against the projected business growth on a regular basis to ensure that the systems are capable of meeting business needs.
- In operating the SI function, BOCHK uses a number of measures including training, cross-team/ cross-division support, flexible working hours, maker-checker arrangements for manual input, to prevent and mitigate human-related operational risks.
- In order to ensure the overall safety and efficiency of RMB CHATS (including RMB FPS), the SI has put in place a number of physical and logical access controls to protect the relevant resources of the system against unauthorized access/modification disclosure, loss or impairment.
- The Renminbi Clearing Centre which is responsible for the daily operation of the CB function within BOCHK has been accredited with ISO9001 since 2014.

3. For the SO:

- The HKICL Board assigns operational reliability performance targets and imposes stringent operational risk management requirements. It pays particular attention to ensuring operational resilience and effective business continuity arrangements. Also, HKICL has established plans which are being executed to ensure cyber resilience.
- The operational policies, procedures and controls of HKICL are designed to meet the objectives of maintaining a high level of system

Principle 17: Operational risks	An FMI should identify the plausible sources of operational risk, both internal and external, and mitigate their impact through the use of appropriate systems, policies, procedures, and controls. Systems should be designed to ensure a high degree of security and operational reliability and should have adequate, scalable capacity. Business continuity management should aim for timely recovery of operations and fulfilment of the FMI's obligations, including in the event of a wide-scale or major disruption.
	availability (over 99.5%) of the RMB CHATS (including RMB FPS) system. They are regularly reviewed and tested thoroughly before and after significant changes are launched. The systems are designed to be scalable to accommodate stress volumes under prevailing performance levels and are tested before going live. The computer systems and controls, and operational policies and procedures are subject to regular information technology audits, operations audits and certification audits (ISO standards) carried out by internal/external auditors and certification authorities. HKICL has established plan which is being executed to observe the Guidance on Cyber Resilience for Financial Market Infrastructures issued by CPMI-IOSCO and the Cybersecurity Fortification Initiative issued by the HKMA in addressing cyber threats. HKICL conducts attestation against Customer Security Controls Framework issued by SWIFT regularly. HKICL has defined endpoint security and anti-fraud requirements for participants to reduce the risk of payment frauds in the wholesale payment ecosystem. Participants are required to make self-declaration annually and/or as needed basis in compliance of endpoint security and anti-fraud requirements. Security and anti-fraud bulletin and guidelines on handling of fraudulent payments are issued to promote awareness, support ongoing education and information sharing to participants. HKICL employs comprehensive business continuity plan (BCP) arrangements to cater for events posing a significant risk of disrupting operations, including events that could cause a wide scale or major disruption. The BCP provides arrangements for the SO to respond to unplanned service disruption to RMB CHATS (including RMB FPS) and aims at facilitating timely resumption of RMB CHATS (including RMB FPS) in the event of a disruption.

Principle 18: Access and participation requirements	An FMI should have objective, risk-based, and publicly disclosed criteria for participation, which permit fair and open access.
Summary disclosure	RMB CHATS (including RMB FPS) has objective, risk-based and publicly disclosed criteria for participants, which permit fair and open access.
	 For the SI: To apply as a direct participant of RMB CHATS, an institution should submit the "Enrolment Form for Member of Renminbi Clearing" (refer to Annex I for a sample of the form) to the CB. The assessment of its application will be made by the CB using the following guidance criteria:
	may join as CPs by submitting the "Enrolment Form for Clearing Participant of Renminbi Faster Payment System" (refer to Annex III

Principle 18: Access and participation requirements	An FMI should have objective, risk-based, and publicly disclosed criteria for participation, which permit fair and open access.
	for a sample of the form) to the CB, subject to the discretion of the HKMA and the CB, and by agreement with an SP. - The CB and the HKMA retain the final right at their discretion on the access and participation as a participant of the system. - Suspension and exit arrangements are covered in the RMB CHATS and RMB FPS Rules and Procedures, which constitutes a contract between the CB, SO and participants.
	3. For the SO: - Established procedures are in place in the RMB CHATS and RMB FPS Rules and Procedures for handling accession of new participants, suspensions and exits of participants and communicating such changes.

Principle 19: Tiered participation arrangements	An FMI should identify, monitor, and manage the material risks to the FMI arising from tiered participation arrangements.
Summary disclosure	RMB CHATS: RMB CHATS supports DPs and GUs. Except for the settlement account arrangements, GUs operate basically as DPs on RMB CHATS.
	Each GU must engage an RMB CHATS DP as its settlement service provider to settle its CHATS transactions via its DP's RMB CHATS ledger account.
	The GUs can initiate and receive payments as the DPs in RMB CHATS, given the full connectivity of DPs and GUs on the same platform in RMB CHATS. The corresponding relationship of DP and GU as well as all the GUs' payment activities are recorded in RMB CHATS. The visibility of a GU's payment activities is basically the same as a DP's in RMB CHATS, thus enabling CB to perform monitoring and risk management for both DPs and GUs (including dependencies between DP and GU).
	RMB FPS: RMB FPS supports SPs and CPs. Except for the settlement account arrangement, CPs basically operate as SPs on RMB FPS as a single tier given the full connectivity of SPs and CPs on RMB FPS platform.
	Each CP must engage an RMB FPS SP as its settlement service provider to settle its FPS transactions via its SP's RMB FPS ledger account. The CPs are the SVF licensees being licensed and supervised by the HKMA under the PSSVFO.
	The CPs can initiate and receive payments as the SPs in RMB FPS, given the full connectivity of SPs and CPs on the same platform in RMB FPS. The corresponding relationship of SP and CP as well as all the CPs' payment activities are recorded in RMB FPS. The visibility of a CP's payment activities is basically the same as an SP's in RMB FPS, thus enabling CB to perform monitoring and risk management for both SPs and CPs (including dependencies between SP and CP).

Principle 20: FMI links	An FMI that establishes a link with one or more FMIs should identify, monitor, and manage link-related risks.
Summary disclosure	Not applicable to RMB CHATS (including RMB FPS) as this principle is not applied to a payment system according to the PFMIs.

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Principle 21: Efficiency and effectiveness	An FMI should be efficient and effective in meeting the requirements of its participants and the markets it serves.
Summary disclosure	 The RMB CHATS (including RMB FPS) is effective and efficient in meeting the requirements of its participants and the markets it serves. For the SI: Since 2006, RMB CHATS (including RMB FPS, which was launched in 2018) has provided a reliable and efficient interbank payment system for RMB transactions, and helped to strengthen Hong Kong's position as an international financial centre. The effectiveness, efficiency and safety of RMB CHATS (including RMB FPS as an extension of RMB CHATS) is further ensured by the effective oversight exercised by the FMIO Team of the HKMA pursuant to the PSSVFO. Apart from supporting the HKMA's long-term development strategies, the SI also works with the SO as well as the SIs of other CHATS systems in identifying new initiatives that may enhance the operating efficiency, effectiveness and safety of the RMB CHATS. BOCHK as the SI appoints HKICL as the SO to perform clearing services in respect of the RMB CHATS (including RMB FPS). The current terms and conditions of the clearing arrangements are specified in the RMB Clearing System Development and Clearing Services Agreement signed between BOCHK and HKICL, as amended from time to time. Performance criteria for RMB CHATS, such as system availability target of 99.9% for prime time and 99.5% for non-prime time, are included in the service agreement signed between BOCHK and HKICL. For the SO: HKICL has publicly communicated objectives of delivering safe, efficient and effective solutions. Clearly defined and measurable targets have been set for monitoring operational performance, which are subject to regular reviews by the Board of HKICL, the SI and the FMIO Team of the HKMA. The effectiveness and efficiency of the system in meeting the relevant stakeholders in the design stage as well as the i
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Principle 22: Communication procedures and standards	An FMI should use, or at a minimum accommodate, relevant internationally accepted communication procedures and standards in order to facilitate efficient payment, clearing, settlement, and recording.	
Summary disclosure	RMB CHATS (including RMB FPS) has adopted internationally- accepted communication procedures and standards to facilitate efficient payment, clearing, settlement and recording.	
	2. SWIFT network (SWIFTNet), an internationally accepted message carrier network, is used to process RTGS payments. The use of SWIFT standards facilitates overseas users to access RMB CHATS via SWIFTNet in the same way as local users without the need for any proprietary technology or special arrangements. Hence, operating procedures, processes, and system use by the overseas and local users are the same. Meanwhile, RMB FPS operates on a secured private network.	

Principle 23: Disclosure of rules, key procedures, and market data	An FMI should have clear and comprehensive rules and procedures and should provide sufficient information to enable participants to have an accurate understanding of the risks, fees, and other material costs they incur by participating in the FMI. All relevant rules and key procedures should be publicly disclosed.
Summary disclosure	 RMB CHATS (including RMB FPS) has clear and comprehensive rules and procedures to facilitate participants to understand the risks, fees, and other material costs they incur by participation. Key features and procedures of the RMB CHATS (including RMB FPS), and/or the respective system turnover, have been publicly disclosed. For the SI: The role and functions of BOCHK as the CB have been publicly disclosed in various publications and the website of BOCHK. The detailed operating rules and procedures, and the fee schedule of the RMB CHATS (including RMB FPS) are covered in the RMB CHATS and RMB FPS Rules and Procedures and other
	 3. For the SO: The RMB CHATS Rules and Procedures and RMB FPS Rules and Procedures, which are fully accessible by all participants, provide clear and comprehensive information in relation to the risks, fees and other material costs of participating in RMB CHATS and RMB FPS. Key operational information of RMB CHATS (including RMB FPS) deemed less technical in nature and easily understandable by the public, such as statistics on clearing volume and value, list of participants and participant codes, have been made publicly accessible on HKICL's website. As the SO, HKICL has discussed with the SI and HKAB the appropriate level of public disclosure of the key rules and operating procedures of RMB CHATS (including RMB FPS).

Principle 24: Disclosure of market data by trade repositories	A TR should provide timely and accurate data to relevant authorities and the public in line with their respective needs.
Summary disclosure	Not applicable to RMB CHATS (including RMB FPS) as this principle is not applied to a payment system according to the PFMIs. RMB CHATS (including RMB FPS) is not a trade repository.

V. List of publicly available resources

List of public resources		Website
	evant to RMB CHATS	
1.	PSSVFO	https://www.elegislation.gov.hk/hk/cap584
2.	Policy statement - Oversight of Financial Market Infrastructures by the Hong Kong Monetary Authority	http://www.hkma.gov.hk/media/eng/doc/key-functions/banking-stability/oversight/FMI_oversight.pdf
3.	Oversight Framework for Designated Clearing and Settlement Systems - A Guideline issued by the Monetary Authority under the PSSVFO	http://www.gld.gov.hk/egazette/pdf/20162020/egn2016202027 77.pdf
4.	Explanatory Note on Designation and Issuance of Certificate of Finality of Clearing and Settlement Systems under PSSVFO	http://www.hkma.gov.hk/media/eng/doc/key-functions/banking-stability/oversight/explanatory_note.pdf
5.	BOCHK Annual Report	https://www.bochk.com/dam/bochk/desktop/top/aboutus/ir/docs/finreport/bochkholdings/2022ar/c101_Fullset_en.pdf
6.	HKICL	https://www.hkicl.com.hk
7.	FPS	https://fps.hkicl.com.hk https://www.hkma.gov.hk/eng/key-functions/international-financial-centre/financial-market-infrastructure/faster-payment-system-fps/
8.	ВОСНК	http://www.bochk.com
9.	Hong Kong CHATS - System Features	http://www.hkma.gov.hk/eng/key-functions/international-financial-centre/infrastructure/payment-systems.shtml
10.	"Payment, Clearing and Settlement Systems in Hong Kong", Payment, Clearing and Settlement Systems in the CPSS countries - Volume 2	https://www.bis.org/publ/cpss105.pdf
11.	InSight Article	https://www.hkma.gov.hk/eng/key- information/insight/20180917.shtml

	t of public resources evant to RMB CHATS	Website
		2. https://www.hkma.gov.hk/eng/news-and- media/insight/2020/04/20200424/
12.	Implementation of a Faster Payment System in Hong Kong	https://www.hkma.gov.hk/media/eng/publication-and- research/quarterly-bulletin/qb201809/fa2.pdf
13.	List of RMB CHATS Participant	https://www.hkicl.com.hk/eng/information_centre/clearing_me mbers_participants_list.php
14.	List of RMB FPS Participants	https://fps.hkicl.com.hk/eng/fps/about_fps/participant.php
15.	Redacted Version of RMB Clearing House Rules, Rainstorm Procedures, Typhoon Procedures	https://www.hkicl.com.hk/eng/information_centre/redacted_ver_sion_of_clearing_house_rules.php
16.	RMB Clearing and FPS Tariff	https://www.hkicl.com.hk/eng/information_centre/clearing_tariffs.php
17.	Application of Principles for Financial Market Infrastructures to Designated Clearing and Settlement Systems	http://www.gld.gov.hk/egazette/pdf/20162020/egn2016202027 78.pdf
18.	Implementation of the Stored Value Facilities Regulatory Regime	https://www.hkma.gov.hk/media/eng/publication-and- research/quarterly-bulletin/qb201609/fa2.pdf
19.	HKICL Clearing Statistics	https://www.hkicl.com.hk/eng/information_centre/statistics_of_clearing_transaction_volume_and_value.php





Enrolment Form for Member of Renminbi Clearing 1,2

Part A – To be completed by Applicant ³

A.1 – Particulars of Applicant			
Name of Institution:	Clearing Code (if any):	SWIFT Address (BIC11, if any):	
Nature of Institution (Please select the appropriate):			
Registered in Hong Kong: Licensed Bank Deposit-taking Company Other Institution Registered outside Hong Kong: Bank Deposit-taking Company Other Institution Registered outside Hong Kong: Deposit-taking Company Other Institution			
Contact person(s):		Title(s):	
Telephone(s):	Facsimile(s):	E-mail Address(es):	
Address:			
A.2 – Membership in RMB Clearing			
We will participate in RMB Clearing as a Member using CHATS service. We acknowledge that our participation in RMB CHATS will terminate immediately upon termination of our Settlement Agreement ⁴ with the RMB Clearing Bank ("CB"). Termination of membership will result in withdrawal of all subscribed clearing services.			
A.3 – Clearing Service(s) (fill in the following in this section, if necessary) ⁵			
☐ Paper Clearing and Electronic Cheque Clearing ⁶	Requested effecti	Requested effective date ⁷ :	
☐ Autocredit	Requested effecti	Requested effective date ⁷ :	
☐ Autodebit	Requested effecti	ive date ⁷ :	
□ EPS/SEPS	Requested effecti	Requested effective date ⁷ :	
□ CCASS/SCCASS/IAH/SCI	Requested effecti	Requested effective date ⁷ :	
☐ Electronic Bill Presentment and Payment (EBPP)	Service Requested effecti	Requested effective date ⁷ :	
□ OTC Items	Requested effecti	ive date ⁷ :	
A.4 – Declaration ⁸			

A.5 – Authorization

We declare, agree and acknowledge that:

- (a) We are properly licensed, approved or registered in accordance with the requirements set out by the local regulatory authorities in our home jurisdiction, or legislation (whether imposed in Hong Kong or outside Hong Kong) to carry on a financial related business, and such license, approval or registration should not be subject to any suspension or revocation.
- (b) We have the operational capability to fulfill the obligations as a Member of RMB Clearing.
- (c) We have adequate financial resources and would not bring undue risks to RMB CHATS, Bank of China (Hong Kong) Ltd. ("BOCHK") in the capacity of the CB and other Members.
- (d) We have established a robust mechanism internally so as to ensure compliance with all applicable laws, regulatory requirements and regulations regarding anti-money laundering ("AML") and counter-terrorist financing ("CFT").
- (e) Our application for membership of RMB Clearing is subject to our fulfillment of the usual customer due diligence requirements imposed by the CB, and the applicable legal and regulatory requirements on AML and CFT.

Authorized Signature and Institution Chop:	
Name(s) in Print:	Date:
Part B – To be completed by Bank of China (Hong I	Kong) Ltd. ("BOCHK"), in the capacity of the RMB Clearing Bank
We accept the above Applicant's enrolment of member	ership.
Authorized Signature and Institution Chop:	

Remarks:

Name(s) in Print:

- 1. RMB Clearing is usually referred to as RMB CHATS.
- 2. Capitalized items used in this form shall have the same meaning as defined in the Renminbi Clearing House Rules as amended from time to time by HKICL.

Date:

- 3. Applicant should complete and submit this form to BOCHK, in the capacity of the CB, for approval. BOCHK shall forward a certified true copy of this form to HKICL for necessary action.
- 4. Settlement Agreement refers to the Agreement for Clearing and Settlement of Renminbi Business signed by and between Bank of China (Hong Kong) Limited as the Renminbi Clearing Bank in Hong Kong and each Member of RMB Clearing.
- 5. Not applicable to overseas banks/institutions until further notice.
- 6. Paper Clearing and Electronic Cheque Clearing is only applicable to the licensed banks registered in Hong Kong.
- 7. Applicant should allow sufficient lead-time for BOCHK to give its approval, and HKICL to process the application according to the Renminbi Clearing House Rules.
- Please refer to the "Principles for Financial Market Infrastructures: Disclosure for RMB CHATS" which is available on the website of BOCHK for the guidance criteria for institutions to become Members or participants of RMB CHATS.
 (Rev. 2019.07)





Enrolment/Withdrawal Form for Settlement Participant of Renminbi Faster Payment System¹

Part A – To be completed by Applicant²

A.1 – Particulars of Applicant			
Name of Institution:	Participant Code (if any):	BIC Code (if any):	
Nature of Institution (Please select the appropriate):		
Registered in Hong Kong ³ : License of stored value facility under PSSVI	FO Restricted Lic	ense Bank	
□ Deposit-taking Company□ Other Institution		ubsidiary of Bank	
Contact person(s):		Title(s):	
Telephone(s):	Facsimile(s):	E-mail Address(es):	
Address:			
A.2 – Membership in RMB FPS			
Please tick where applicable.			
☐ We intend to participate in the Renminbi Faster Payment System ("RMB FPS") as a Settlement Participant with effect from(date) ⁴ .			
☐ We intend to withdraw from participation of the RMB FPS with effect from(date) ⁵ .			
A.3 – Declaration			

In relation to our enrolment, we declare, agree and acknowledge that:

- (a) We are duly incorporated and validly existing under the laws of our jurisdiction of incorporation. All authorisations, consents, approvals, resolutions, licenses and registrations required for us to carry on our business have been obtained or effected and are in full force and effect.
- (b) We have the capability, power and resources (financial or otherwise) to perform the obligations as a Settlement Participant of RMB FPS.
- (c) We have complied and shall comply in all respects with all laws and regulations to which we may be subject including but not limited to all laws, regulatory requirements and regulations regarding anti-money laundering ("AML") and counter-financing of terrorism ("CFT").
- (d) We have established a robust mechanism internally so as to ensure compliance with all applicable laws, regulatory requirements and regulations regarding AML and CFT. The mechanism shall include but is not limited to establish our own access criteria, customer due diligence policies/ guidelines, which are in line with the requirements of HKMA.
- (e) It is our responsibility to conduct customer due diligence, including AML, CFT, Know Your Customer on the Clearing Participant. On request, we shall provide to the RMB Clearing Bank ("CB") the documents, data or information obtained by us in relation to the Clearing Participant in accordance with requirements similar to those imposed under AMLO. CB's approval to any application for membership of RMB FPS is subject to the applicant's fulfillment of the usual customer due diligence requirements imposed by the CB, and the applicable legal and regulatory requirements on AML and CFT.
- (f) Our participation in RMB FPS will terminate immediately upon termination of our Settlement Agreement^{6,7} with the CB and our withdrawal from participation in the RMB CHATS.

Name(s) in Print:	Date:	
Part B – To be completed by Bank of China (Hong Ko	ong) Limited in the capacity of the CB ("BOCHK")	
Please tick where applicable.		
☐ We accept the above Applicant's application for enro	olment of membership; or	
☐ We acknowledge the above Applicant's application for withdrawal from participation in RMB FPS.		
Authorized Signature and Institution Chop:		

Remarks:

Name(s) in Print:

A.4 – Signature by Applicant

Authorized Signature and Institution Chop:

1. Capitalized items used in this form shall have the same meaning as defined in the Rules for Renminbi Faster Payment System as amended from time to time by HKICL.

Date:

2. Applicant should complete and submit this form to BOCHK, in the capacity of the CB, for approval if necessary, and onward submission to HKICL.

Annex II

- 3. Not applicable to overseas banks/institutions until further notice.
- 4. The effective date for enrolment shall be no earlier than 14 days following the submission date of this form.
- 5. The effective date for withdrawal shall be no earlier than 60 days following the submission date of this form.
- 6. Settlement Agreement refers to the Agreement for Clearing and Settlement of Renminbi Business signed by and between Bank of China (Hong Kong) Limited as the Renminbi Clearing Bank in Hong Kong and each Member of RMB Clearing.
- 7. Please refer to the "Principles for Financial Market Infrastructures: Disclosure for RMB CHATS" which is available on the website of BOCHK for the guidance criteria for institutions to become Members or participants of RMB CHATS.

(CB015 V2018.06)

A.3 - Declaration





Enrolment/Withdrawal Form for Clearing Participant of Renminbi Faster Payment System¹

Part A – To be completed by Applicant² A.1 – Particulars of Applicant Name of Institution: Participant Code (if any): BIC Code (if any): Nature of Institution (Please select the appropriate): Registered in Hong Kong³: ☐ Licensee of stored value facility under PSSVFO ☐ Restricted License Bank ☐ Deposit-taking Company ☐ Credit Card Subsidiary ☐ Other Institution Contact person(s): Title(s): Telephone(s): Facsimile(s): E-mail Address(es): Address: A.2 -Membership in RMB FPS and Agreement with Settlement Participant Please tick where applicable and delete where appropriate. ☐ We will enter into an agreement with being a Settlement Participant of the Renminbi Faster Payment System ("RMB FPS") who will provide settlement services for us and we intend to become its Clearing Participant with effect from _ (date)⁴. ☐ We shall terminate our agreement with who is our existing Settlement Participant of the RMB FPS and shall cease to be its Clearing Participant⁵ with effect from ____ _(date) ⁶. □ We shall withdraw from participation of the RMB FPS with effect from ______ (date) ⁷

In relation to our enrolment, we declare, agree and acknowledge that:

- We are duly incorporated and validly existing under the laws of our jurisdiction of incorporation. All authorisations, consents, approvals, resolutions, licenses and registrations required for us to carry on our business have been obtained or effected and are in full force and effect.
- We have the capability, power and resources (financial or otherwise) to perform the obligations as a Clearing Participant of RMB FPS.
- We have complied and shall comply in all respects with all laws and regulations to which we may be subject including but not limited to all laws, regulatory requirements and regulations regarding anti-money laundering ("AML") and counterfinancing of terrorism ("CFT").
- We have established a robust mechanism internally so as to ensure compliance with all applicable laws, regulatory requirements and regulations regarding AML and CFT. The mechanism shall include but is not limited to establish our own access criteria, customer due diligence policies/ guidelines, which are in line with the requirements of applicable competent authorities (including but not limited to the HKMA).
- It is our responsibility to conduct customer due diligence, including AML, CFT, Know Your Customer. Approval by the RMB Clearing Bank ("CB") to any application for membership of RMB FPS is subject to the applicant's fulfillment of the

usual customer due diligence requirements imposed by the CB, and the appli AML and CFT.	cable legal and regulatory requirements on		
A.4 – Signature by Applicant			
Authorized Signature and Institution Chop:			
	_		
Name(s) in Print:	Date:		
Part B – To be completed by the Settlement Participant for its Clearing Participa	ant for enrolment and termination only		
	•		
We confirm that:			
Please tick where applicable			
☐ We have completed a satisfactory due diligence check against the above Applicant. We are satisfied that the above Applicant has established a robust mechanism internally so as to ensure compliance with all applicable laws, regulatory requirements and regulations regarding AML and CFT and we shall conduct on-going monitor on all transactions under our FPS ledger account of the above Applicant are in compliance with all applicable laws, regulatory requirements and regulations regarding AML and CFT. The above Applicant shall become our Clearing Participant with effect from (date); or			
☐ We shall terminate our agreement in respect of the settlement service with the will cease to be our Clearing Participant with effect from			
Authorized Signature and Institution Chop:			
2			
Name(s) in Print:	Telephone(s):		
Name of Institution/Participant Code:	Date:		

Part C - To be completed by Bank of China (Hong Kong) Limited, in the capacity of the CB ("BOCHK")

Please tick where applicable and/or delete where appropriate		
☐ We accept the above Applicant's application for enrolment/termination* of membership; or		
☐ We acknowledge the above Applicant's application for withdrawal from participation in RMB FPS.		
Authorized Signature and Institution Chop:		
Name(s) in Print:	Date:	

Remarks:

- 1. Capitalized items used in this form shall have the same meaning as defined in the Rules for Renminbi Faster Payment System as amended from time to time by HKICL.
- 2. Applicant should complete and submit this form via its Settlement Participant to BOCHK for approval if necessary, and onward submission to HKICL.
- 3. Not applicable to overseas banks/institutions until further notice.
- 4. The effective date for enrolment shall be no earlier than 14 days following the date on which this form is submitted by the relevant Settlement Participant.
- 5. Applicant changing its Settlement Participant should complete and submit two separate forms to the respective Settlement Participants for terminating the agreement with its existing Settlement Participant and for entering into an agreement with the new Settlement Participant.
- 6. The effective date for termination shall be no earlier than 14 days following the date on which this form is submitted by the relevant Settlement Participant.
- 7. The effective date for withdrawal shall be no earlier than 60 days following the submission date of this form.

(CB015 V2018.06)