BANK NEGARA MALAYSIA
CENTRAL BANK OF MALAYSIA

RENTAS Modernisation Plans
Discussion Paper

Applicable to −
RENTAS Participants

This discussion paper sets out Bank Negara Malaysia's (the Bank) proposed plan for modernising the Real Time Electronic Transfer of Funds and Securities System (RENTAS).

This paper aims to gather feedback and views from all RENTAS participants on the identified plans within the RENTAS modernisation strategy.

The Bank invites feedback from all RENTAS participants with responses from each institution expected to encompass insights from all relevant departments. This includes those overseeing strategic investment in payment services, such as Treasury and Payments Operations, Transaction Banking, Client Service Delivery, IT Services, Risk Management, Innovation and Product Strategy.

Submission of feedback for the discussion paper:
a) Please provide written feedback on the proposals, including suggestions on areas to be clarified or elaborated and any alternative proposals that the Bank should consider. In addition to providing general feedback, respondents are expected to respond to the specific questions set out throughout this discussion paper.
b) The written feedback should be supported with clear rationale, accompanying evidence or illustrations as appropriate, to facilitate the Bank's assessment.
c) All responses to the discussion paper are to be submitted electronically to the Bank via Microsoft Forms (https://forms.office.com/r/NM1xm99Esu) by **22 March 2024.**

Feedback received may be made public unless confidentiality is specifically requested for the whole or part of the submission.

If you have any queries on the discussion paper or access to Microsoft Forms, you may direct them to the Payment Services Policy Department of BNM at RENTASpolicy@bnm.gov.my.

Issued on: 23 February 2024

TABLE OF CONTENTS

EXECUTIVE SUMMARY

The Real Time Electronic Transfer of Funds and Securities System (RENTAS) is a critical financial market infrastructure (FMI) in Malaysia, facilitating real-time and gross settlement of large value payments. RENTAS plays a vital role in connecting financial institutions nationwide and thus, is a systemically important payment system (SIPS).

Currently, many central banks globally are proactively modernising their Real-Time Gross Settlement (RTGS) systems to futureproof and enhance system resiliency, efficiency and interoperability. Key drivers underlying these efforts include infrastructure refresh needs, enhancing cross-border payments, adoption of ISO 20022, exploration of emerging technologies (e.g. application programming interface (API) and distributed ledger technology (DLT)), as well as evolving user demands.

Recognising similar trends and drivers in Malaysia, the Bank has embarked on its own RENTAS modernisation exercise, as outlined in the Bank's Financial Sector Blueprint 2022-2026. The Bank proposes several key initiatives, under two overarching themes:

1. *Futureproofing RENTAS*
   a. **Supporting near 24/7 operations**: Ensuring system readiness to support an extension of RENTAS operating hours and to pursue the roll-out of near real-time retail payment settlement.
   b. **Enabling open access**: Facilitating open and flexible connectivity, through alternative access channels to RENTAS, ensuring flexible data retrieval and facilitating future integration with other FMIs and asset ledgers.

2. *Enhancing risk management and user functionality*
   a. **Data provisioning and analytics capabilities**: Improving business analytics functionality with additional indicators and real-time access to data, focusing on essential metrics. Additionally, participants are envisioned to have direct access to transactional data for their own personalised data analytics.
   b. **Redesigning of Liquidity Savings Mechanism (LSM)**: Enhancing LSM in RENTAS with the aim to optimise liquidity use, support crisis preparedness and promote better payment behaviour.

Note: Additional proposals or modifications may emerge after this Discussion Paper as the Bank will continue engaging RENTAS participants for insights on modernisation efforts in response to evolving developments.

PART A   OVERVIEW

Introduction

1.1   In 2023 alone, RENTAS facilitated over 400,000 transactions, valued at RM6.9 trillion, with on average 24,400 transactions settled daily totalling RM361.2 billion. This underscores the need for continued reliability and resiliency of RENTAS to support the efficient functioning of the economy.

1.2   While RENTAS has been continually enhanced to meet the changing needs of participants and the economy, it must continue to evolve to remain fit-for-purpose in the medium to long term. The payment landscape is increasingly evolving, shaped by the emergence of new technologies (e.g. API, DLT, machine learning (ML) and artificial intelligence (AI)). Non-bank payment services providers (PSP) are also growing in prominence, with the blurring functions/line between new PSPs and traditional banks adding to the complexity in the payment ecosystem. In addition, the adoption of common standards like ISO 20022 messages and shifting user demands for improved customer experience further drive these developments.

1.3   In terms of risks, cyber-threats and operational risks are escalating, posing rising threats to the financial system. Effective prevention strategies, emphasising on robust systems and processes are crucial for mitigating these risks and ensuring the continued resilience of RTGS operations.

1.4   Against this backdrop, many central banks globally have embarked on RTGS modernisation exercises, focusing on an infrastructure refresh to replace legacy systems and ensuring agility for seamless integration with latest innovations in the changing payment landscape. These efforts aim to deliver a more resilient, efficient and innovative settlement system to promote monetary and financial stability.

1.5   The renewal of these RTGS systems also seek to ensure greater alignment with international standards set by the Committee on Payments and Market Infrastructure (CPMI)[1] such as the Principles for Financial Market Infrastructures (PFMI). Further, these exercises also support global efforts to enhance cross-border payments (e.g. G20 Roadmap for Enhancing Cross-border Payments).

1.6   In recent years, the Bank has already initiated efforts to respond to these developments. Most notably, this includes ISO 20022 messages adoption in RENTAS and enhancing end-to-end risk management of RENTAS with the transfer of its operations to the Bank. In 2022, modernisation efforts for RENTAS

---

[1] CPMI is an international standard setter under the Bank for International Settlements (BIS) that promotes, monitors and makes recommendations about the safety and efficiency of payment, clearing, settlement and related arrangements.

have become a key priority for the Bank with its inclusion in the Financial Sector Blueprint 2022-2026. Accordingly, the Bank has conducted a survey (the 2022 Survey) to assess the current landscape and gather feedback on potential areas to explore in modernising RENTAS. Multiple engagements with RENTAS participants have also been conducted since then.

1.7   Participants are generally supportive of the modernisation initiative and key feedback noted from the 2022 Survey are as follows:

   a) There is a need to streamline compliance checks, given the uneven practices across participants. Many participants still rely on manual processes, especially to comply with Foreign Exchange Policy (FEP) and Anti-Money Laundering and Countering Financing of Terrorism (AML/CFT) requirements.
   b) Participants are receptive to exploring emerging technologies particularly API, DLT and AI in RENTAS, recognising the potential to enhance system agility and enable new offerings.
   c) While intraday liquidity management is not an immediate concern, improvements to strengthen industry practices and surveillance capabilities would be beneficial to deliver further efficiency gains in liquidity management.
   d) Participants express a need for richer data and increased data access to support analytics, including introduction of critical triggers or notification feature and the use of APIs for data analytics.

1.8   This paper outlines the proposals of key initiatives to modernise RENTAS with the two overarching themes i.e. futureproofing RENTAS and enhancing risk management and user functionality. The details of proposals are discussed in Part B of this paper.

PART B   PROPOSED INITIATIVES FOR RENTAS MODERNISATION

Scope and guiding principles

2.1   The outlined use cases and initiatives in this paper address the plans for RENTAS modernisation, guided by two overarching themes:

a) Futureproofing of RENTAS; and
b) Enhancing risk management and user functionality.

2.2   *Guiding principles*: In determining the use cases and initiatives, the Bank adheres to the following principles:

a) *Agile*
Ensuring an agile system design, capable of adapting to operational and developmental demands in serving current and future needs, with minimal configuration.

b) *Intuitive*
Developing simple, intuitive and user-friendly RENTAS functionalities, while maintaining efficient transaction processes.

c) *Fair and open*
Promoting fair and open access to RENTAS to foster innovation and competition, delivering value across the industry, from participants to corporates and end-users.

d) *Resilient and secure*
While embracing rapid technological developments, the modernised RENTAS shall continue to prioritise resiliency and security to facilitate smooth transaction processes, with enhanced features to enhance risk management by participants.

2.3   The Bank remains open to additional proposals that may emerge post-infrastructure design assessment or as they arise, and the Bank will continue engaging RENTAS participants for insights.

Theme 1: Futureproofing RENTAS

### Proposal 1: Supporting near 24/7 operations

3.1 On working days, RENTAS currently operates for 13 hours (8:00 a.m. to 9:00 p.m.) for settlement of wholesale and retail payments[2] e.g. DuitNow or Real-time Retail Payments Platform (RPP), Financial Process Exchange (FPX), Interbank GIRO (IBG) and Direct Debit. The evening settlement window between 6:00 p.m. to 9:00 p.m. is dedicated to facilitate settlement for IBG and Direct Debit.

Figure 1: RENTAS operating hours on business days
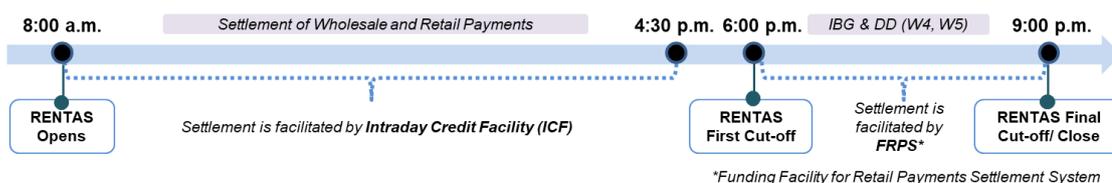
3.2 In October 2023, RENTAS extended its operations to weekends and public holidays, from 8.00 a.m. to 6.00 p.m., to facilitate settlement of Real-time Retail Payment Systems (RT-RPS) i.e. RPP and FPX. This expansion was aimed to reduce FI's net debit exposures and mitigate settlement risk arising from the current deferred net settlement mechanism of RT-RPS.

Figure 2: RENTAS operating hours for weekends and public holidays
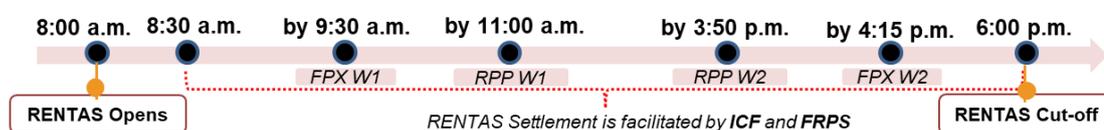
3.3 Building Block 12 (BB12)[3] of the G20 Roadmap for Enhancing Cross-border Payments underscores the need to align the operating hours of key payment systems globally. This building block aims to minimise delays in cross-border payments, which are partly driven by the varying operating hours of RTGS systems across jurisdictions. This alignment could enable faster payments, better liquidity management, reduced settlement risk and enhanced performance of systems used for cross-border transactions. Consequently, these considerations are incorporated in efforts to extend RTGS operating hours.

3.4 The recent CPMI report on 'Extending and aligning payment system operating hours for cross-border payments' outlines three potential end states for RTGS operations:

---

[2] Other retail payment systems include Shared ATM Network, MyDebit and National Electronic Cheque Information Clearing System (eSPICK).

[3] The Cross-border Payment Task Force of the CPMI identifies 19 building blocks in supporting a global approach to address the four main challenges in cross-border payments i.e. high cost, low speed, limited access and limited transparency.

a) *End state 1:* Extended hours on current operating days, with a proposed Global Settlement Window (06:00 – 11:00 GMT)[4].

b) *End state 2:* Expanded hours into current non-operating days (i.e. weekends and public holidays)[5].

c) *End state 3:* 24/7 operations (or near 24/7), with zero or minimal downtime for maintenance processes.

3.5   Several major central banks have announced plans to explore extending their RTGS operating hours, with a focus on ensuring technical capability to support near 24/7 operating hours.

3.6   In Malaysia, the Bank's current assessment suggests that existing RENTAS operating hours are adequate to facilitate the needs of wholesale payments:

a) The 2022 Survey indicates that majority of participants have no immediate demand or need to extend RENTAS operating hours from a wholesale payments perspective.

b) Malaysia already benefits from the overlapping operating hours between RENTAS and the RTGS of other countries, such as US Fedwire, for USD settlement of cash and bonds while the remaining cross-border settlement largely occurs within the region (e.g. via USD CHATS in Hong Kong and other correspondent banking arrangements).

c) RENTAS operating hours are already largely aligned with CPMI's proposal on the Global Settlement Window.

Questions

1. While there is no immediate need to support 24/7 operations for wholesale payments, does your institution foresee any potential use cases in the medium to long term? Please provide details.

2. We seek input from participants on the expected effort for your institution in the event RENTAS operation for wholesale payment moves to near 24/7. Please specify which sections/departments (e.g. front-end, IT, risk, etc.) and systems (e.g. core banking, treasury, etc.) of your institution that will be impacted by such an extension of operating hours.

---

[4] 5-hour period when the largest number of RTGS systems simultaneously operate, i.e. 2:00 – 7:00 p.m. Malaysian time.
[5] With extended operations to weekend and public holidays, RENTAS is currently at end state 2.

3.7   Nevertheless, given plans to transition to near real-time settlement for retail payment, the Bank views that ensuring system readiness to enable an extension of RENTAS operating hours, will be pivotal in facilitating the potential roll-out of near real-time settlement for retail payment.

3.8   Currently, the settlement for RT-RPS is based on a deferred net basis. To mitigate the credit risk present in this settlement arrangement, several interim measures were rolled out in October 2023 namely – (a) introduction of additional settlement windows on weekends and public holidays; and (b) requirement for retail payment participants to set aside a pre-determined amount of collateral to secure against RPP transactions (Deferred Net Settlement (DNS) collateralisation control)[6].

3.9   Cognisant of issues[7] surrounding the DNS collateralisation control, the Bank is considering for a long-term solution to address credit and settlement risks in RT-RPS by transitioning to a near real-time settlement model. This is supported by majority of participants based on a survey[8] conducted in 2023. The Bank will continuously engage the industry for the plan to transition to near real-time settlement for retail payment.

3.10   Moving forward, as RENTAS is envisioned to be technically capable for near 24/7 operations, the Bank will explore additional use cases for wholesale payment. Despite the lack of demand for extended hours from the wholesale perspective, the Bank will continue to monitor the global development and engage participants on any potential use cases in the future.

---

[6] The DNS collateralisation control is supported by contractual protection under the Operational Procedures for MYR Settlement in RENTAS which reserves the right to BNM and Perbadanan Insurans Deposit Malaysia (PIDM) to manage DNS collateral to ensure "business-as-usual" of retail payment settlements in the event of a participant's gone concern.

[7] DNS collateralisation control may be subject to residual risk in situations where the net debit exposure of retail payment transactions exceeds the amount of DNS collateral, and the high implementation cost in the long run particularly considering that DNS collateral cannot be recognised as high-quality liquid assets (HQLA) under Liquidity Coverage Ratio (LCR) requirements as it is deemed to be encumbered.

[8] Based on survey issued to retail payment participants in June 2023 entitled "Survey on Real-time Retail Payment Systems (RT-RPS) Controls".

Proposal 2: Enabling open access

4.1 To support greater competition and innovation, the modernised RENTAS shall facilitate open and flexible connectivity. This may, among others, involve providing access to new participants, flexible access channel including data retrieval (e.g. via API) and potential connectivity to other ledgers and RTGS in other countries. With an agile system design, the modernised RENTAS will be able to adapt to current and future demands.

4.2 The Bank has identified several uses cases for open connectivity as follows:

a) *Alternative access channel to RENTAS*
   - Allow RENTAS to cater for wider range of participants in the future (e.g. non-bank e-money issuers, non-resident banks). Currently, RENTAS participants can access the system via three terminals i.e., RENTAS Bank Gateway (RBG), SWIFT Access and RENTAS iLINK. With open connectivity, an alternative connection method such as API, could lower access costs for smaller players and reduce dependency on designated vendors.

b) *Future integration with other FMIs or other asset ledgers*
   - Considering developments in the retail payment space, potential linkages with other RTGS or FMIs, particularly within the region, may also be explored in the future to enhance the regional financial ecosystem.
   - An open and flexible connection to RENTAS would also facilitate potential integration with a central bank digital currency (CBDC) platform (domestic or multi-CBDC platform), hence enabling efficient liquidity movement between RTGS and CBDC platforms.

c) *Flexible data retrieval*
   - Enable flexibility for participants to retrieve transactional data or information from a secured-zone database. This allows participants to develop their own tools or analytics for operational and risk management purposes (will be discussed further under Proposal 3 of this Discussion Paper).

Figure 3: Illustration on proposed use cases for open connectivity to RENTAS
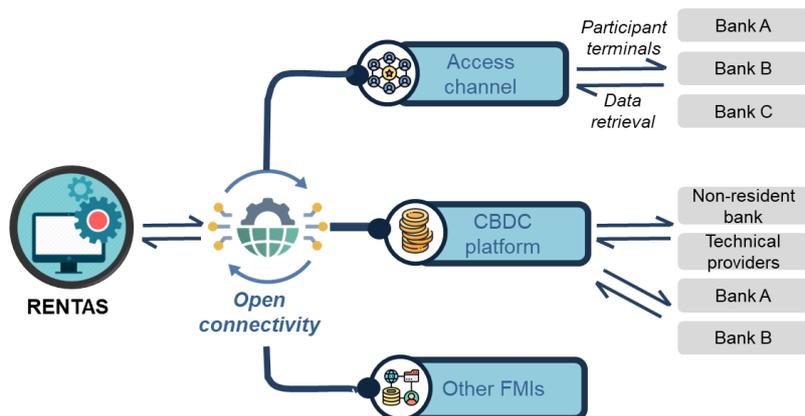
4.3   Despite the considerable opportunities, enabling more open access to RENTAS may at the same time elevate cyber security risks as well as operational risks. Such concern stems from the growing number and complexity of cyber threats, especially on a large payment ecosystem like RENTAS. Operationally, resources and processes would be also largely impacted with the enablement of open connectivity to RENTAS.

4.4   Thus, enhanced security measures to manage the risks will be implemented and this may include strengthening the security of existing interface, coupled with robust access controls and data loss prevention. These may include multi-layer access control, implementation of firewalls and intensified monitoring of network traffic. In addition, enhanced business continuity plans shall also be in place to address any disruption in systems and operations.

Questions

3. Please provide your institution's response and views on the proposed plans for open and flexible connectivity for RENTAS. Does your institution agree with the proposal and are there strong opinions or immediate needs to any of the outlined points? Additionally, does your institution have other suggestions for use cases?

4. What other potential risks does your institution foresee with this initiative? Please elaborate on these risks and suggest potential mitigation measures.

Theme 2: Enhancing risk management and user functionality

Overview

5.1   As a large value payment system that processes settlement on real-time gross basis, RENTAS requires its participants to have sufficient liquidity. Accordingly, RENTAS participants need to effectively manage their liquidity risk, especially

intraday liquidity risk in RENTAS. Such risks are heightened in times of stress. Recognising the increasing liquidity risks, the Bank has issued the [Exposure Draft on Liquidity Risk](#)[9] that includes strengthened expectations for financial institutions to manage intraday liquidity risk to ensure the smooth functioning of payment and settlement in RENTAS.

5.2   Although the Bank observed minimal settlement failures in RENTAS transactions and minimal incidents of insufficient funds among participants, there are certain limitations in participants' practices regarding intraday liquidity management, particularly in liquidity optimisation:

a)   Many participants lack analytical tools for intraday liquidity analysis (e.g. manual projection in Excel, retrieving information from branches, etc.). This limitation impairs the participants' ability to align with prudential measures for managing settlement exposures.

b)   Limited use of existing LSMs, i.e. the Liquidity Optimisation Settlement Facility (LOSF) and Gridlock Resolution Mechanism by participants. This leads to sub-optimal use of liquidity despite high liquidity buffers at certain times for some participants.

5.3   To bridge these gaps, the Bank envisions tools to support enhanced institutional and system-wide management of intraday liquidity within RENTAS. A comprehensive approach for end-to-end intraday liquidity management in RENTAS is being considered, encompassing on-going surveillance using RENTAS tools, facilities to support on-going liquidity needs and implementation of liquidity savings mechanism for heightened efficiency across the financial system. The proposals include:

a)   Provision of intraday liquidity monitoring data in RENTAS to facilitate participants' effective monitoring; and
b)   Exploration of LSM enhancements to optimise liquidity savings.

Proposal 3: Data provisioning and analytics capabilities

6.1   While RENTAS iLINK currently provides essential reports and monitoring indicators such as account balance listing, ICF utilisation and settlement status, there are notable gaps that necessitate functional improvements. This includes limited historical data series (up to 45 days only) and rigid data formats for analysis (e.g. Excel, PDF).

---

[9] Exposure Draft on Liquidity Risk issued on 23 August 2023 outlines several prudential requirements on managing intraday liquidity risk.

6.2   *Functionality 1*: *Enhanced Business Intelligence (BI) Tool*
        Based on the 2022 Survey on RENTAS modernisation, 78% of respondents support the introduction of intraday liquidity monitoring indicators in RENTAS.

- The Bank intends to provide the essential metrics aligned with recommendations in the Basel Committee on Banking Supervision (BCBS) paper on [Monitoring tools for intraday liquidity management](#), based on data availability in RENTAS[10]:
    i.   Daily maximum intraday liquidity usage
    ii.   Available intraday liquidity at the start of the business day
    iii. Total payments sent/received in Large Value Payment System (LVPS) i.e. RENTAS
    iv.   Time-specific obligations
    v.   Intraday throughput
- This aims to facilitate participants to identify potential liquidity shortfalls promptly, enabling timely and informed actions.

6.3   *Functionality 2: Enabling transactional data access*

- In the pursuit of advanced analytics capabilities, as per one of the use cases in Proposal 2, the Bank is planning to provide access to transactional data via open and flexible connectivity (e.g. API) to address existing data and functionality gaps.
- Participants may retrieve necessary data and conduct their analysis, tailored to their specific requirement. This is intended to empower participants to conduct in-depth trend analysis using transaction-level data on exposures for their respective institution.

Questions

5. In addition to the indicators outlined in the BCBS paper, are there other essential data points that your institution deems necessary and should be provided by RENTAS?

6. What is your institution's opinion on the Bank's plan to furnish transactional data via open connectivity? What potential benefits do you anticipate for your institution, and how do you plan to capitalise on more efficient access to granular data?

---

[10] BCBS Intraday liquidity monitoring tool indicators that are not available in RENTAS include 1) value of payments made on behalf of correspondent banking customers; and 2) intraday credit lines extended to customers.

Proposal 4: Redesigning of Liquidity Savings Mechanism

7.1 Incorporating LSM in RTGS will facilitate more efficient liquidity planning and cost management, particularly with the potential increase in the allocation of cash and securities needed to support DNS collateralisation and transition towards near real-time retail payment settlement. Furthermore, LSM helps participants manage settlement risk for crisis preparedness, especially during stress conditions. It will enable more efficient use of excess liquidity and collateral, reinforcing participants' liquidity buffer. Finally, LSM can encourage prompt settlement, minimise liquidity hoarding and foster improved payment behaviour.

7.2 **Liquidity Optimisation Settlement Facility (LOSF) – manual opt-in requirement**
The LOSF is designed to match transactions, thereby reducing net obligations and minimising liquidity needs for participants. It combines the transactions of incoming and outgoing payments to achieve a reduced net obligation. However, its operational efficiency is currently hampered by the necessity for manual opt-in and the requirement for transactions to be queued in separate settlement queues (refer to Figure 4 below). Participants that would like to utilise this facility need to manually request other participant(s) to also opt-in and set the relevant transactions in the separate queue. To-date, there has been no utilisation of LOSF since it was made available in RENTAS since 2012.

7.3 **Gridlock[11] resolution mechanism – reactive nature**
This module resolves settlement gridlock via automatic multilateral netting on a gross basis. The mechanism will identify an optimal set of queued transactions across affected participants that can be settled simultaneously. However, the mechanism only kicks in after liquidity in both cash and K-accounts are fully depleted with detection intervals set at 20 minutes, which further limits its utilisation. In 2023, only 10% of the gridlocked transactions were actually resolved through this mechanism. The remaining unresolved transactions were moved back to the queue for settlement upon availability of liquidity.

---

[11] Gridlock occurs in RENTAS when the inability of some participants to settle their outgoing transactions, usually due to insufficient funds or securities, prevents a substantial number of transactions from other participants from settling.

Figure 4: Current LSMs in RENTAS
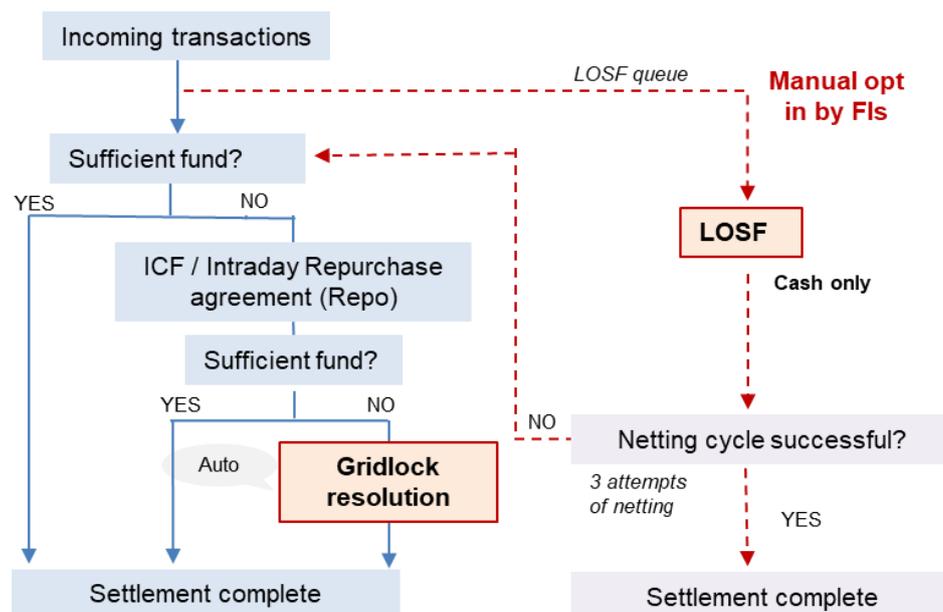
7.4 Recognising the advantages of incorporating an LSM module in RTGS, the Bank is initiating an exploration to identify the most effective mechanism for integration into RENTAS. Some of the features that are being considered for the new LSM include the splitting of transactions into separate streams (e.g. urgent and non-urgent payments), more frequent intervals, and combination of different algorithms (e.g. multilateral/bilateral netting, bypass First In First Out (FIFO), resequencing, etc.).

7.5 Our benchmarking[12] of selected countries have highlighted a common LSM feature that entails the segregation of urgent and non-urgent payments, which is determined by the individual RTGS participants (e.g. time-bound). Another common feature adopted by other RTGS is the multilateral netting in shorter time intervals. Notably, the Bank of England (BOE)'s implementation of such LSM tool, which runs every 2 minutes, has resulted in a 20-30% savings in liquidity usage for the industry in 2019[13]. Meanwhile, with adoption of LSM in the Bank of Canada (BOC)'s new RTGS system, Lynx, also has led to a higher liquidity efficiency ratio[14] (average LER of 8.4) in 2021, compared to its old Large Value Transfer System (LVTS) that works on a deferred net settlement basis (average LER of 7.0).

7.6 In considering the adoption of a similar mechanism within RENTAS, we have outlined a potential flow in the diagram below as an illustration based on our benchmarking findings. The Bank seeks feedback from RENTAS participants on

---

[12] The RTGS systems adopting this approach are Bank of England's RTGS and Payment Canada's Lynx.

[13] Based on Bank of England's Liquidity Saving Mechanism User Guide (February 2021).

[14] The Bank of Canada uses the liquidity efficiency ratio (LER), which is the value of payments settled for every dollar of liquidity used, which is described in their staff paper on From LVTS to Lynx: Quantitative Assessment of Payment System Transition.

the areas that would build up a more effective LSM. In addition, the Bank plans to conduct a tailored simulation study for RENTAS to identify the most effective solution that can be implemented.

Figure 5: Potential flow for LSM in RENTAS
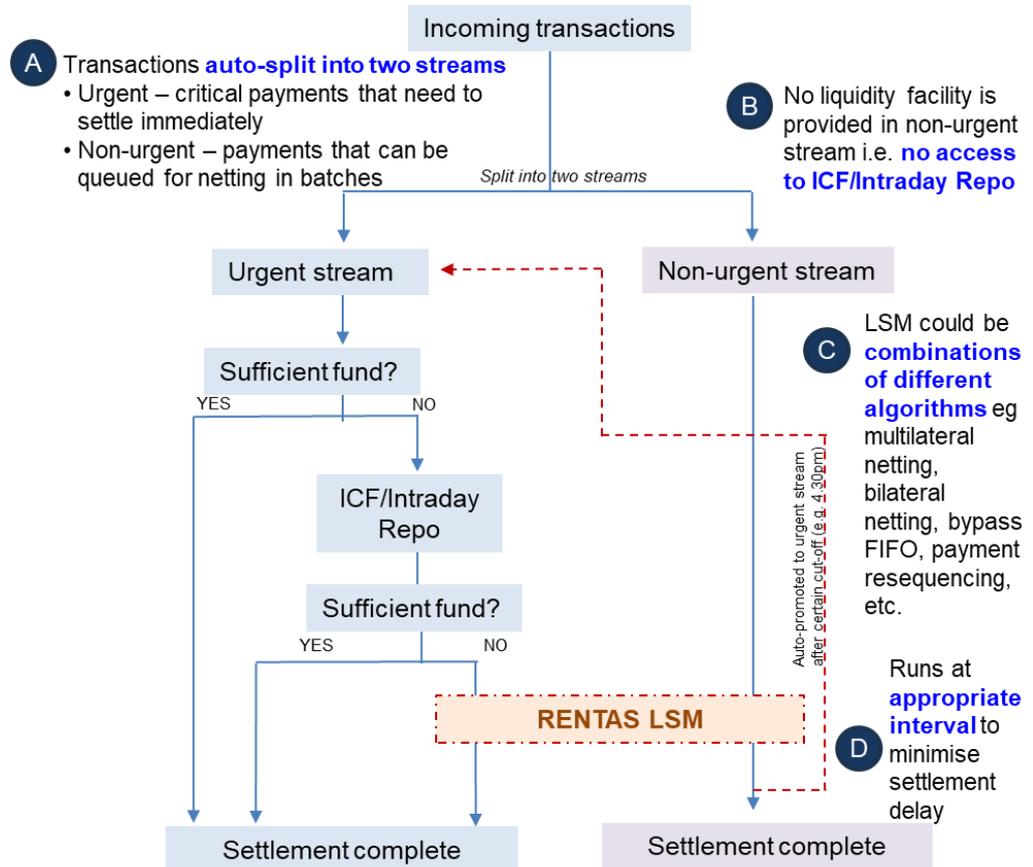
Questions

7. If RENTAS adopts a mechanism similar to BOE and BOC, how would your institution classify transactions as urgent and non-urgent? Additionally, what types of payments are considered as non-urgent and eligible for the LSM?

8. Does your institution have additional proposals to enhance liquidity optimisation in RENTAS?

Other future considerations

8.1   In addition to the previously mentioned initiatives, the Bank is embarking on Phase 2 CBDC exploration (Domestic Wholesale CBDC). This project aims to explore innovative solutions using wholesale CBDC and DLT to enhance and futureproof RENTAS. One of the use cases involve testing the potential of smart contracts to address compliance bottlenecks for RENTAS transactions, in addition to exploring tokenisation of securities and settlement using CBDC.

8.2   These use cases were determined after taking into consideration the feedback provided by participants in the 2022 Survey. The Bank noted on suggestions to explore enhancing efficiency in the compliance process and pre-matching activities in securities settlement. The Bank intends to continue engaging with participants for additional feedback and project findings will be shared.

8.3   Efforts are also ongoing to futureproof the debt securities issuance system, namely the Fully Automated System for Issuing/Tendering (FAST). The Bank gathered feedback from FAST users in 2022 and conducted internal feasibility studies to establish requirements to support developments in the debt capital market. In addition, the Bank also plans to adopt the latest technology to replace existing ones with the aim of providing a more scalable, efficient and user-friendly system. This initiative is scheduled to kick off later in 2024.

8.4   In addition to these ongoing initiatives, some jurisdictions have enabled or plan to enable synchronisation functionality in their RTGS, which allows cash movements to synchronise with the movement of other assets (e.g. house purchase). Meanwhile, a central bank is looking into linking of RTGS between jurisdictions particularly ASEAN countries, upon successful implementation of cross-border linkages for retail payment.

Question

9.   The Bank is cognisant of related efforts taken by other countries to enhance their RTGS, as shared in paragraph 8.4. Does your institution have suggestions for additional initiatives that should be considered by the Bank in the RENTAS modernisation exercise? If so, please elaborate on your recommendations and provide justification for their inclusion.