



BANK NEGARA MALAYSIA
CENTRAL BANK OF MALAYSIA

Operational Procedures For Malaysian Ringgit (MYR) Settlement In The Real Time Electronic Transfer Of Funds And Securities System (RENTAS)

Applicable to:

1. Participants of RENTAS

REVISION HISTORY

Version No.	Effective Date	Summary of Changes
1.0	1 Jul 2021	Initial Creation
1.1	2 Aug 2021	<p>Clause 8.8 Renamed to “MYR Money Market Transactions” and to have sub-clause underneath i.e. Clause 8.8.1 Intraday Money Market Transactions and Clause 8.8.2 Overnight Interbank Money Market Transactions.</p> <p>Appendix XVII – Standardised Format in MT202 for Overnight Interbank Money Market Transactions Added new appendix to specify the standard message content</p>
1.2	4 Jan 2022	<p>Clause 3.2.1 Included Swift Alliance Lite2 (SAL2) as additional option for participants to access RENTAS subject to participants complying with BNM Risk Management in Technology (RMiT)</p> <p>Clause 4.2.2. Added institutions licensed under Financial Services Act (FSA)/ Islamic FSA upon designation in RENTAS membership Type 1</p> <p>Clause 8.8.2 & Appendix XVII Removed the word “Overnight” from the Interbank Money Market Transactions requirements</p> <p>Clause 12.10 Added clause 12.10.5 to specify participants’ responsibility in monitoring the redemption profile of securities in SRR account.</p> <p>Clause 15.9 and 15.10 Updated the clauses to clarify that “free-ride” of extension is not limited to multiple cut-off time extension requests that overlapped with each other.</p> <p>Clause 19.5 Revised the requirement on number of days for participants to renew their ePKI certificate before expiry date</p> <p>Appendix II Added non-compliance charges specifically for settlement after 6.00pm</p> <p>Glossary - Item 5 and 56 Added definition of “Bridge Institutions” and “PIDM”</p>
1.3	1 Aug 2022	<p>Clause 3.2 Amended Clause 3.2.1 (ii) to update the Department in charge in BNM for consultation purpose</p>

Guideline VI – Supplementary Guideline on Co-existence of RENTAS ISO20022 (MX) and ISO15022 (MT)

Added new guideline to provide clarity on changes to payment messages resulting from the RENTAS MT-MX co-existence

Appendix XV – External User Access Request Form

Added RENTAS Portal as the available System/Application in External User Access Request Form

Appendix XVIII – Declaration of Onboarding Readiness for RENTAS ISO20022 Payment Messages

Added new appendix for Participants to formally declare their onboarding readiness for MX

Appendix XIX – Confirmation of MT-MX Outgoing & incoming Transaction Flow

Added new Appendix for Participants to provide the selected option on transaction flow

Glossary – Item 45

Added definition of “MX Participants”

1.4 **1 Apr 2023**

Clause 8.0

Added clause 8.11 and 8.12 to clarify the handling of payments settlement in RENTAS in the event of Unexpected Banking Holiday

Clause 34.4

Added new sub-cause 34.4.6 to introduce RENTAS Portal as new module in RENTAS Portal

Clause 35.0

Removed clause 35.1 on RENTAS Portal user manuals.

Guideline VI – Supplementary Guideline on Co-existence of RENTAS ISO20022 (MX) and ISO15022 (MT)

Added clause 4.3 and clause 5.2 to manage additional MX information by RENTAS participants during co-existence of MT-MX

Appendix XV – External User Access Request Form

Updated the form to be application for BNM and external use. Removed the Cyber Security Department (CSD) sign off.

Glossary

Added definition of “Banking Holiday” and “Unexpected Banking Holiday”

Insert word ‘eligible’ in the definition of Intraday Credit Facility.

1.5	2 January 2024	<p>Clause 3.2.1 Updated Clause 3.2.1 (ii) to include new platform i.e. Swift Alliance Cloud (SAC) and the requirement for participants opting for SAL2 and SAC.</p> <p>Clause 8.0 Updated Clause 8.27 to reflect changes to provision of MYR Intraday Credit during MYR Evening Settlement Window and RPS Business Hours</p> <p>Added Clause 8.28 on the availability of MYR Intraday Credit in Clause 8.27 (ii) and (iii) for Conventional Banks.</p> <p>Removed Clauses 8.40 to 8.56 related to ACOFF. Where applicable, ACOFF is replaced with Funding Facility for Retail Payments Settlement System (FRPS).</p> <p>Added new Clause 8.40 to 8.51 to introduce Funding Facility for Retail Payments Settlement System (FRPS)</p> <p>Added new Clauses 8.52 to 8.56 to outline requirements and procedures of FRPS Outright Purchase for Conventional Banks.</p> <p>Added new Clauses 8.57 to 8.62 to outline requirements and procedures of FRPS Outright Purchase for Islamic Banks.</p> <p>Added new Clauses 8.63 to 8.69 to outline requirements and procedures on Deferred Net Settlement (DNS) Collateral.</p> <p>Clause 9.0 Added new Section 9.0 to introduce Retail Payments Settlement (RPS).</p> <p>Added new clause 9.1 to 9.9 to outline requirements procedures for Retail Payments Settlement</p> <p>Clause 19.0 (Previous Clause 18.0) Renamed sub-topic “Managing Unsettled MYR Intraday Credit” to “Managing Unpaid MYR Intraday Credit during MYR Settlement Business Hours”</p> <p>Added new sub-topic “<i>Managing Unpaid MYR Intraday Credit during MYR Evening Settlement Windows and Retail Payments Settlement Business Hours</i>”.</p> <p>Added Clause 19.12 on management of unpaid ICF during MYR Evening Settlement Windows and Retail Payments Settlement Business Hours by Conventional Banks.</p> <p>Removed all clauses related to ACOFF. Where applicable, ACOFF is replaced with Funding Facility for Retail Payments Settlement System (FRPS).</p>
-----	-----------------------	---

Appendix VI – Form C: Confirmation of Access Channel for Foreign Currency Settlement in RENTAS

Added Swift Alliance Cloud (SAC) as a selectable access channel option for Participants.

Appendix XX – Authorisation for BNM to Transfer cash and/or Eligible Securities in DNS Collateral Account to MYR Settlement Account or K Account of Retail Payments Participant.

Added new Appendix for Participants to provide authorisation for BNM to transfer cash and/or eligible securities in DNS Collateral Account to MYR Settlement Account or K Account of Retail Payments

Appendix XXI – Confirmation of Subscription to Funding Facility for Retail Payments Settlement (FRPS)

Added new Appendix for Participants to confirm Participants subscription to FRPS.

Glossary

Added definition of the following terms:
“Conventional Banks”, “Islamic Banks”, “FRPS Outright Sale”, “FRPS Outright Purchase”, “Retail Payments Settlement Business Day”, “Retail Payments Settlement Participant”, “Retail Payments Settlement”, “Retail Payments Settlement Business Hour”, “DNS Collateral Account”, “MYR Evening Settlement” and “SRR Cash Account”

1.6 1 July 2024

Clause 3.2.1

Updated Clause 3.2.1 (iii) to remove iLink accessibility via internet.

Clause 4.2.2

Updated Type 1 membership table to recognise Bridge Institution as RENTAS member upon designation in accordance with PIDM Act.

Clause 7

Updated to reflect the changes of payment message format to MX from MT, while retaining securities messaging format as MT.

Clause 8.2

Added MyDebit 2nd Window in MYR Settlement activities.

Clause 8.7.8, 8.8.2.1, 8.55 and 8.61

Updated to reflect the changes of MT message format to MX.

Clause 14.1, 14.3 and 14.4

Updated to reflect the changes of MT message format to MX.

Guideline I – Guidelines on MYR Third Party Payments

Updated Clause 3.0, 3.1, and 3.2 to replace MT103 requirements to Pacs.008.001.08 requirements.

Updated Clause 3.3 to reflect Pacs.008.001.08 requirements and removed clause 3.3.3 guide on regulatory reporting and updated guide based on MX version in 3.9.

Updated Clause 3.4, 3.6 and 3.7 to reflect Pacs.008.001.08 requirements in the relevant MX fields.

Added Clause 3.8 and 3.9 to specify the relevant MX fields to be used for regulatory reporting and the identification of the previous instructing agent.

Guideline II – Guidelines on Handling Invalid Characters in RENTAS

Updated Clause 2.1 and 2.2 to reflect the extended special characters required by MX message format.

Guideline III – Guidelines on Compensation on Inter-Bank Failed Settlements Indemnity

Updated Clause 3.2 to reflect the changes to MX message format.

Guideline VI – Supplementary Guideline on Co-existence of RENTAS ISO20022 (MX) and ISO15022 (MT)

Removed Guideline VI as RENTAS participants will be on MX message format effective 7 July 2024, and the MX message format have been reflected into the main Clauses.

Appendix XII – Supported Foreign Currency

Removed USD as the available currency from foreign currency settlement service in RENTAS.

Appendix XVII – Standardised Format in pacs.009 for Interbank Money Market Transactions

Updated to reflect the changes to relevant MX fields and removed the double slash "/" at the beginning of field lines in the example, as it is not required in MX fields.

Appendix XXII – Business Services ID for MX

Added new Appendix for Participants, pursuant to the new MX requirement to provide business services ID in respective MX transactions.

Glossary

Updated definition of the following terms:
“Bridge Institutions” and “PIDM”.

Added definition of “PIDM Member Institution”.

1.7 **1 November
2024**

Clause 8.11 and 8.12

Updated to replace “Unexpected Banking Holiday” with “Unexpected Holiday”.

Clause 13.9.2, 13.9.3 and 13.9.4

Updated to replace “Banking Holiday” with “Holiday”.

Appendix II – Fees and Charges for RENTAS MYR Services

Updated Contingency Terminal Charges at BNM premise to include RENTAS Bank Gateway (RBG) activation fee, and streamlined utilization fee for iLINK or RBG.

Glossary

Updated the following terms in glossary:

- i. Replaced “Unexpected Banking Holiday” with “Unexpected Holiday” and provided definition of the new term.
- ii. Replaced “Banking Holiday” with “Holiday” and provided definition of the new term.
- iii. Updated the definition for the term “Business Day” to specify exclusion of Holiday or Unexpected Holiday

Updated the illustration in the definition of “Recovery Time Objective (RTO)”

1.8 **29 September
2025**

Clause 1.1

Updated to include Near Real Time Settlement (NRTS) as a function of RENTAS.

Clause 1.2

Removed Operational Procedures for Cross-Border Securities Custodian Services (CSCS) in RENTAS due to closure of CSCS.

Clause 2

Updated RENTAS Overview to include NRTS and remove CSCS module.

Clause 3.1

Removed RENTAS Euroclear Link upon termination of CSCS.

Added NRTS as a new module in RENTAS Host.

Clause 4.2.2

Amended “Foreign Central Banks” to “Central Banks” under type IV membership

Added “RPSO” under Type VI membership

Updated the clause to remove Cross-border Securities section.

Clause 4.5

Updated the clause to remove CSCS.

Clause 7

Updated Settlement Reports to add NRTS reports

Clause 8.2

Removed RPP Window 1 and Window 2 net settlement from MYR Settlement activities

Added "By" for scheduled time for MYR Settlement opening, Repayment of Funding Facility for Retail Payments Settlement (FRPS), and Bursa Derivatives Malaysia – Settlement of First Margin call.

Clause 8.14

Updated to include NRTS Accounts.

Clause 8.27, 8.40, 8.48, 8.52

Amended clause to align with changes made in Clause 9.

Clause 8.63 – 8.69, Clause 9.7 – 9.9 and Appendix XX - Authorisation for BNM to Transfer cash and/or Eligible Securities in DNS Collateral Account to MYR Settlement Account or K Account of Retail Payments Participant.

Removed clauses and appendices pertaining to DNS Collateral

Clause 9

Updated the Clauses name to provide clarity on the purpose of the clause upon implementation of NRTS.

Clause 16.11

Transfer of clause into the Participation Rules for Payments and Securities Services to standardise all clauses related to breaches/non-compliance to be outlined in the PR

Clause 24.2

Added NRTS of Retail Payments to list of transaction exempted from the minimum transaction amount.

Clause 26

Removed clause due to obsolescence.

Clause 38

Introduced new clause and appendices for the implementation of NRTS.

Appendix I

Updated contact information for BNM's Financial Market Infrastructure Department and RENTAS Operations at Jabatan Kewangan.

Appendix II

Updated list of fees and charges to include charges for FRPS+ utilisation, Overnight Charges and non-compliance charge for late repayment of FRPS+, FRPS+ utilisation and/or overnight charges.

Standardised terminology used in the description of items related to non-compliance breaches.

Appendix VI Form A: New Participant and Appendix VI Form B: Existing RENTAS Extends Membership to MYR Settlement Service

Removed CSCS offered in RENTAS from the appendices.

Appendix IX - Example of RBG pacs.008 Construct Screen and Appendix X - Example of Swift Access pacs.008 Construct Screen

Updated examples of MT103 to pacs.008 based on ISO20022 implementation

Appendix XVI - Guideline for Registration of New Digital Certificate in RENTAS Portal

Updated the appendices based on the new RENTAS Portal screens.

Appendix XVIII - Declaration of Onboarding Readiness for ISO20022 Payment Messages and Appendix XIX - Confirmation of MT-MX Outgoing & Incoming Transactions Flow

Removed appendices due to completion of migration from ISO150001 to ISO20022.

Appendix XIX - List of Retail Payments offered in NRTS module, Appendix XX - Authorisation for BNM to manage NRTS Account on behalf of Retail Payments Participants and Appendix XXI Confirmation of Subscription to Funding Facility for Retail Payments Settlement+ (FRPS+)

Introduced new appendices upon the implementation of NRTS.

Glossary

Added the following terms related to the implementation of NRTS:

- i. "DNS"
- ii. "FRPS+ Activation"
- iii. "FRPS+ Repayment"
- iv. "Near Real Time Settlement (NRTS)"
- v. "NRTS Account"
- vi. "Retail Payment System Operator"
- vii. "Retail Payments"
- viii. "Retail Payments transactions"
- ix. "Sell and Buyback Agreement (SBBA)"

Updated the following terms in glossary:

- i. "Clearing houses' transactions" updated to "Retail Payment System Operator (RPSO) transactions"
- ii. "Retail Payments Settlement Participant" updated to "Retail Payments Participant"

Removed "DNS Collateral" term.

TABLE OF CONTENTS

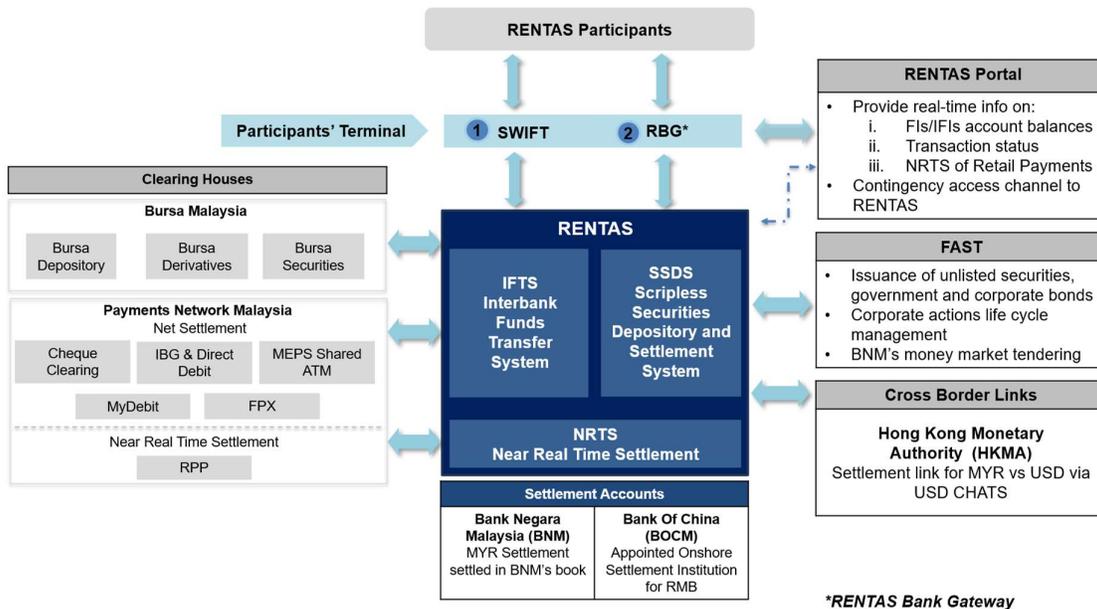
1	Introduction	12
2	Overview of RENTAS	13
3	System Components.....	14
4	RENTAS Membership.....	17
5	Participants Representation	22
6	Participation in PvP Link (RENTAS – USD CHATS Link).....	22
7	Transaction Types and Message Formats	23
8	MYR Settlement.....	25
9	Deferred Net Settlement for Retail Payments on Weekend and Holiday	38
10	Gridlock Resolution.....	39
11	Queue Management	40
12	Liquidity Optimisation Settlement Facility	40
13	SSDS Processing	42
14	Standing Instructions	45
15	Request for Extension of PvP Link Cut-off Time	45
16	Request for Extension of MYR Settlement Cut-off.....	46
17	Incident Report (IR).....	48
18	Compensation on Inter-Bank Failed Settlements	48
19	Managing Unpaid Credit Facilities.....	49
20	Public Key Infrastructure Security Requirements	51
21	RENTAS Portal Certificate (ID) Registration	52
22	Digital Certificates	52
23	Authenticity, Confidentiality and Irrevocability of the RENTAS MYR Settlement Messages	52
24	Minimum Transaction Amount.....	53
25	Billing	53
26	Retention	54
27	Business Continuity Management (BCM).....	54
28	BCM Arrangements in Relation to RENTAS Failure.....	54
29	RENTAS System Failure at Production Site.....	55
30	RENTAS Failure at Both Production Site and Recovery Centre (RC).....	55
31	e-PKI Failure.....	58
32	RENTAS Portal Activation – Contingency Access Channel.....	58
33	Testing Procedure.....	59
34	RENTAS Portal.....	59
35	User Manuals.....	60
36	RENTAS Participants Directory.....	60
37	Customer Service	61
38	Near Real Time Gross Settlement for Retail Payments (NRTS).....	61
	Guideline I - Guidelines on MYR Third Party Payments	72
	Guideline II - Guidelines on Handling Invalid Characters in RENTAS.....	77
	Guideline III - Guidelines on Compensation on Inter-Bank Failed Settlements	78
	Guideline IV - Procedures for Activation of RENTAS Portal at BNM's Premises	86
	Guideline V - Guideline to Create Clients' RENTAS Segregated Securities Account via RENTAS Portal	87
	Appendix I RENTAS – Contact Details	88
	Appendix II Fees and Charges for RENTAS MYR Services.....	89
	Appendix III (a) Request For Extension of RENTAS PvP Link Cut-off Time	92
	Appendix III (b) Request For Extension of RENTAS MYR Settlement Cut-off Time	93
	Appendix IV Incident Report From Participants	94

Appendix V	Request To Re-sequence or Cancel Payment Instruction(s) In Priority Queue	95
Appendix VI	Form A: New Participant	96
Appendix VI	Form B: Existing RENTAS Participant Extends Membership to MYR Settlement Service	97
Appendix VI	Form C: Confirmation of Participants Terminal for MYR Settlement in RENTAS	98
Appendix VII	Contact Person for Daily Operation of RENTAS	99
Appendix VIII	RENTAS – Authorised Signatories List	100
Appendix IX	Example of RBG pacs.008 Construct Screen	101
Appendix X	Example of Swift Access pacs.008 Construct Screen	105
Appendix XI	Activation of RENTAS Portal Facility at BNM	108
Appendix XII	Supported Foreign Currency	109
Appendix XIII	Activation of RENTAS Portal Facility at BNM’s Checklist	110
Appendix XIV	Request Form for RENTAS Test Environment	111
Appendix XV	User Access Request Form	112
Appendix XVI	Guideline for Registration of New Digital Certificate in RENTAS Portal	114
Appendix XVII	Standardised Format in pacs.009 for Interbank Money Market Transactions	116
Appendix XVIII	Confirmation of Subscription to Funding Facility for Retail Payments Settlement (FRPS)	118
Appendix XIX	Business Services ID for MX	119
Appendix XX	List of Retail Payments offered in NRTS module	120
Appendix XXI	Authorisation for BNM to manage NRTS Account on behalf of Retail Payments Participants	121
Appendix XXII	Confirmation of Subscription to Funding Facility for Retail Payments Settlement+ (FRPS+)	122
	Glossary of Terms	123

1 Introduction

- 1.1 The Operational Procedures provides information and procedures that are applicable to Participants using the Real Time Electronic Transfer of Funds and Securities (RENTAS) for MYR Settlement for interbank fund transfers, Near Real Time Settlement (NRTS) transactions, securities trades and corporate actions.
- 1.2 These Operational Procedures shall be read in conjunction with the following documents:
 - i. Participation Rules for Payment and Securities Services;
 - ii. Operational Procedures for Foreign Currency Settlement in RENTAS;
 - iii. Operational Procedures for Securities Services;
 - iv. Bank Negara Malaysia's Guidelines on Standing Facilities;
 - v. Bank Negara Malaysia's Guideline on Intraday Credit Facility;
 - vi. Guidelines on Business Continuity Management for Participants of RENTAS and FAST; and
 - vii. Other relevant guidelines, notices, circulars issued by Bank Negara Malaysia (BNM) from time to time.
- 1.3 These Operational Procedures are intended to equip Participants with an operating knowledge of MYR Settlement in RENTAS and serve as a basis for Participants to develop comprehensive internal procedures.
- 1.4 These Operational Procedures are issued pursuant to the requirements under—
 - i. Section 35 of the Financial Services Act 2013 (FSA); and
 - ii. Section 45 of the Islamic Financial Services Act 2013 (IFSA).
- 1.5 These Operational Procedures come into effect on 29 September 2025.

2 Overview of RENTAS



- 2.1 Participants may initiate payment and securities transactions using the Participant Terminals. Participants shall use the RENTAS Bank Gateway (RBG) or the Swift Access as their primary means of initiating and processing RENTAS transactions¹. RENTAS Portal is a contingency terminal in the event that RBG or Swift terminal fails. The Participant Terminals transmit the transactions to the RENTAS Host where the transactions are processed by simultaneously debiting the paying Participant and crediting the receiving Participant's MYR Settlement Account maintained with BNM or the Participant's Foreign Currency Settlement Accounts maintained with designated Onshore Settlement Institutions (OSI). Upon completion of MYR funds transfer transactions, RENTAS Host will send MYR completion advice to the paying Participants, while the receiving Participants will receive MYR confirmation advice.
- 2.2 The RENTAS Host will process all transactions on an online and real time basis. Participants may also perform online queries on the status of their transactions and account balances via RENTAS Portal.

¹ Participants with only non-essential transactions, low aggregate transaction value and very low volume may seek exemption from this requirement

3 System Components

3.1 RENTAS Host System (RENTAS Host)

The RENTAS Host consists of the following major modules:

3.1.1 Inter-bank Funds Transfer System (IFTS)

This module receives, validates, queues and processes fund transfer transactions and cash Settlements. It then relays the transactions to the MYR Settlement Account System (MYR SAS) or the Foreign Currency Settlement Account System (MCT SAS), where debit and credit transactions are posted to the Participants' MYR Settlement Account or foreign Currency Settlement Account respectively.

3.1.2 MYR Settlement Account System (MYR SAS)

This is a real-time accounting module that posts debits and credits to MYR cash accounts across the books of BNM. All MYR Settlement Accounts are maintained with BNM.

3.1.3 Foreign Currency Transfer Settlement Account System (MCT SAS)

This is a real-time accounting module that posts debits and credits to foreign currency cash accounts across the books of OSIs. All Foreign Currency Settlement Accounts are maintained with OSIs.

3.1.4 Scripless Securities Depository and Settlement System (SSDS)

This module receives, validates, queues and processes securities sales, repos, free-of-payment transfers and pledges. It then simultaneously initiates debit and credit to the Securities Account of the buyer and seller and synchronizes securities Settlement with cash Settlement in the IFTS module to achieve Delivery versus Payment (DvP).

3.1.5 Payment vs Payment (PvP) Link to USD CHATS

PvP is a cross-border link between the RENTAS system and the USD CHATS system in Hong Kong. This link provides real-time Settlement for foreign exchange (FX) transactions involving US Dollars (USD) and MYR, whereby USD settlement takes place in USD CHATS, while MYR settlement takes place in RENTAS.

3.1.6 Near Real-Time Settlement for Retail Payments

A module for Retail Payments settlement within RENTAS, hosted on the cloud to facilitate Near Real-Time and Gross Settlement of Retail Payments transactions that are streamed line-by-line from the RPSO.

3.2 RENTAS Terminals

Participants Terminals

3.2.1 There are three RENTAS Terminals that Participants can use to access RENTAS, namely the RENTAS Bank Gateway, Swift Access and RENTAS Portal. Participants may opt for either the RENTAS Bank Gateway or Swift Access as their primary terminal, while RENTAS Portal may be used for contingency purposes:

3.2.1.1 RENTAS Bank Gateway (RBG)

Participants use RBG to enter, transmit and receive MYR and foreign currency funds and securities transactions. RBG also provides straight-through processing capabilities to automatically relay transactions from Participants' internal systems to RENTAS Host without the need for data entry or manual intervention at RBG. RBG connects to RENTAS Host via the network described in **Clause 3.3**.

3.2.1.2 Swift Access

Participants use Swift Access to enter, transmit and receive MYR and foreign currency funds and securities transactions. Swift Access has three (3) technology platforms, namely:

- i. Swift Alliance Access (SAA) -
- ii. Swift Alliance Lite2 (SAL2); and
- iii. Swift Alliance Cloud (SAC).

SAA is a system with straight-through processing capabilities installed at the Participants' premises or data centres while SAL2 and SAC are cloud solutions that are hosted offshore by Swift. Participants may opt to use SAA, SAL2 or SAC to access RENTAS Host, subject to Participants complying with relevant requirements in the Risk Management in Technology (RMiT) Policy and Swift Customer Security Controls Framework (CSCF). As outlined in

RMiT, Participants interested in using the SAL2 and SAC are required to undergo consultation sessions with BNM and demonstrate how their usage aligns with RMiT. Confirmation and approval from BNM must be obtained prior to the adoption of SAL2 and SAC.

Swift Access via Cloud Services

For Participants opting to use SAL2 or SAC to access RENTAS Host, the following additional requirements shall be observed:

- a) Usage of VPN connectivity
 - Participants are required to utilize VPN box connectivity, either through Alliance Connect (On-Premises) or Alliance Connect Virtual, which is hosted on a Swift-recommended third-party cloud provider such as Amazon Web Service (AWS), Microsoft Azure, or Google Cloud.
 - On-premises VPN box solution may be used as a connectivity method. However, the cloud-based option of the VPN box is subject to the Key Risks and Control Measures for Cloud Services in RMiT.
 - Physical restrictions must be imposed to ensure secure message transactions, and connectivity are limited to authorized personnel within the corporate network.
- b) Submission of annual declaration report to BNM for review
 - Participants must submit their declaration report to BNM by 31 January of each year. The annual declaration report shall include:
 - i. The status of Swift CSCF attestation,
 - ii. Participants' compliance status against RMiT's guidelines on Key Risks and Control Measures for Cloud Services.
 - iii. A copy of Risk Assessment Report as specified in Appendix 7 of RMiT.
- c) Outsourcing of key users is not permitted.
 - Participants shall retain the responsibility for managing Swift designated key users, including security officers and Swift.com administrators within the Participants' organization.

- d) Ensure Disaster Recovery (DR) availability as per (BCM) Guidelines for RENTAS and FAST. In addition, Participants shall employ two distinct availability zones for the cloud option. This measure is taken to ensure DR remains accessible even when one of the cloud zones experiences downtimes. This requirement covers aspects such as VPN connectivity and straight-through processing. Additionally, Participants shall ensure the two locations are included in the DR set-up.

3.2.1.3 RENTAS Portal

- i. RENTAS Portal is a web-based system that provides real-time information such as cash positions, securities holdings and Settlement status of transactions. RENTAS Portal also acts as a Participant Terminal that allows initiation of MYR and foreign currency funds and securities transactions.
- ii. Participants shall access RENTAS Portal via the private network described in Clause 3.3.

3.3 Network

3.3.1 Participants using RENTAS Portal and RBG connect to RENTAS Host via a secured private communication network provided by a third-party provider determined by BNM.

3.3.2 Participants using Swift Access connect to RENTAS Host via SwiftNet.

3.4 Enterprise Public Key Infrastructure (e-PKI)

3.4.1 Enterprise Public Key Infrastructure (e-PKI) provides data authenticity, integrity and non-repudiation features, thus ensuring the security of transactions and information transmitted via RBG and RENTAS Portal.

4 RENTAS Membership

4.1 This **Clause 4.0** shall be read in accordance with the **Membership** section in the Participation Rules for Payments and Securities Services.

4.2 Types of RENTAS membership

4.2.1 RENTAS Membership is open to entities that meet the following criteria:

- 4.2.1.1 Financial Institutions (“FIs”) regulated by BNM and institution under BNM’s purview;
- 4.2.1.2 Investment banks co-regulated by BNM and the Securities Commission of Malaysia;
- 4.2.1.3 International Central Securities Depository (ICSD) and National Central Securities Depository (CSD);
- 4.2.1.4 Central banks / monetary authorities, qualified foreign licensed financial institutions and multi-lateral development banks;
- 4.2.1.5 Qualified domestic entities that provide payment and clearing services (clearing houses); and
- 4.2.1.6 Qualified institutions whose admission will promote the development of the Malaysian financial markets.

4.2.2 There are six (6) types of RENTAS membership as illustrated in the table below:

	Type I	Type II	Type III	Type IV	Type V	Type VI
Type of Institution	<ul style="list-style-type: none"> • Licensed FIs regulated or co-regulated by BNM • Institutions under BNM’s purview • Subsidiary of PIDM upon designation as Bridge Institution in accordance with PIDM Act. 	<ul style="list-style-type: none"> • Development Financial Institutions • Domestic entities admitted for market development purposes 	ICSDs and CSDs	Central banks	Qualified foreign entities and multi-lateral institutions	<ul style="list-style-type: none"> • Clearing houses • RPSOs • Qualified local corporates
For MYR:						
a) Settlement Services	Access to both Settlement and Securities Accounts	Access to both Settlement and Securities Accounts	Access to Securities Accounts only	Access to Securities Accounts for own holdings only	Access to Securities Accounts for own holdings only	Access to Settlement and Securities Accounts for own holdings only
b) Intraday credit facility	Yes	No	No	No	No	No
c) Direct Participation	Yes	Yes	Yes	Yes	Yes	Yes

	Type I	Type II	Type III	Type IV	Type V	Type VI
For Foreign Currencies:						
a) Settlement Services	Access to both Settlement and Securities Accounts	Access to both Settlement and Securities Accounts	Access to Securities Account	Access to Securities Account for own holdings only	Access to Securities Account only	Access to Settlement Accounts only
b) Intraday Credit Facility	At the discretion of OSI where the Participants maintain their foreign currency account.					
c) Direct Participation	Yes	Yes	Yes	Yes	Yes	Yes

4.2.3 Potential participants seeking admission to RENTAS shall fulfil the following requirements:

- 4.2.3.1 Demonstrate financial soundness;
- 4.2.3.2 Have sufficient liquidity position or credit lines to cover the Participants' maximum expected settlement obligation in RENTAS;
- 4.2.3.3 Have sufficient expertise and resources to operate RENTAS; and
- 4.2.3.4 Possess sufficient risk management and business continuity planning framework and policies.

4.2.4 Foreign entities with access to only securities accounts in RENTAS shall open a MYR cash account with a Malaysian bank for MYR cash settlement purposes and shall ensure sufficient liquidity at their participating banks, either by maintaining sufficient balances or by obtaining access to credit lines.

4.2.5 Documents to be submitted for the participation application shall include:

- 4.2.5.1 The latest three (3) years audited financial statements;
- 4.2.5.2 Certificate of incorporation;
- 4.2.5.3 Board resolution approving participation in RENTAS; and
- 4.2.5.4 Memorandum and articles of association.

4.2.6 Participants may be requested to submit documents on an annual basis to provide evidence that they are in compliance with the requirements outlined in Clause 4.2.3.

4.2.7 BNM may waive document submissions for entities that are regulated by BNM, or entities under BNM's purview.

4.3 Admission of New Participant for MYR Settlement in RENTAS

- 4.3.1 RENTAS currently offers Settlement services in MYR and selected foreign currencies.
- 4.3.2 Participants may opt to participate in the Settlement services of any or all of the supported currencies stated in [Appendix XII](#).
- 4.3.3 The annual RENTAS membership fee is as stated in [Appendix II](#) and is applicable to all RENTAS Participants. Participants are required to pay only a single annual membership fee in MYR even if the Participant participates in the Settlement Services of more than one currency.

4.4 To participate in RENTAS MYR Settlement, new Participants must complete and submit the following forms:

- (i) “Confirmation of Participation” form to BNM as per [Appendix VI](#) (Form A);
- (ii) “Confirmation of Access Channel for MYR Settlement in RENTAS” form as per [Appendix VI](#) (Form C);
- (iii) “Contact Person for the Daily Operations of RENTAS” form as per [Appendix VII](#);
- (iv) “RENTAS – Authorised Signatories List” form as per [Appendix VIII](#);
- and
- (v) “External User Access Request Form” in [Appendix XV](#).

In addition, new Participants shall also undertake the following:

- 4.4.1 Open an MYR Settlement Account directly with BNM. Please refer to [Appendix I](#) for the contact details;
- 4.4.2 Obtain a Bank Identification Code (BIC) by registering with The Society for Worldwide Inter-bank Financial Telecommunication (Swift). The BIC will be used as part of a unique identifier code (UIC) for the Participant;
- 4.4.3 Obtain a digit code from BNM. This code is to be used as the UIC for each Participant;

- 4.4.4 Acquire the RENTAS application software for the Participant Terminals (RBG and/or SAA) from authorised vendors. For SAA, the authorised vendor is Swift or, if applicable, a solution provider nominated and certified by Swift. For RBG, the authorised vendor would be designated by BNM;
- 4.4.5 Deploy the applicable communication network for RBG or SAA as stated in **Clause 3.3**;
- 4.4.6 Deploy the relevant security solutions depending on the type of access channel:
 - 4.4.6.1 For RBG and RENTAS Portal, deploy e-PKI security module (HSMs, tokens and certificates); and
 - 4.4.6.2 For Swift Access, deploy the security module specified by Swift.
- 4.4.7 Establish a Business Continuity Plan (BCP) in accordance with the Guidelines on Business Continuity Management for Participants of RENTAS and FAST;
- 4.4.8 Establish processes, internal controls and procedures to ensure that RENTAS MYR Settlement operations are carried out with minimal risk to the Participants, counterparties and BNM;
- 4.4.9 Notify BNM for the activation of access to RENTAS Portal;
- 4.4.10 Notify BNM in writing two (2) weeks before the actual implementation date of operations;
- 4.4.11 Submit the “User Access Request Form” [Appendix XV](#) to request creation of Administrator ID. This RENTAS Portal Administrator ID will be able to create IDs and assign access rights for the new Participants’ officers; and
- 4.4.12 BNM shall open a Securities Account for new Participants once they confirm their participation in Securities Services by submitting the duly signed “Confirmation of Participation” form stated in **Clause 4.4**.

4.5 Existing RENTAS Foreign Currency Participants Subscribing to MYR Settlement Services

4.5.1 Existing RENTAS Participants in RENTAS' Foreign Currency Settlement Services who have received approval from BNM to participate in MYR Settlement Services shall open a MYR Settlement Account directly with BNM.

4.5.2 The Participants shall complete and submit the "Confirmation of Participation in Additional Services" form to BNM as per [Appendix VI](#) (Form B), two (2) weeks before the actual implementation date of the Participants' MYR Settlement operations.

4.5.3 In addition, the Participants shall undertake the tasks mentioned in **Clauses 4.4 to 4.4.12.**

5 Participants Representation

5.1 RENTAS User Group Committee (RUGC)

5.1.1 To ensure that Participants are kept updated and consulted regarding amendments to the RENTAS system and Operational Procedures, BNM has established the RENTAS User Group Committee (RUGC) which comprise of all the Business units of RENTAS Participants.

5.1.2 The role of the RUGC is to:

5.1.2.1 Provide feedback and advice to BNM to guide the business, development, operation and governance of RENTAS; and

5.1.2.2 Co-ordinate and implement improvements and changes to RENTAS at their respective organisations.

6 Participation in PvP Link (RENTAS – USD CHATS Link)

6.1 Participants may use the RENTAS-USD CHATS Link as a Settlement channel for settlement of US Dollar (USD)/MYR FX transactions provided that both parties to a transaction agree to this mode of PvP settlement.

- 6.2 Participants shall arrange for an adequate credit line with their correspondent banks in Hong Kong to fund their USD transactions.
- 6.3 If the Settlement of a PvP transaction falls on Holiday in either Malaysia or Hong Kong, Settlement will be executed on the next Business Day.
- 6.4 Participants shall pro-actively communicate with their correspondent banks and counterparties as and when necessary to ensure Settlements are completed at the earliest possible time.
- 6.5 If there is a failed PvP Settlement as at the PvP cut-off time, Participants shall contact their counterparties immediately to arrange an alternative Settlement arrangement via non PvP means.

7 Transaction Types and Message Formats

RENTAS supports the following transaction types which shall be initiated and transmitted using the corresponding Swift ISO 20022 message formats for payments messages and Swift ISO 15022 for securities messages:

Transaction Type	Message Format
Fund Transfer Services	
Single Credit Transfer	pacs.008.001.08 – Financial Institution to Financial Institution Customer Credit Transfer pacs.009.001.08 – Financial Institution Credit Transfer fxtr.014.001.04 – Foreign Exchange Trade Instruction
Single Debit Transfer	pacs.010.001.03 – Financial Institution Direct Debit
Transaction Cancellation Request (send to RENTAS)	camt.056.001.08 – Financial Institution to Financial Institution Payment Cancellation Request camt.058.001.06 – Notification to Receive Cancellation Advice
Transaction Processing Status Update	camt.029.001.09 – Resolution of Investigation camt.059.001.06 – Notification to Receive Status Report pacs.002.001.10 – Financial Institution to

Transaction Type	Message Format
	Financial Institution Payment Status Update
Debit Notification	camt.998.001.03 – Cash Management Proprietary Message
Credit Notification (Advice for return/recover of fund)	camt.087.001.06 – Request to Modify Payment
Notice to Receive	camt.057.001.06 – Notification to Receive
Customer Transfer Tracking	pacs.002.001.10 – Financial Institution to Financial Institution Payment Status Update
Allegation Message	fxtr.008.001.06 – Foreign Exchange Trade Status Notification camt.059.001.06 – Notification to Receive Status Report for Pre-Advice of Fund Allegement
Confirmation of Debit	camt.054.001.08 – Bank to Customer Debit Notification
Confirmation of Credit	camt.054.001.08 – Bank to Customer Credit Notification
Securities Settlement Services	
Securities Transfer Message	MT 540 - Receive Free of Payment MT 541 - Receive Against Payment MT 542 - Deliver Free of Payment MT 543 - Deliver Against Payment
Settlement Allegement Message	MT 578 - Settlement Allegement
Settlement Status and Processing Advice Message	MT 548 - Settlement Status and Processing Advice
Securities Transfer Confirmation Message	MT 544 - Receive Free Confirmation MT 545 - Receive Against Payment Confirmation MT 546 - Deliver Free Confirmation MT 547 - Deliver Against Payment Confirmation
Settlement Reports	
Cash Settlement Reports	camt.052.001.08 – Bank to Customer Account Report camt.053.001.08 – Bank to Customer Account Report camt.060.001.05 – Account Reporting Request
Securities Settlement Reports	MT 549 - Request for Statement Advice MT 535 - Statement Holding MT 536 - Statement of Transactions
NRTS Reports	camt.998.001.03 – NRTS Window 1 and 2

Transaction Type	Message Format
	camt.998.001.03 – NRTS End of Day Report
Corporate Action Settlement	
Corporate Action	MT 564 - Corporate Action Notification MT 566 - Corporate Action Confirmation MT 567 - Corporate Action Status and Processing Advice MT 568 - Corporate Action Narrative
Free Format Message	
Free Format Message	camt.998.001.03 – Cash Management Proprietary Message

8 MYR Settlement

i. MYR Settlement Business Hours

- 8.1 The Business hours for MYR Settlement in RENTAS is from 8.00 am to 9.00 pm on all Business Days.
- 8.2 The detailed schedules for MYR Settlement activities in RENTAS are as provided in the table below:

Scheduled Time	Actions
By 8:00 am	MYR Settlement opening
	Repayment of Funding Facility for Retail Payments Settlement (FRPS)
	Bursa Derivatives Malaysia – Settlement of first margin call
8:30 am	Start time for PvP Link to USD CHATS
By 8:45 am	eSPICK normal clearing settlement
By 8:50 am	MYR Settlement for Interbank GIRO and Direct Debit clearing – 1 st window
By 9:30 am	MYR Settlement for FPX – 1 st Window
By 11:00 am	Settlement of Interbank Maturity/ Forward value dated transactions
	DNS Settlement for FPX-RPP Bridge transactions – 1 st Window
	Settlement of Securities Linked Settlement for MGS Futures Contract

Scheduled Time	Actions
By 11:30 am	Cut-off time for all repayments of maturities
	Settlement for MyDebit, MEPS Cash and Shared ATM Network (SAN) clearing 1 st window
By 11:50 am	MYR Settlement for Interbank GIRO and Direct Debit clearing – 2 nd window
By 2:50 pm	MYR Settlement for Interbank GIRO and Direct Debit clearing – 3 rd window
3:30 pm	Cut-off time to send PvP payment instructions to Participant's banker in Hong Kong
By 3.50 pm	DNS Settlement for FPX-RPP Bridge transactions – 2 nd Window
4:00 pm	MYR Intraday Credit Cut-off Warning
	Cut-off time for paying Participants to initiate MYR third party transaction and PvP transaction (MYR Leg)
By 4:15 pm	MYR Settlement for FPX and MyDebit – 2 nd Window
By 4.20 pm	MYR Settlement for MEPS Shared ATM Clearing– 2 nd Window
4:30 pm	MYR intraday credit cut-off. No borrowing from 'K' account
5:00 pm	Cut-off warning for PvP Link to USD CHATS
5:30 pm	Cut-off time for PvP Link to USD CHATS
6:00 pm	Cut-off time for the repayment of MYR Intraday Credit Facility
	MYR Settlement Cut-off time
	Start of MYR Evening Settlement Window and Activation of FRPS
By 6:10 pm	MYR Settlement for Interbank GIRO clearing – 4 th window
By 6.25 pm	MYR Settlement for Direct Debit clearing – 4 th window
By 8:30 pm	MYR Settlement for Interbank GIRO and Direct Debit clearing – 5 th window ²
By 9:00 pm	MYR Evening Settlement Window Cut-off

8.3 BNM may amend the MYR Settlement Business hours in **Clause 8.2**, if circumstances warrant such a change, either temporarily or permanently.

² BNM may vary the "MYR Settlement for Interbank GIRO and Direct Debit clearing – 5th window" time depending on when the Interbank GIRO clearing positions are available.

- 8.4 Participants are strongly advised to observe the cut-off times for payments and settlements as delays may affect the liquidity of counterparties that are expecting these payments. In the event of unavoidable delays, the paying Participants shall communicate directly with the receiving Participants on the delay.
- 8.5 To avoid possible transaction congestion during peak hours and the risk of failed Settlement, Participants are encouraged to transmit their messages as early as possible.
- 8.6 As stated in **Clause 8.2**, the MYR third party transaction cut-off time for RENTAS MYR Settlement Participants is 4:00 pm. Participants are allowed to impose an earlier cut-off time for their customers but the cut-off time for customers should not be earlier than 3:00 pm.
- 8.7 Availability of Funds for Beneficiary
- 8.7.1 All paying Participants that provide Current Account and Saving Account (CASA) to their customers shall transmit payment instructions to RENTAS within two (2) minutes upon receiving an instruction from the paying customers.
- 8.7.2 **Clause 8.7.1** applies only during RENTAS business hour. Transactions received outside of RENTAS business hours shall be submitted to RENTAS on the next Business Day upon Participant's start of day.
- 8.7.3 All receiving Participants that provide Current Account and Saving Account (CASA) to their customers shall ensure good funds³ are credited to the beneficiary customer's account within two (2) minutes upon receiving a credit confirmation advice from RENTAS.
- 8.7.4 The following types of outgoing payment transfers are exempted from the requirements in **Clause 8.7.1**:
- 8.7.4.1 Payment instructions initiated by customers Over-the-Counter at bank branches;
- 8.7.4.2 Bulk payment transfers;

³ Good funds are unencumbered cash balances that can be used immediately upon being credited into the beneficiary's account

- 8.7.4.3 Payment instructions that fail regulatory, sanction or anti-money laundering screening;
- 8.7.4.4 Transactions where the payment instruction from customers require repair, correction, conversion or other amendments; and
- 8.7.4.5 Bank-to-Bank transactions where both the beneficiary and paying customers are RENTAS Participants.

8.7.5 The following types of incoming transaction are exempted from the requirements in **Clause 8.7.3**;

- 8.7.5.1 Transactions that fail regulatory, sanction or anti-money laundering screening; and
- 8.7.5.2 Transactions where the credit confirmation contains information require repair or correction.

8.7.6 For outgoing transactions that fall under the exemptions in **Clause 8.7.4**, paying Participants shall transmit payment instructions to RENTAS within 30 minutes of receiving final approval from the paying customers. The above is not applicable for transactions that fail regulatory, sanction or money laundering screening.

8.7.7 For incoming transactions that fall under the exemptions in **Clause 8.7.5**, all receiving Participants shall make good funds available to the beneficiary customers within 30 minutes of receiving a credit confirmation advice from RENTAS. The above is not applicable for transactions that fail regulatory, sanction or money laundering screening.

8.7.8 To facilitate end-to-end tracking and monitoring of funds availability at beneficiary customer's account, all receiving Participants must notify paying Participants that the account has been successfully credited by sending pacs.002.001.10. This is only applicable to RENTAS Participants that provide Current Account and Saving Account (CASA) to customers.

8.8 MYR Money Market Transactions

8.8.1 Intraday Money Market Transactions

8.8.1.1 The lender / investor must pay the borrower / investee within thirty (30) minutes from the time the deal is done.

8.8.2 Interbank Money Market Transactions

8.8.2.1 The lender / investor in the interbank⁴ money market is required to include information in pacs.009.001.08 settlement instruction as specified in **Appendix XVII**

8.9 Same day value for Money Market (MM) / Foreign Exchange (FX) deals

8.9.1 Deals transacted before 5:00 pm are to be settled by 5:30 pm.

8.10 Forward Dated Transactions

8.10.1 Participants may initiate through their Participant Terminals same day value and forward dated transaction as follows:

8.10.1.1 IFTS: Forward-dated for up to one (1) calendar year;

8.10.1.2 PvP : Forward-dated for up to one (1) calendar year; and

8.10.1.3 SSDS: Forward-dated for up to one (1) calendar year.

8.11 If the value date of a transaction falls on an Unexpected Holiday, RENTAS shall process such transactions on next Business Day.

8.12 Although RENTAS automatically adjusts the value date of transactions to the next Business Day in the event of an Unexpected Holiday, the proceeds of the transactions remain unchanged. BNM will not perform any adjustments to the proceeds arising from the deferred Settlement due to Unexpected Holidays.

8.13 During the MYR Evening Settlement Window, Participants shall only perform transactions to facilitate the settlement of Interbank GIRO and Direct Debit clearing positions such as withdrawal from SRR Cash Account to MYR Settlement Account and vice versa.

ii. **MYR Settlement Accounts and Settlement Finality**

8.14 MYR Settlement Accounts, NRTS Accounts and Securities Accounts are maintained with BNM. Hence, RENTAS MYR transactions are settled across

⁴Applicable for MYR interbank transactions, excluding BNM Tenders and Standing Facilities

the books of the central bank. The settlement asset is a claim on the central bank.

- 8.15 There are four (4) types of RENTAS Securities Accounts:
- (i) B – Bank’s own securities account;
 - (ii) K – Collateral Account for Intraday Credit Facility (ICF) and Funding Facility for Retail Payments Settlement;
 - (iii) R – Resident clients’ segregated securities accounts; and
 - (iv) N – Non-Resident clients’ segregated securities account.
- 8.16 BNM will create Participant’s B and K account upon the inception of participant’s membership in RENTAS.
- 8.17 Participants with Custodian Bank status are responsible for the creation and maintenance of clients’ RENTAS segregated securities account (R and N) via RENTAS Portal.
- 8.18 Custodian Banks may refer to **Guideline V** – Creation of RENTAS Segregated Securities Account via RENTAS Portal for guidelines to create the client’s RENTAS segregated securities account.
- 8.19 For creation of Segregated Securities Account via FAST, Custodian Banks may refer to “RENTAS SSA User Guide in FAST”, which is available under the Rules and Guidelines section on the FAST website.
- 8.20 All RENTAS payments are final and irrevocable after the paying Participant submits the payment to RENTAS or Mini RENTAS (in the event the contingency system is activated in accordance with **Clause 31.0**), and the payment has met all conditions necessary to execute the final transfer of funds across the books of BNM. The conditions for final settlement across the books of BNM are as follows:
- 8.20.1 Paying Participant has sufficient liquidity to cover the payment;
 - 8.20.2 Paying Participant is in good standing, whereby its membership status is not suspended or terminated;
 - 8.20.3 Value date of payment is a Business Day;
 - 8.20.4 Receiving participant is in good standing, whereby its membership status is not terminated;

- 8.20.5 Payment submission time is within the MYR Settlement Business Hours specified in **Clause 8.2**; and
 - 8.20.6 The payment Message content and remittance information meets the requirements specified herein.
- 8.21 Once all the above conditions are met, the Paying Participant's account is debited, and receiving Participant's account is credited on a final and irrevocable basis.
- 8.22 All RENTAS SSDS sales and repos are final and irrevocable after:
- 8.22.1 the seller transmits a Deliver versus Payment message (MT543) and the buyer transmits a Receive versus Payment message (MT541) to RENTAS (or, in the event the contingency system is activated in accordance with **Clause 31.0**, to Mini RENTAS);
 - 8.22.2 the MT543 and MT541 messages are matched; and
 - 8.22.3 the transaction has met all conditions necessary to execute the final transfer of funds across the books of BNM from the buyer to seller's Settlement Accounts, simultaneously against the transfer of securities from the seller to the buyer's Securities Accounts. The conditions for final settlement across the books of BNM are as follows:
 - 8.22.3.1 Buyer has sufficient liquidity to cover the securities purchase;
 - 8.22.3.2 Seller has sufficient securities to deliver;
 - 8.22.3.3 Both buyer and seller are in good standing, whereby its membership status is not suspended or terminated;
 - 8.22.3.4 Value date of payment is a Business Day;
 - 8.22.3.5 Securities transacted is valid, transferable and has not matured;
 - 8.22.3.6 Transaction submission time is within the MYR Settlement Business Hours specified in **Clause 8.2**; and
 - 8.22.3.7 The transaction Message content and remittance information meets the requirements specified herein.
- 8.23 Once all the above conditions are met, the buyer's Settlement Account is debited, seller's Settlement Account is credited, buyer's Securities Account is credited, and the seller's Securities Account is debited on a final and irrevocable basis simultaneously.

- 8.24 All RENTAS SSDS free of payment transfers are final and irrevocable after:
- 8.24.1 the transferee initiates a Receive Free of Payment message (MT540) and the transferor initiates a Deliver Free of Payment message (MT542) to RENTAS (or, in the event the contingency system is activated in accordance with **Clause 31.0**, to Mini RENTAS);
 - 8.24.2 the MT540 and MT542 are matched; and
 - 8.24.3 the transaction has met all conditions necessary to execute the final transfer of securities from the transferring Participant to the receiving Participant's Securities Account. The conditions for final settlement across the books of BNM are as follows:
 - 8.24.3.1 Transferring Participant has sufficient securities to deliver;
 - 8.24.3.2 Both transferring and receiving Participants are in good standing, whereby their membership status are not suspended or terminated;
 - 8.24.3.3 Value date of payment is a Business Day; and
 - 8.24.3.4 Securities transacted are valid, transferable and have not matured.
- 8.25 Once all the above conditions are met, the transferring Participant's Securities Account is debited and the receiving Participant's Securities Account is credited on a final and irrevocable basis. Participants will receive a confirmation message from RENTAS for each transaction that is successfully settled. MT544 for MT540, MT545 for MT541, MT546 for MT542 and MT547 for MT543 (Refer to table in **Clause 7.0**).

iii. **MYR Intraday Credit and Funding Facility for Retail Payments Settlement**

- 8.26 Eligible Participants may draw on the following credit facilities offered by BNM:
- 8.26.1.1 MYR Intraday Credit Facility; and
 - 8.26.1.2 Funding Facility for Retail Payments Settlement

MYR Intraday Credit Facility

- 8.27 The MYR Intraday credit facility in RENTAS is a credit line provided by BNM to the Participants to ensure sufficient liquidity in RENTAS to effect Settlements

on timely basis. BNM will determine which Participants are eligible for Intraday credit. MYR Intraday Credit is provided during:

- i. MYR Settlement Opening time until MYR Intraday Credit cut-off;
- ii. MYR Evening Settlement Window; and
- iii. Deferred Net Settlement for Retail Payments on weekend and Holiday.

8.28 MYR Intraday Credit in Clause 8.27 (ii) and (iii) is only available to Conventional Banks.

8.29 The MYR Intraday credit is granted in the form of collateralised borrowing in tranches of RM5 million against Eligible Securities of the eligible Participants. The eligible Participants will be provided with a collateral account (“K account”) to facilitate the earmarking of collateral securities for the MYR Intraday credit drawdown.

8.30 The repayment of MYR Intraday credit facility is automatically done whenever there are sufficient funds in the Participants’ MYR Settlement Account to redeem the earmarked securities in their K account. At MYR Settlement Cut-off time, BNM will impose a non-compliance charge (refer to **Appendix II**) on Participants who fail to redeem their MYR Intraday credit facility.

8.31 In order to utilise the MYR Intraday credit facility, Participants must have adequate Eligible Securities in their K account. Eligible Securities would no longer qualify as collateral two (2) Business Days before the securities’ Final Redemption Date or Partial Redemption Date or Early Redemption Date. Participants shall monitor the redemption profile of the Eligible Securities in their K account to ensure that there is no shortfall in collateral due to upcoming redemptions.

8.32 BNM will exercise its sole discretion in tagging and identifying a certain value of Eligible Securities (Identified Securities) against the MYR Intraday credit facility granted to each Participant at any given time.

8.33 All rights, title and interest in and to any of the Identified Securities shall vest in BNM free and clear of any liens, claims, charges or encumbrances or any other interest of the Participants or of any third party.

- 8.34 Though the Identified Securities may be represented in their K account, BNM has complete and full ownership, control and possession of the Identified Securities.
- 8.35 Nothing in this Clause is intended to create or does create in favour of either party any mortgage, charge, lien, pledge, encumbrance or other security interest in the Identified Securities.
- 8.36 BNM retains the absolute right to remove the Identified Securities from the Participants' K account at any given time.
- 8.37 Provided that the Participant discharges its obligation under the MYR Intraday credit facility within the stipulated time, BNM has the obligation to return only securities equivalent to the Identified Securities of the same type, nominal value, description and amount.
- 8.38 For the avoidance of doubt and without prejudice to **Clause 8.34**, if a Participant fails to discharge its obligations under the MYR Intraday credit facility, BNM reserves complete and full rights, title and interest over the Identified Securities.
- 8.39 While BNM does not currently charge any interest on MYR Intraday credit, a transaction fee per MYR Intraday credit tranche is imposed (refer to **Appendix II**).

Funding Facility for Retail Payments Settlement (FRPS)

- 8.40 FRPS is a funding facility that BNM offers to facilitate:
- i. Islamic Banks during MYR Evening Settlement and Deferred Net Settlement on weekend and Holiday
 - ii. Conventional Banks for management of unpaid MYR Intraday Credit upon cut-off time of MYR Evening Settlement Windows and Deferred Net Settlement on weekend and Holiday.
- 8.41 FRPS is granted through the outright sale of Eligible Securities from the Participants' K accounts to BNM. Hence, Participants shall ensure sufficient Eligible Securities are placed in their K accounts.

- 8.42 Securities in K accounts would no longer be FRPS Eligible Securities two (2) Business Days before the securities' Final Redemption Date or Early Redemption Date or Partial Redemption Date or Coupon Date. Participants shall monitor the coupon and redemption profile of securities in their K accounts to ensure that there is no shortfall in Eligible Securities due to upcoming coupon payments and redemptions.
- 8.43 BNM will exercise its sole discretion in selecting and identifying the Eligible Securities (Identified Securities) in Participants' K accounts that BNM would purchase under FRPS at any given time.
- 8.44 BNM has the absolute right to transfer the Identified Securities from the Participants' K accounts to BNM's account through SSDS sale transactions when Participants require funding under FRPS.
- 8.45 All rights, title and interest in and to any of the Identified Securities shall vest in BNM free and clear of any liens, claims, charges or encumbrances or any other interest of the Participants or of any third party.
- 8.46 Nothing in this Clause is intended to create or does create in favour of either party any mortgage, charge, lien, pledge, encumbrance or other security interest in the Identified Securities.
- 8.47 For Conventional Banks, the amount of FRPS is equivalent to the unpaid MYR Intraday Credit amount.
- 8.48 If Conventional Banks are unable to pay MYR Intraday Credit upon cut-off time for MYR Evening Settlement Window and Deferred Net Settlement for Retail Payments on weekend and Holiday, FRPS will automatically triggers outright sale of Eligible Securities in K-Account to pay the unpaid MYR Intraday Credit. MT543 will be generated for Conventional Banks and MT541 for BNM.
- 8.49 For Islamic Banks, the FRPS amount is determined by the difference between Settlement amount and the available balance in MYR Settlement Account.
- 8.50 BNM on behalf of Islamic Banks will execute FRPS Outright Sale of Eligible Securities in K-Account upon insufficient balance in MYR Settlement Account during RPS. MT543 will be generated for Islamic Banks and MT541 for BNM.

- 8.51 The net price of Eligible Securities sold to BNM under FRPS is calculated as follows:

Net price = $[100 - \text{Margin}] / 100 \times [\text{Clean Market Price of Eligible Securities}]$
The applicable Margin is determined by BNM.

FRPS Outright Purchase for Participants Regulated Under the Financial Services Act (Conventional Banks)

- 8.52 On the next RENTAS Business Day or next Deferred Net Settlement for Retail Payments Business Day, whichever earlier, RENTAS automatically executes the FRPS Outright Purchase of the sold securities by the “FRPS Activation” time specified in Clause 8.2 or 9.2. Completion advice of MT547 will be generated for BNM and MT545 for the Participants. Conventional Banks shall ensure that their MYR Settlement Accounts have sufficient funds to settle the FRPS Outright Purchase.

- 8.53 For Conventional Banks with insufficient funds in MYR Settlement Account, the MYR Intraday Credit will be triggered to settle the FRPS Outright Purchase.

- 8.54 FRPS Outright Purchase would occur at net prices that are identical to the net price of FRPS Outright Sale.

- 8.55 FRPS Profit will be automatically debited from the Conventional Banks’ MYR Settlement Accounts during FRPS Outright Purchase via pacs.010.001.03. The profit is calculated as follows:

$$\text{FRPS Profit} = \text{Funding obtained under FRPS} \times \text{FRPS Rate} \times \text{No. of Days} / 365$$

Where:

FRPS Rate = Ceiling Rate (currently at OPR + 25 basis points)

No. of Days = Business Day of FRPS Outright Purchase – Business Day of FRPS Outright Sale

BNM shall determine the FRPS rate and has a right to vary the rates according to market condition.

- 8.56 Conventional Banks shall submit the Confirmation of Subscription to FRPS as per Appendix XVIII to confirm the acceptance or non-acceptance of the FRPS.

FRPS Outright Purchase for Participants Regulated Under the Islamic Financial Services Act (Islamic Banks)

- 8.57 For Islamic Banks who have sold the securities under FRPS and subsequently have surplus in the MYR Settlement Account, BNM on behalf of Islamic Banks will automatically execute the FRPS Outright Purchase of the sold securities.
- 8.58 The remaining securities sold under FRPS shall only be purchased on the next RENTAS Business Day by the “FRPS Activation” time specified in Clause 8.2. BNM on behalf of Islamic Banks will automatically execute the FRPS Outright Purchase of the remaining sold securities. Completion advice of MT547 will be generated for BNM and MT545 for the Participants for every FRPS outright purchase transactions. Islamic Banks shall ensure that their MYR Settlement Accounts have sufficient funds to settle the FRPS Outright Purchase.
- 8.59 FRPS Profit specified in the Clause 8.61 is only applicable for the outright purchase executed on the next RENTAS Business Day.
- 8.60 FRPS Outright Purchase would occur at net prices that are identical to the net price of FRPS Outright Sale.
- 8.61 FRPS Profit will be automatically debited from the Islamic Banks’ MYR Settlement Accounts during FRPS Outright Purchase via pacs.010.001.03. The profit is calculated as follows:

$$\text{FRPS Profit} = \text{Funding obtained under FRPS} \times \text{FRPS Rate} \times \text{No. of Days}/365$$

Where:

FRPS Rate = Ceiling Rate (currently at OPR + 25 basis points)

No. of Days = Business Day of FRPS Outright Purchase – Business Day of FRPS Outright Sale

BNM shall determine the FRPS rate and has a right to vary the rates according to market condition.

- 8.62 Islamic Banks shall submit the Confirmation of Subscription to FRPS as per Appendix XVIII to confirm the acceptance or non-acceptance of the FRPS.

9 Deferred Net Settlement for Retail Payments on Weekend and Holiday

- 9.1 The business hours for Deferred Net Settlement for Retail Payments on weekend and Holiday is from 8.00 am to 6.00 pm.
- 9.2 The detailed schedules for Retail Payments Settlement activities in RENTAS are as provided in the table below:

Scheduled Time	Actions
8:00 am	Opening of Retail Payments Settlement
8:30 am	Intraday Credit Facility (ICF) activation
	FRPS activation
By 9:30 am	Settlement of FPX – 1st Window
By 4:15 pm	Settlement for FPX – 2nd Window
By 6:00 pm	Intraday Credit Facility cut-off
	FRPS Cut-off
	Retail Payments Settlement Window Cut-off

- 9.3 BNM may amend the Clause 9.2, if circumstances warrant such a change, either temporarily or permanently.
- 9.4 Retail Payments Participants are encouraged to pre-fund the MYR Settlement Account to ensure sufficient balance for the settlement stipulated in the clause 9.2.
- 9.5 In the event of insufficient balance in the MYR Settlement Account, Retail Payments Participants may utilise the following funding facilities provided by BNM:
- 9.5.1 Intraday Credit Facility as stipulated in clause 8.26 to clause 8.39 for Conventional Banks.
- 9.5.2 FRPS as stipulated in clause 8.40 to clause 8.62 for Islamic Bank.

- 9.6 During the Deferred Net Settlement on weekend and Holiday business hours, Retail Payments Participants shall perform the following transactions to facilitate the Retail Payments Settlement clearing positions:
- i. Withdrawal from SRR Cash Account to MYR Settlement Account, provided Participants have excess balances in the SRR Cash Account and the SRR withdrawal will not cause Retail Payments Participants to be in non-compliance to the Statutory Reserve Requirements (SRR).
 - ii. Transfer of Eligible Securities from Retail Payments Participants' B account to K account;

10 Gridlock Resolution

- 10.1 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.
- 10.2 RENTAS has a gridlock resolution mechanism that will identify an optimal set of queued transactions across affected Participants that would not have settled individually but can be settled simultaneously. This resolution mechanism simultaneously takes into account an affected Participants' incoming and outgoing queued transactions so that the liquidity demands on affected Participants is reduced.
- 10.3 During gridlock resolution, RENTAS may select queued transactions for settlement in any order instead of a First In First Out (FIFO) basis. This is done to arrive at the largest possible set of incoming and outgoing transactions that can be settled simultaneously.
- 10.4 RENTAS' gridlock resolution mechanism settles transactions on a gross basis. Transactions advices that Participants receive for transactions that settle under gridlock resolution are no different from the transaction advices under RENTAS' normal settlement track.
- 10.5 RENTAS' gridlock detection occurs in intervals of 20 minutes. Gridlock resolution would ensue if gridlock is detected.

11 Queue Management

11.1 If Participants do not have sufficient funds or sufficient securities, their transactions will be queued centrally at RENTAS on a FIFO basis. There are two (2) types of payment queues, namely the normal queue and priority queue.

11.2 During the RENTAS MYR Settlement Cut-off, all unsettled instructions in both the normal and priority queues will be cancelled by RENTAS. Participants will be notified accordingly via online reports.

11.3 Normal Queue Management

- i. Through RENTAS Portal, Participants may manage their MYR IFTS payment normal queue by:
 - (i) Re-ordering their queued transactions; or
 - (ii) Cancelling the queued transactions.

11.4 Participants may also make online real-time queries on their outgoing and incoming normal payment queues via RENTAS Portal.

11.5 Priority Queue Management

- i. Only BNM is allowed to re-order or cancel transactions in the priority queue.
- ii. Participants shall submit a form (as per **Appendix V**) to BNM in order to re-sequence or cancel transactions in the priority queue should the need arise.
- iii. Although Participants are not allowed to manage transactions in the priority queue, Participants may make online real-time queries on their outgoing and incoming MYR priority payment queues via RENTAS Portal.

12 Liquidity Optimisation Settlement Facility

12.1 Liquidity Optimisation Settlement Facility (LOSF) is the process of combining incoming or outgoing MYR payments in order to achieve a reduced net obligation.

- 12.2 The purpose of LOSF is to optimise liquidity. Through LOSF, Participants are able to offset their outgoing MYR payments against incoming receipts, thereby reducing their liquidity needs.
- 12.3 RENTAS provides an optional multilateral LOSF settlement track where Participants may voluntarily submit MYR IFTS transactions that are less time critical for LOSF settlement.
- 12.4 LOSF settlement is only available for MYR IFTS transactions. There is no LOSF settlement for SSDS and PvP transactions.
- 12.5 Participants may designate MYR IFTS transactions for LOSF settlement by entering a specified Transaction Reference Number (TRN) code into the transactions.
- 12.6 Participants may submit same day LOSF settlement transactions to RENTAS at any time between 9:00 am to 4:00 pm. RENTAS will perform LOSF in specified settlement time intervals. After 4:00 pm, LOSF transactions submitted for same day value will be reverted to gross settlement immediately.
- 12.7 LOSF transactions submitted between the pre-determined LOSF settlements time will be queued until the next available LOSF settlement time slot.
- 12.8 Participants may opt to remove their transactions from the LOSF settlement queue. Transactions removed from the LOSF settlement queue will automatically be submitted for gross settlement.
- 12.9 If an LOSF settlement batch cannot be settled because one or more Participants do not have sufficient funds, RENTAS will make three (3) attempts to perform the LOSF settlement after a specified time interval. After three attempts, all transactions in the failed LOSF settlement batch will be reverted to gross settlement.
- 12.10 Participants may also submit forward dated transactions for LOSF settlement. Forward dated transactions will be queued until the first LOSF settlement pre-determined time slot on the settlement date.
- 12.11 Participants are able to view the status of their LOSF settlement transactions via RENTAS Portal.

13 SSDS Processing

13.1 SSDS Initiation and Settlement Deadlines

- i. Participants are required to observe the following deadlines to ensure timely and orderly settlement of SSDS transactions:

Value Date	Transaction Initiation Deadlines	Settlement Deadlines
Same Day Value ⁵	By 4 pm on Transaction Day (T)	By 5 pm on T
Value Tomorrow	By 11 am on T+1	By 3 pm on T+1
Value Spot	By 11 am on T+1	By 3 pm on T+2
Forward Value	By 11 am on T+1	By 3 pm on T+N

- 13.2 Both buyer and seller shall initiate SSDS transactions via either RBG or Swift Access using the message format specified in **Clause 7.0**.

- 13.3 In an SSDS transaction, the buyer shall initiate a Receive versus Payment message (MT541) while the seller initiates a Deliver versus Payment message (MT543). DVP Settlement will take place when these two messages are matched, the buyer has sufficient cash balances to pay the seller, and the seller has sufficient securities to deliver to the buyer.

- 13.4 To reduce Settlement failures arising from minor discrepancies between the purchase proceeds entered by the buyer in the MT541 message and the sale proceeds entered by the seller in the MT543 message, RENTAS will accept a tolerance limit of 5 currency units⁶. The tolerance range will be calculated based on seller's proceeds (+/- 5 currency units from the proceeds entered by the seller). If the proceeds entered by the buyer are within the tolerance limit, RENTAS will deem the buyer's MT541 and seller's MT543 messages as matched and will settle the SSDS transactions based on the proceeds entered by the seller.

- 13.5 In a SSDS transfer transaction, the transferee initiates a Receive Free of Payment message (MT540) while the transferor initiates a Deliver Free of

⁵ Exemption on instruction deadline for Participants whose clients are Non-resident as they are subject to FEA and AMLA

⁶ e.g. MYR 5 or CNY 5

Payment message (MT542). Settlement will take place when these two messages are matched and the transferor has sufficient securities to deliver.

- 13.6 Participants may cancel SSDS transactions that are still pending Settlement as follows:
- i. Matched transactions that are pending Settlement due to insufficient cash or securities;
 - ii. Unmatched transactions; and
 - iii. Forward-dated transactions with the mutual agreement of both Participants and their counterparties.
- 13.7 Participants may initiate new MT 541 or MT543 and indicate 'CANC' in field 23 and state the previous' original MT541/543 Ref Number of field 20 in field 21 (Related Ref) of the cancellation message.
- 13.8 Participants may cancel Repo transactions only when the first leg has yet to settle due to insufficient repo collateral and/or cash. No cancellation can be initiated after the first leg is settled. SSDS and Repo transactions that are still pending Settlement will be automatically cancelled at MYR Settlement Cut-off time.
- 13.9 Processing of Specified and Non-Specified RENTAS Securities
- i. RENTAS processes all securities transactions on a real-time basis during MYR Settlement Business hours. Forward-dated transactions received will be stored in RENTAS database and only will be processed on the value date.
 - ii. If the value date of a payment falls on a Business Day that is subsequently declared a Holiday, RENTAS shall process such transactions on the next Business day.
 - iii. Although RENTAS automatically adjusts the value date of transactions to the next Business Day in the event of a Holiday, the proceeds of the transactions remain unchanged. BNM will not input additional days of accrued interest or other adjustments arising from the deferred Settlement due to Holidays.

- iv. All interest, coupon, dividend and redemption payments will be paid on a Business Day. In the event that the interest, coupon, dividend or redemption date falls on a Holiday, the payment of interest, coupon, dividend and redemption proceeds shall follow procedures as stated in Part IX (Holiday Convention) of the Operational Procedures for Securities Services.

13.10 Securities Linked Settlement (SLS) for MGS Futures Contract Initiation and Settlement Deadline.

- i. Participants are required to observe the following deadlines to ensure timely and orderly settlement of SLS for MGS Futures Contract:

Value Date	Transaction Initiation Deadline	Settlement Deadlines
Value Spot	By 10 am on T+2	By 11 am on T+2

- ii. Participants are required to submit cancellation message MT541 or MT543 and indicate 'CANC' in field 23 of the message should the SLS for MGS Futures Contract transaction was unable to be completed by 11 am.
- iii. The cancellation messages from sender and receiver are required to be matched for the cancellation to complete in RENTAS. If the sender and/or receiver fail to submit the cancellation by 3 pm on the value date, the failing party will be subjected to general non-compliance.

13.11 Clauses 13.1 to 13.9 is not applicable for SLS MGS Futures Contract transaction.

13.12 For securities placed in the Statutory Reserve Requirement (SRR) account, Participants shall monitor the redemption profile of securities to avoid failure of redemption due to shortfall in the SRR balance arising from redemption process.

14 Standing Instructions

- 14.1 Participants may configure Standing Instructions (SI) to automate recurring outgoing credit transfers (pacs.009.001.08). SIs are configured via RENTAS Portal.
- 14.2 Each SI would automatically trigger the initiation of an outgoing transaction when certain conditions are met. Participants may configure the following trigger conditions in each SI:
- i. **Trigger by time:** Participants configure the exact time point in time when a SI would initiate a transaction;
 - ii. **Trigger by time and MYR Settlement Account balance:** Participants configure a point in time when a SI would initiate a transaction provided the Participants' account balance is at, above, or below a pre-specified level; and
 - iii. **Trigger by incoming funds:** Participants configure that a SI initiate a transaction upon receiving an incoming transaction of a specified value range and of a specified TRN Code.
- 14.3 Participants may configure SIs either as one-off or recurring. When configuring SIs, Participants shall specify all necessary info for each SI to allow the RENTAS to automatically generate an outgoing pacs.009.001.08.
- 14.4 When the configured trigger conditions are met, an SI will automatically generate a pacs.009.001.08 transaction with following TRN codes:
- i. SIP00 – for inter-bank fund transfers between Participants; or
 - ii. SIP99 – for in-house transfers between a Participant's own accounts.

15 Request for Extension of PvP Link Cut-off Time

- 15.1 Participants are required to observe the PvP Link Cut-off scheduled at all times to ensure industry-wide operational efficiency.
- 15.2 BNM may, in exceptional circumstances, consider extending the PvP Link Cut-off time when the extension of time is necessary to avoid settlement failures that pose a systemic risk to the system. Any extension of time has to be mutually agreed upon by both BNM and HKMA.

- 15.3 Requests for extension shall be made to BNM as listed in **Appendix I** by telephone at least forty-five (45) minutes before the scheduled PvP Link Cut-off time. BNM may reject any request made less than forty-five (45) minutes before the PvP Link Cut-off time. In such circumstances, BNM shall not be held responsible for any losses incurred by the Participants.
- 15.4 Participants shall fax or email the duly completed form (as specified in **Appendix III (a)**) for the request of extension of PvP Link Cut-off time, preferably within 30 minutes of the verbal request for extension.
- 15.5 BNM will not grant an extension of PvP Link Cut-off time exceeding MYR Settlement Cut-off time except in circumstances where BNM deems the extension necessary to avoid systemic risks to RENTAS Participants.
- 15.6 BNM will inform the industry through RENTAS broadcast message in the event of any extension of PvP Link Cut-off time.
- 15.7 Participants requesting a PvP Link Cut-off extension grants BNM the right to publicly disclose all information pertaining to the Participants' PvP Link Cut-off extension request.

16 Request for Extension of MYR Settlement Cut-off

- 16.1 Participants are required to observe the MYR Settlement Cut-off schedule at all times to ensure industry-wide operational efficiency. However, BNM may, in exceptional circumstances, consider extending the MYR Settlement Cut-off time when:
 - i. Participants are unable to settle their respective MYR Intraday credit;
 - ii. The extension of time is requested by BNM under exceptional circumstances; and
 - iii. The extension of time is necessary to avoid Settlement failures that pose a systemic risk to the system.
- 16.2 Any requests for extension shall be made to BNM via telephone listed in **Appendix I** at least fifteen (15) minutes before the scheduled MYR Settlement Cut-off time followed by:
 - i. An email confirming the extension request via telephone from the requester to the relevant BNM officer before the extension time; and

- ii. Key in the request for extension via RENTAS Portal by following and within the time period stated in **Clause 16.3**.

In making such requests, the requesting Participant acknowledges and agrees that:

- (a) BNM reserves the right to reject any request not made in accordance with this Clause;
- (b) BNM shall not be held liable or responsible for any losses incurred by the requesting Participant arising from any request accepted by BNM under this Clause; and
- (c) BNM has the right to publicly disclose all information pertaining to the requesting Participants' cut-off extension request.

16.3 For the purpose of **Clause 16.2.2**, requesting Participants shall:

- i. Attach the duly completed form (as specified in **Appendix III (b)**); and
- ii. Submit in the RENTAS Portal for the request of extension of MYR Settlement Cut-off time within 30 minutes of the verbal request for extension made via telephone in accordance with **Clause 16.2**.

16.4 Notwithstanding **Clauses 16.2** and **16.3**, in the interest of operational efficiency, BNM may, at its discretion, act upon verbal requests for extension of MYR Settlement Cut-off time by the Participants.

16.5 Any extension of MYR Settlement Cut-off time will be notified via RENTAS broadcast messages.

16.6 BNM will not grant an extension exceeding two (2) hours except in circumstances where BNM deems the extension necessary to avoid systemic risks to RENTAS Participants.

16.7 Participants who have completed all transactions, repaid all outstanding MYR Intraday credit and settled all obligations to BNM may close their operations at the scheduled MYR Settlement Cut-off time of 6:00 pm even if there is a cut-off extension.

16.8 Participants whose MYR Settlement Cut-off extension request is granted, will be subjected to penalties as specified in **Appendix II**.

- 16.9 Participants may not “free-ride” on another Participant’s MYR Settlement Cut-off extension request.
- 16.10 In the event of multiple requests of MYR Settlement Cut-off extension from more than one participant:
- i. The first Participant’s non-compliance charge is calculated based on the duration from the scheduled MYR Settlement Cut-off of 6:00 pm to the extended cut-off time requested by the first Participant.
 - ii. The second Participant’s non-compliance charges is calculated based on the duration from the scheduled MYR Settlement Cut-off of 6:00 pm to the extended cut-off time requested by the second Participant.

17 Incident Report (IR)

- 17.1 Once BNM has granted the Participants’ request to extend the MYR Settlement Cut-off time, Participants are required to submit a complete Incident Report (IR) to BNM via facsimile or email within 24 hours of the initial cut-off extension request. (Please refer to **Appendix IV** for the IR template).
- 17.2 Apart from IRs for MYR Settlement Cut-off extensions, Participants are also required to submit an IR to BNM should there be any incident that materially impacts their RENTAS operations, including major system failures or downtime for more than 15 minutes, degradation in system performance, security breaches and fraud, delays or disruptions affecting customers, as well as failures to settle obligations.

18 Compensation on Inter-Bank Failed Settlements

- 18.1 Participants are encouraged to resolve any claims for compensation arising from failed Settlements amicably.
- 18.2 Liabilities for failure to make payments may extend beyond the normal loss of interest of profit and may include direct, indirect and consequential losses.
- 18.3 These Operational Procedures do not absolve the paying Participants of any potential claims that may arise from payment errors or failure to make payments.

- 18.4 The Guidelines for Compensation on Inter-bank Failed Settlements (as specified in **Guideline III**) provide a mechanism to compute compensation in situations of Settlement failure or delayed Settlement. The mechanism works on a compensation basis to cover losses. The mechanism is not intended to be punitive as no Participant shall benefit from errors or settlement failure of other Participants.

19 Managing Unpaid Credit Facilities

i. Managing Unpaid MYR Intraday Credit during MYR Settlement Business Hours

- 19.1 Participants are required to ensure that they have sufficient funds to repay and settle all MYR Intraday credit extended by BNM before the MYR Settlement Cut-off time.
- 19.2 Towards this end, Participants shall monitor closely the amount of MYR Intraday credit that is not repaid after the scheduled MYR Intraday credit cut-off time. Prior to the MYR Intraday credit cut-off time, any excess balance in the Participants' MYR Settlement Account will be used to fund outgoing transactions.
- 19.3 After the MYR Intraday credit cut-off time, RENTAS will re-prioritise how excess funds are applied and will automatically apply these excess funds towards repaying MYR Intraday credit. After all MYR Intraday credit is repaid, RENTAS will allow Participants to utilise the remaining excess balance for transactions.
- 19.4 Should a Participant encounter difficulty in repaying MYR Intraday credit sixty (60) minutes before the scheduled MYR Settlement Cut-off time, the Participant shall immediately determine the following:
- i. If there are any MYR incoming transactions that will increase the MYR Settlement Account balance and allow the Participant to repay the MYR Intraday credit;
 - ii. If they have sufficient excess balances in the statutory reserve account that can be transferred to the MYR Settlement Account to repay the MYR Intraday credit⁷;

⁷ If there are sufficient excess balances in the statutory reserve account that can be transferred to the Settlement Account to repay the MYR Intraday credit, Participants must ensure that they remain in compliance with statutory reserve requirements

- iii. Whether they are able to source for funds from other Participants; and
 - iv. If there are any other avenues to source for funds.
- 19.5 After exhausting all possible funding avenues indicated above, the Participant may make a request to BNM for funding under BNM's Guidelines on Standing Facilities.
- 19.6 If funding is forthcoming from BNM, the Participant's dealers must remain in the Participant's premises and must be contactable until RENTAS MYR Settlement Cut-off.
- 19.7 The Participant shall ensure that sufficient back-office Settlement staff is available to complete the Settlement of the borrowing under the standing facilities. The staff must be competent and must have familiarity with the construction of repo transactions or any other form of transaction used for the funding.
- 19.8 If funding transaction cannot be completed by MYR Settlement Cut off time, BNM may opt to convert unredeemed MYR Intraday credit to an overnight repo. The Participants shall grant BNM the sole authority to determine the rates, tenor and other terms in converting the MYR Intraday credit into an overnight repo transaction.
- 19.9 As a final measure, BNM reserves the right to take possession of the collateral i.e. collateralised loans against the eligible collaterals and has the authority to determine the value of the collateral. If there is any shortfall in the collateral value against the unpaid MYR Intraday credit, the Participants shall remain liable to BNM for the shortfall.
- 19.10 MYR Settlement Cut-off Time will not be closed until all MYR Intraday credit is repaid or extinguished. If a MYR Settlement Cut-off extension becomes necessary due to the Participant's inability to repay the MYR Intraday credit, notwithstanding any penalties or punitive rates imposed by BNM, the Participants will still be subjected to penalties imposed by BNM for not repaying the MYR Intraday credit before the MYR Settlement Cut-off time as well as penalties for extending the MYR Settlement Cut-off time. Detailed BNM non-compliance charges are as listed in the **Appendix II**.

19.11 If the MYR Settlement Cut-off time has been extended, Participants may repay their MYR Intraday credit up to the extended MYR Settlement Cut-off time. In the event the Participant fails to repay the Intraday credit by the extended MYR Settlement Cut-off time, the Participant will be subjected to both penalties for not repaying their Intraday credit, as well as penalties for extension of the MYR Settlement Cut-off time. The duration of the extension will be calculated from the original MYR Settlement Cut-off time of 6:00 pm.

ii. Managing Unpaid MYR Intraday Credit during MYR Evening Settlement Windows and Retail Payments Settlement Business Hours

19.12 For Conventional Banks who fail to redeem their MYR Intraday Credit, the unpaid MYR Intraday credit will be managed by Funding Facility for Retail Payments Settlement (FRPS) as per Clause 8.40 to Clause 8.62.

20 Public Key Infrastructure Security Requirements

e-PKI

20.1 Participants accessing RENTAS via RBG or RENTAS Portal shall deploy digital certificates issued by Licensed Certification Authority (CA) to perform the necessary e-PKI functions in RENTAS. There are two (2) CAs namely Digicert Sdn. Bhd and MSC Trustgate Sdn. Bhd.

20.2 These digital certificates can be purchased and registered for individuals or organisations based on the Participants' internal controls and internal procedures.

20.3 Participants are encouraged to have certificates from both CAs to avoid reliance on a single CA.

20.4 Participants are also required to have a token-based digital certificates for its e-PKI functions to activate the RENTAS contingency terminal at BNM's premises.

20.5 Participants are responsible for monitoring the expiry dates of their respective digital certificates. Participants shall renew the certificates at least 14 calendar days prior to the expiry date of the certificates.

Swift Security

20.6 Participants accessing RENTAS via Swift Access shall adhere to Swift's security requirements and specifications issued by Swift.

21 RENTAS Portal Certificate (ID) Registration

21.1 RENTAS Portal is a possible contingency Participant Terminal in the event the primary channel is unavailable. Hence, it is important that all digital certificates of authorised officers who have access to RENTAS must first be registered in RENTAS Portal. This registration must also be performed upon certificate renewal at the end of the certificate validity period. Procedures on the digital certificate registration in RENTAS Portal are provided in the **Appendix XVI** – Guideline for Registration of New Digital Certificate in RENTAS Portal.

21.2 Each Participant's RENTAS Portal Administrators shall manage all user IDs within their organisation in accordance with the respective Participant's internal IT security policies as well as BNM's guidelines and policies.

21.3 Participant's RENTAS Portal Administrators shall ensure that access is granted on a need-basis and access should be reviewed periodically to determine if the assigned access privileges are appropriate. Participant's RENTAS Portal Administrators shall promptly revoke user IDs for officers who have resigned, transferred, or whose job functions no longer require access to RENTAS Portal.

21.4 If a Participant's RENTAS Portal Administrator ID has to be removed as mentioned in **Clause 21.3**, the Participant shall promptly make a request to BNM by completing the "External User Access Form" in **Appendix XV**.

22 Digital Certificates

22.1 Participants shall liaise directly with the CAs to purchase, renew, suspend or revoke their digital certificates.

23 Authenticity, Confidentiality and Irrevocability of the RENTAS MYR Settlement Messages

23.1 Participants cannot repudiate any transmitted messages or payments that they have digitally signed.

- 23.2 For forward-dated transactions, a digital signature is verified based on the validity of the corresponding digital certificate on the date the transaction is initiated.
- 23.3 If a Participant has revoked a digital certificate, all messages or instructions transmitted by and signed using the digital certificate prior to the revocation shall be deemed valid.
- 23.4 Receiving Participants will receive a cryptographic error notification at their Participant Terminal system when a transaction fails the digital signature verification. The receiving Participant must then investigate the cause of the digital signature verification failure and validate the integrity and authenticity of the affected transaction manually to independently ascertain the legitimacy of the transaction.

24 Minimum Transaction Amount

- 24.1 The minimum amount for MYR third party payments is RM10,000.00. This minimum amount is not applicable for payments executed in favour or by order of BNM, the Government, statutory bodies or any other institutions specified by BNM from time to time.
- 24.2 There is no minimum amount for payment in favour or by order of the RENTAS MYR Settlement Participant's own account.

25 Billing

- 25.1 This **Clause 25.0** shall be read in accordance with the Fees and Charges section in the Participation Rules for Payments and Securities Services.
- 25.2 BNM will automatically debit the Participants' MYR Settlement Accounts for the billed amount on the first Business Day of the following month or any time as determined by BNM.
- 25.3 Participants shall check their billing advices and inform BNM of any discrepancies, including erroneous billing within fourteen (14) calendar days of receipt of the billing statements.

25.4 Participants may refer to **Appendix II** in this Operational Procedures for detailed fees and charges for MYR Settlement services in RENTAS.

26 Retention

26.1 Participants shall retain all Messages, transaction advices, audit trail reports for a period of seven (7) years.

27 Business Continuity Management (BCM)

27.1 Participants are required to conduct BCP and DRP exercises by operating using their Participant Terminals at their respective recovery / DR in accordance with the Guidelines on Business Continuity Management for Participants of RENTAS and FAST.

27.2 Participants that fail to comply with **Clause 27.1** shall be subjected to penalties stipulated in **Appendix I** of the Guidelines on Business Continuity Management for Participants of RENTAS and FAST.

28 BCM Arrangements in Relation to RENTAS Failure

28.1 Participant Terminal Failure

- i. Participant Terminal failure may happen due to system, software, hardware or communication line failure, inadequate or failed internal processes, human errors, power outage or other unanticipated events.
- ii. In the event of Participant Terminal disruption, Participants are required to assess immediately the severity of the failure. Where appropriate, Participants shall invoke the necessary recovery measures to resume normal operations. Participants are reminded that recovery efforts undertaken to resume normal operations shall be within the system recovery and Recovery Time Objectives (RTO) specified in Guidelines on Business Continuity Management for Participants of RENTAS and FAST.
- iii. Participants are required to inform BNM immediately of any Participant Terminal failure and other disruptions that are affecting their RENTAS system. After the initial notification, Participants are required to update BNM

every thirty (30) minutes on their recovery status and next-action-plan until the Participant Terminal resumes normal operation.

- iv. Participants shall decide whether to move to its recovering / DR site within sixty (60) minutes of Participant Terminal failure.
- v. Participants that fail to comply with the requirements in **Clause 28.1.2** shall be subjected to penalties stipulated in **Appendix I** of the Guidelines on Business Continuity Management for Participants of RENTAS and FAST.

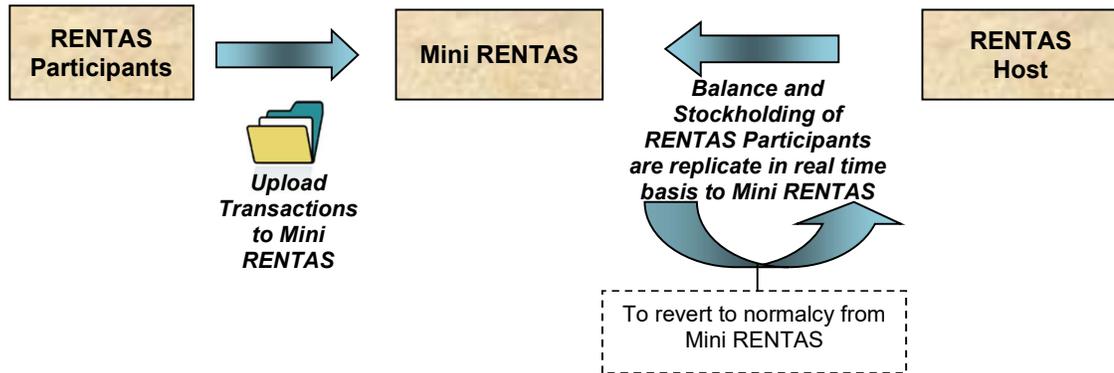
29 RENTAS System Failure at Production Site

- 29.1 To minimise the risk of disruption to the settlement operations of Participants, RENTAS system runs on fault tolerant technology, which allows the system to continue functioning uninterrupted when individual system components fail. In addition, BNM maintains a RENTAS system at Recovery Centre that is updated in real-time so that all data and transactions are identical to the RENTAS Live system.
- 29.2 In the unlikely event of RENTAS system failure at Production Site, BNM shall make use of e-mail, or SMS or BCP call tree to keep Participants updated on the recovery status and action plan every thirty (30) minutes until the RENTAS system resumes normal operation.
- 29.3 If BNM decides to move its RENTAS system operations to its Recovery Centre, the activation of the RENTAS system at the Recovery Centre can be completed within two (2) hours.

30 RENTAS Failure at Both Production Site and Recovery Centre (RC)

- 30.1 In the unlikely event of total RENTAS failure at both the Production Site and RC or the total failure of RENTAS Virtual Private Network, BNM may activate the contingency system known as Mini RENTAS.
- 30.2 Mini RENTAS is intended to provide a minimal level of settlement services to RENTAS Participants

30.3 Mini RENTAS can be accessed through internet at <https://mr3.bnm.gov.my>.



30.4 BNM will make use of e-mail, WhatsApp, SMS or BCP call tree to notify RENTAS Participants regarding activation of mini RENTAS. BNM shall transfer Participants most recent available Settlement Account balances and Securities Account balances to Mini RENTAS. Upon activation of Mini RENTAS, Participants shall verify their Settlement Account balances and Securities Account balances accordingly.

30.5 To perform settlement in Mini RENTAS, Participants shall initiate transactions in Mini RENTAS by uploading the transactions in the same format as the interface file used to initiate transactions via Participant Terminal. During activation, Mini RENTAS would perform settlement by offsetting the outgoing payments against incoming payments in specified time intervals.

30.6 Participants may make use of Mini RENTAS to perform online enquiry on their Settlement Account balances and Securities Account balances.

30.7 The following transaction types can be settled in Mini RENTAS upon activation by BNM:

- i. IFTS Single Credit;
- ii. IFTS Multiple Credit;
- iii. IFTS Single Debit;
- iv. SSDS Sale;
- v. SSDS Free of Payment; and
- vi. SSDS In-house.

30.8 Participants may only initiate transactions for same day value in Mini RENTAS.

- 30.9 If Participants had previously transmitted future dated transactions into RENTAS prior to the failure of RENTAS, such future dated transactions would not be transferred to mini RENTAS. Hence Participants would have to re-initiate these transactions in Mini RENTAS on the value date of the transactions.
- 30.10 For Retail Payments Settlement, Mini RENTAS would automatically generate a credit transfer for Participants who are short in the respective clearing position. This auto-construction of the credit transfer eliminates the need for Participants to manually construct a credit transfer to cover their clearing obligation. The affected Participants would have to verify and approve the credit transfer for the Retail Payments Settlement to take place.
- 30.11 To revert to normalcy, BNM would deactivate Mini RENTAS and perform end day batch processing. Upon completion, BNM would transfer Participants' latest Settlement Account balances and Securities Account balances to RENTAS. Participants shall verify their Settlement Account balances and Securities Account balances accordingly.
- 30.12 BNM shall conduct annual test runs on Mini RENTAS. Participants are required to take part in the annual test runs.
- 30.13 As Mini RENTAS does not have functionalities to cater for repos and USD/MYR PVP transactions via USD CHATS, Participants may fall back to the following workarounds when Mini RENTAS is activated:
- i. Participants may settle repos by initiating SSDS sales (MT543) on the value date of the repos, followed by SSDS purchases (MT541) on the maturity date of the repos;
 - ii. Participants may settle USD/MYR PVP transactions as normal forex transactions where the MYR leg is initiated as IFTS Credits in Mini RENTAS while the USD leg is settled via correspondent banking. With this workaround, the MYR and USD legs settle separately without PVP matching.

31 e-PKI Failure

- 31.1 RENTAS Host is designed to withstand the complete failure of e-PKI. As such, the failure of e-PKI would largely be transparent to Participants. All transactions would remain protected using a backup security solution which provides data authenticity, integrity and non-repudiation features, thus ensuring the security of RENTAS at all times.
- 31.2 To ensure seamless and automatic activation of the backup security solution, Participants shall ensure that the e-PKI configuration at their Participant Terminals is in accordance with BNM's specifications.

32 RENTAS Portal Activation – Contingency Access Channel

- 32.1 In the event any RENTAS Participant encountered system failure affecting the Participant's RENTAS access channels at Production Site and/or Recovery Centre, RENTAS Participant may request to activate RENTAS Portal as the contingency access channel.
- 32.2 RENTAS Participants intending to use RENTAS Portal must ensure all applicable settings in RENTAS Portal such as user's access matrix, user's transaction approval limit, global approval limit and TRN maintenance screens are configured accordingly.
- 32.3 RENTAS Participants are advised to review the settings in RENTAS Portal periodically to ensure the settings are up-to-date and able to support their latest transactional and operational needs in RENTAS.
- 32.4 RENTAS Participants must send a request to activate RENTAS Portal to BNM via email at rentas@bnm.gov.my. RENTAS Participants must also update BNM via email to deactivate RENTAS Portal as soon as RENTAS Participants reverts to normalcy.
- 32.5 If activating RENTAS Portal from Participant's site is not feasible, Participants may activate RENTAS Portal at BNM's premises as a last resort. In this regard, Participants shall refer to Guideline IV - Procedures for Activation of RENTAS Portal at BNM's Premises.

33 Testing Procedure

- 33.1 Participants are allowed to use BNM's RENTAS Host test environment, if the need arises.
- 33.2 Any request to use the test environment shall be made by Participants via RENTAS Portal by attaching the form provided in [Appendix XIV](#) duly signed (by authorised signatories) at least three (3) Business Days prior to the scheduled testing.
- 33.3 The value date of the exercise shall default to the current value date, unless the Participant requests a different value date. Requests for a value date other than the current date will only be entertained on a case-by-case basis.
- 33.4 Fees imposed on Participants for use of the test environment is as stated in [Appendix II](#) of this Operational Procedures. The fees will be levied based on the number of days of the planned exercise. Participants will not be reimbursed if the planned exercise is not conducted. If a request is made less than three (3) Business Days prior to the test, the request will be deemed as an unplanned testing exercise for billing purposes.
- 33.5 Participants are not allowed to use the RENTAS Host testing environment during weekends, Holiday and after office hours.
- 33.6 BNM may also conduct RENTAS Host test exercises and reserves the rights to make the testing mandatory for some or all Participants based on the objectives of the test exercise.
- 33.7 In the testing where the test scripts are to be provided by BNM, the test scripts will be made available at least one (1) week before the actual exercise date.

34 RENTAS Portal

- 34.1 RENTAS Portal serves as the main information repository and communication channel between BNM and RENTAS Participants.
- 34.2 The URL for RENTAS Portal is <https://rentasportal.bnm.gov.my>.

- 34.3 Each Participant is required to register at least two administrators in RENTAS Portal and the administrators are responsible to approve the creation of other users within the relevant Participant's own entity.
- 34.4 RENTAS Portal provides the following services to Participants:
- i. News - For BNM to broadcast latest updates or developments related to RENTAS operations and testing. For Participants to broadcast on their operational matters to other Participants;
 - ii. Alerts - To broadcast the three types of alerts; General, Delay of Settlement and Business Contingency Plan. BNM and Participants may use any of the alerts above to notify other Participants;
 - iii. References - For BNM to post any documents related to RENTAS operations for Participants' reference;
 - iv. Extension Requests - For Participants to request for extension of MYR or Foreign Currency Settlement Cut-off time, in accordance with **Clause 16**;
 - v. Test Environment – For Participants to request the use of RENTAS test environment, in accordance with **Clause 33**; and
 - vi. RENTAS iLINK - Provides real-time information such as cash positions including NRTS Account balance, securities holdings and settlement status. RENTAS iLINK also acts as Participants contingency terminal.

35 User Manuals

- 35.1 User manuals for RENTAS Portal shall be provided by BNM.

36 RENTAS Participants Directory

- 36.1 Participants shall furnish their latest contact information for communications and business continuity purposes by updating the Member Directory in RENTAS Portal. An up-to-date contact list is an essential component of BCP.
- 36.2 Participants shall maintain an updated list of RENTAS Authorised Signatories using the form in [Appendix VIII](#) and submit to BNM immediately upon changes.

37 Customer Service

- 37.1 Participants may contact BNM with regards to any RENTAS issue. The contact details for BNM are available as per [Appendix I](#). The contact information is also available in the Member Directory in RENTAS Portal.

38 Near Real Time Gross Settlement for Retail Payments (NRTS)

A. Near Real Gross Time Settlement (NRTS)

- 38.1 Retail Payments transactions are settled on gross in near-real time basis. NRTS refers to the process where interbank settlement of retail payments is normally completed within seconds after the Retail Payment transactions between customers are completed. Under exceptional circumstances, the interbank settlement may be completed beyond expected. The Retail Payments services covered under NRTS are listed in **Appendix XX**.
- 38.2 The Retail Payments Service Operator (RPSO) shall only stream completed Retail Payments transactions to RENTAS for interbank settlements. In this mechanism, the RPSO will stream completed Retail Payment transactions directly to RENTAS on a line-by-line basis for interbank settlement.
- 38.3 Transactions streamed to RENTAS are processed by simultaneously debiting the paying Participant and crediting the receiving Participant's NRTS Accounts maintained with BNM.
- 38.4 NRTS is based on pre-funding basis. Retail Payments Participants are required to pre-fund their NRTS Accounts to ensure sufficient balance for the NRTS of Retail Payments transactions.
- 38.5 NRTS of Retail Payments transactions is based on First In First Out basis. In the event of insufficient funds, settlement will be queued. Queued settlement shall be settled based on First Available First Out basis, where transactions with sufficient funds will settle first.

NRTS Business Hours

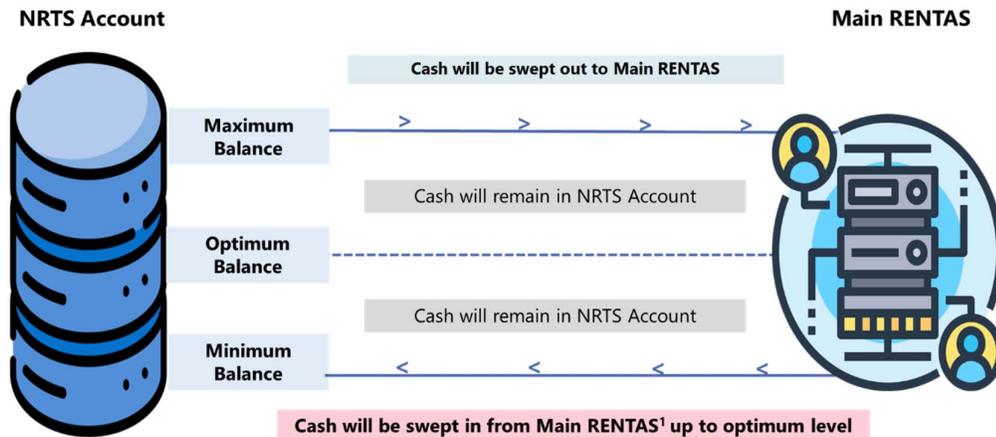
- 38.6 Near Real Time Settlement operates 24 hours, 7 days a week including on weekends and Holidays.

NRTS Account

- 38.7 The NRTS account shall be used to facilitate NRTS.
- 38.8 Retail Payments Participants shall pre-fund their NRTS Accounts via manual or automatic sweep-in from their MYR Settlement Account.
- 38.9 BNM shall create the NRTS Account for respective Retail Payments Participants upon the agreement of the Participant to subscribe to Retail Payments services that are covered under NRTS.
- 38.10 Retail Payments Participants are responsible for the maintenance of their NRTS Accounts via RENTAS Portal.
- 38.11 While Retail Payments Participants are responsible for the maintenance of the account, BNM reserves the right to perform maintenance and edit Retail Payments Participants NRTS Account, as well as closure of the account upon exit of the Participant as a party of NRTS. Retail Payments Participants shall sign and return the form in **Appendix XXI**.
- 38.12 During the Near Real Time Settlement Business Hours, Retail Payments Participants may perform the following transactions to facilitate settlement:
- i. Manual sweep-in from the MYR Settlement account to the NRTS Account
 - ii. Transfer of Eligible Securities from Retail Payments Participants' B account to K account.
 - iii. Withdrawal from SRR Cash Account to MYR Settlement Account, provided Retail Payments Participants have excess balances in the SRR Cash Account and the transfer will not cause Retail Payments Participants to be in non-compliance to the Statutory Reserve Requirements (SRR).
- 38.13 The above transactions are made available to Retail Payments Participants throughout Near Real Time Business Hours, except during RENTAS Batch Processing. During which, NRTS will continue to operate, whereas RENTAS Host shall be unavailable for batch processing.

B. Account Balance Management

38.14 Due to the pre-funding requirements of NRTS, Retail Payments Participants are required to manage the liquidity in NRTS Accounts to ensure timely settlements of Retail Payments transactions.



38.15 For each NRTS Account, a minimum, optimum, and maximum balance mechanism is applied. The purpose of the balances is as follows:

Minimum Balance

- i. The minimum balance is the minimum amount of cash balance that Retail Payments Participants shall always maintain in their NRTS Account. It is intended to provide sufficient liquidity for NRTS of Retail Payments Transactions.
- ii. Once the NRTS Account reaches the minimum balance, a 10-minute buffer is triggered prior to the sweep-in of cash from the MYR Settlement Account.
- iii. During this buffer period, all outgoing transactions are queued, while incoming transactions continue to be settled. If incoming transactions during the buffer causes the NRTS Account balance to exceed the minimum balance, the queued transactions will be settled on a First Available, First Out (FAFO) basis.
- iv. However, if the NRTS Account balance remains below the minimum balance after the buffer, cash shall be swept in from the MYR Settlement Account to the NRTS Account up to the optimum balance level.
- v. BNM has the authority to review and change the buffer duration if circumstances warrant such changes.
- vi. The minimum balance for the NRTS account shall be determined by BNM.

The minimum balance of the Participant's NRTS account is calculated as follows:

Minimum balance = 50% of the highest total outgoing transactions within a 10-minute interval across a 12-month rolling period

- vii. BNM shall regularly review the NRTS Account's minimum balance requirement to ensure the minimum balance accurately aligns the Participant's liquidity usage for NRTS. BNM also reserves the right to revise the minimum balance calculation method.
- viii. Failure to comply with the minimum balance requirements in the NRTS Account shall be subjected to general non-compliance charges.
- ix. Retail Payments Participants shall be notified via RENTAS Portal and email should their NRTS Account balances fall below the minimum balance threshold.

Optimum Balance

- i. The optimum balance serves as the optimal amount of cash balance required to facilitate NRTS of Retail Payments transactions at all times.
- ii. Retail Payments Participants are responsible for determining and configuring the optimum balance threshold for their individual accounts. Retail Payments Participants are also required to review their optimum balances on a regular basis to ensure the optimum balance meets the liquidity needs of the participant.
- iii. Retail Payments Participants are encouraged to always maintain the Optimum Balance in their NRTS Account to ensure smooth operations of NRTS.

Maximum Balance

- i. The maximum balance is defined as the maximum amount of cash balance that shall be maintained in NRTS Account.
- ii. Excess cash balances shall be automatically swept out from the NRTS Account to MYR Settlement Account upon exceeding a threshold of RM 50,000 above the defined maximum balance. The balance in NRTS Account shall be swept out to the maximum balance level.

- iii. BNM may revise the threshold of RM 50,000, should the need arise.
- iv. Retail Payments Participants are responsible for determining and configuring the maximum balance threshold for their individual accounts.

Manual Sweep-in and sweep-out to/from NRTS Account

38.16 Retail Payments Participants may perform manual sweep-in or sweep-out to and from their NRTS Accounts.

- i. Manual sweep-in of the NRTS Accounts may be performed via Retail Payments Participants' respective access channels (RBG/SAA/SAL2/SAC) or via RENTAS Portal. If manual sweep-in is performed via RBG or Swift Terminal, Retail Payments Participants shall indicate the following information in the pacs. 009 instruction:
 - Receiving Member: BNMAMYKL
 - Receiving Account Number: MY81BNMA9999999999
 - TRN: MSI01
- ii. Manual sweep-out of the NRTS Accounts may only be performed via RENTAS Portal.

Insufficient Funds in NRTS Account

38.17 If Retail Payments Participants do not have sufficient funds in their NRTS Accounts, their transaction will be queued on a First Available First Out basis. Upon receiving incoming from counterparties, transactions shall be settled based on the availability of balance.

38.18 Retail Payments Participants may make online real-time queries on the status of their insufficient funds queues via RENTAS Portal.

C. Funding Facility for Retail Payments Settlement+ (FRPS+)

38.19 FRPS+ is the last resort funding facility in RENTAS that BNM offers to Retail Payments Participants to facilitate NRTS of Retail Payments transactions.

38.20 Retail Payments Participants shall sign and return the form in **Appendix XXII** as Confirmation of Subscription to Funding Facility for Retail Payments Settlement+ (FRPS+).

38.21 FRPS+ is granted through the automatic REPO/SBBA⁸ of Eligible Securities from the Retail Payments Participants' K accounts to BNM. Hence, Retail Payments Participants shall ensure sufficient Eligible Securities are placed in their K account for the purpose of facilitating NRTS.

38.22 FRPS+ is offered in two modes:

- i. Intraday FRPS+: Intraday REPO/SBBA.
- ii. Overnight FRPS+: Overnight REPO/SBBA.

38.23 Scheduled for FRPS+ is as follows:

Scheduled Time	Actions
By 2:00 am	Activation of Intraday FRPS+
By 8.30 am	Repayment of Overnight FRPS+
3:00 pm	Cut-off for Intraday FRPS+
	Activation of Overnight FRPS+
3:30 pm	Cut-off for Repayment of : <ul style="list-style-type: none"> i. Intraday FRPS+ ii. Overnight FRPS+ triggered on the previous RENTAS business day
10:00 pm	Cut-off for Overnight FRPS+

38.24 BNM may amend the schedule in Clause 38.23, if circumstances warrant such a change, either temporarily or permanently.

38.25 Retail Payments Participants are strongly advised to observe the cut-off times for the stipulated activities. Retail Payments Participants who fail to observe the cut-off times shall be subject to non-compliance charges.

38.26 Intraday FRPS+ is only available on RENTAS Business Day.

38.27 Securities in K accounts would no longer be FRPS+ Eligible Securities two (2) RENTAS Business Days before the securities' Final Redemption Date or Early Redemption Date or Partial Redemption Date or Coupon Date. Retail Payments Participants shall monitor the coupon and redemption profile of securities in

⁸ FRSP+ SBBA shall be accompanied by Wa'ad where the IFI shall buy back the securities on the next RENTAS Business Day (for overnight FRPS+) or by the cut-off time for repayment of intraday FRPS+ (for intraday FRPS+)

their K accounts to ensure that there is no shortfall in Eligible Securities due to upcoming coupon payments and redemptions.

38.28 BNM will exercise its sole discretion in selecting and identifying the Eligible Securities (Identified Securities) in Retail Payments Participants' K accounts that BNM would purchase under FRPS+ at any given time.

38.29 BNM has the absolute right to transfer the Identified Securities from the Retail Payments Participants' K accounts to BNM's account through REPO/SBBA transaction when Retail Payments Participants require funding under FRPS+.

38.30 All rights, title and interest in and to any of the Identified Securities shall vest in BNM free and clear of any liens, claims, charges or encumbrances or any other interest of the Retail Payments Participants or of any third party.

38.31 Nothing in this clause is intended to create or does create in favour of either party any mortgage, charge, lien, pledge, encumbrance or other security interest in the Identified Securities.

38.32 The FRPS+ amount is determined by the difference between the triggered sweep-in amount and the available balance in MYR Settlement Account.

38.33 RENTAS will automatically execute activation of the REPO/SBBA of Securities in K-Account upon insufficient balance in Participant's MYR Settlement Account. RENTAS shall send completion advice (MT547 for Retail Payments Participants, MT545 for BNM) upon completion.

38.34 The net price of Eligible Securities sold to BNM under FRPS+ is calculated as follows:

$$\text{Net price} = [100 - \text{Margin}] / 100 \times [\text{Clean Market Price of Eligible Securities}]$$

The applicable Margin is determined by BNM.

Repayment for Intraday FRPS+

38.35 Upon activation of intraday FRPS+, RENTAS automatically executes the repayment of the intraday REPO/SBBA on behalf of the Retail Payments Participants. Completion advice of MT547 will be generated for BNM and MT545 for the Retail Payments Participants.

The repayment of intraday FRPS+ would be based on the same net prices during the activation of the REPO/SBBA.

38.36 Usage of Intraday FRPS+ shall be subjected to a utilisation charge (refer to **Appendix II**).

38.37 Retail Payments Participants shall ensure that their MYR Settlement Accounts have sufficient funds to settle the repayment of intraday FRPS+ by the scheduled cut-off time stipulated in Clause 38.23. BNM will impose a general non-compliance charge (refer to **Appendix II**) on Retail Payments Participants who fail to repay the intraday FRPS+ by the stipulated cut-off time.

38.38 Retail Payments Participants shall monitor closely the repayment of intraday FRPS+.

38.39 The MYR Intraday Credit will be triggered to settle the repayment of intraday FRPS+ in the event of insufficient funds in MYR Settlement Account.

Repayment of Overnight FRPS+

38.40 For overnight FRPS+, RENTAS automatically executes the repayment of the overnight FRPS+ on behalf of the Retail Payments Participants on the next RENTAS Business Day. Completion advice of MT547 will be generated for BNM and MT545 for the Retail Payments Participants.

38.41 Retail Payments Participants shall ensure that their MYR Settlement Accounts have sufficient funds to settle the repayment of Overnight FRPS+ by the scheduled cut-off time stipulated in Clause 38.23. BNM will impose a general non-compliance charge (refer to **Appendix II**) on Retail Payments Participants who fail to repay the overnight FRPS+ by the stipulated cut-off time.

- 38.42 The MYR Intraday Credit can be triggered to settle the repayment of Overnight FRPS+ in the event of insufficient funds in MYR Settlement Account. In the event of unpaid MYR Intraday Credit, Retail Payments Participants shall observe Clause 19.
- 38.43 The repayment of Overnight FRPS+ would be based on the same net prices during the activation of the REPO/SBBA.
- 38.44 The utilisation of Overnight FRPS+ is subjected to utilisation charges (refer to **Appendix II**) and overnight charges.
- 38.45 Overnight charges will be automatically debited from Retail Payments Participants' MYR Settlement Accounts during repayment of Overnight FRPS+ via pacs.010.001.03. The overnight charges shall be calculated as follows:

Overnight charges = Funding obtained under FRPS+ x FRPS+ Rate x tenor/365

Where:

FRPS+ Rate = Ceiling Rate (currently at OPR + 25 basis points)

Tenor = Date of Overnight FRPS+ maturity – Date of overnight FRPS+ activation

BNM shall determine the FRPS+ rate and has a right to vary the rates according to market condition.

Confirmation of Subscription to FRPS+

- 38.46 Retail Payments Participants shall submit the Confirmation of Subscription to FRPS+ as per **Appendix XXII** to confirm the acceptance or non-acceptance of the FRPS+.

D. Monitoring and Reports

- 38.47 In facilitating the operation of NRTS, RENTAS Portal provides the following functionalities to Retail Payments Participants:
- i. Monitoring of NRTS Account balance, settlement volume and value, sweep-in and withdraw to and from NRTS Account;
 - ii. NRTS Account management – To configure NRTS Account minimum, optimum and maximum balance;

- iii. Manual Sweep-in and sweep-outs of funds to and from NRTS Account; and
- iv. Retrieval of NRTS Account End of Day and Settlement Report.

38.48 RENTAS shall provide reports on Retail Payments Settlement and NRTS Account balance to Retail Payments Participants to Participant Terminals.

38.49 RENTAS shall provide two types of reports for Retail Payments Participants:

- i. NRTS End of Day Account Balance Report
- ii. NRTS Settlement Report

38.50 Reports shall be provided to Retail Payments Participants based on the following scheduled time⁹:

Scheduled Time	Report
By 9:00 a.m.	NRTS End-Of-Day Account Balance Report for T-1
	NRTS Settlement Report for Clearing Window 2
By 4:30 pm	NRTS Settlement Report for Clearing Window 1

38.51 BNM may amend Clause 38.50 if circumstances warrant such a change, either temporarily or permanently.

38.52 RENTAS shall provide the above reports in Clause 38.50 in the camt.998 message format.

38.53 Detailed information on the Retail Payment transactions shall be provided by the RPSO. Retail Payments Participants may refer to the RPSO’s rules and operational procedures for respective Retail Payments products.

E. NRTS Contingency

38.54 NRTS is equipped with redundancy and multiple data backups allowing for seamless restoration and quick recovery to minimize downtime.

38.55 In the event of prolonged downtime, BNM may decide the following:

⁹Clearing window 1 – 00:00:00 - 13:59:59
 Clearing window 2 – 14:00:00 – 11:59:59

- i. RPSO shall submit the DNS clearing file(s) to RENTAS to settle both in-flight transactions and transactions that have not yet been streamed to BNM for the affected window(s).
- ii. For transactions submitted to BNM but are yet to settle, the settlement will resume when NRTS returns to normalcy.

38.56 Retail Payments Participants shall monitor the settlement position of the Retail Payments transaction via RENTAS Portal and shall receive camt.054 for the deferred net settlement.

38.57 In the unlikely event that NRTS contingency needs to be triggered, BNM shall make use of recognised communications channels such as e-mails, SMS/Whatsapp, and BCP call tree to keep Retail Payments Participants updated on the contingency plan. BNM, on best effort basis, shall update on the recovery status and action plan periodically.

RENTAS Host failure

38.58 In the event of RENTAS Host failure, the following services shall not be available for NRTS operation:

- i. NRTS Account Balance Sweep-In and Sweep-Out
- ii. FRPS+ activation and repayment

38.59 During certain circumstances, BNM may manually update NRTS Account balance upon instruction from Retail Payments Participant.

38.60 BNM reserves the right to suspend NRTS until RENTAS Host returns to normalcy.

Guideline I - Guidelines on MYR Third Party Payments

1.0 Introduction

1.1 These guidelines are intended to standardise the format of pacs.008.001.08 messages for MYR third party payments to facilitate Straight-Through-Processing (STP).

2.0 Transaction Reference Number (TRN) Code

2.1 Participants shall use the TRN codes IFT03 and GOV03 as follows:

TRN	Usage
IFT03	<p>MYR third party payments where the beneficiary and/or ordering party are non-RENTAS Participants. The minimum transaction amount is subject to Clause 24.0.</p> <p>Under certain circumstances where paying Participants are required to send pacs.008.001.08 for the amount of less than RM10,000, paying Participants shall have mutual arrangement with the receiving Participants for such transaction to be executed.</p>
GOV03	<p>MYR third party payments where the beneficiary and/or ordering party are government bodies. The minimum transaction amount is subject to Clause 24.0.</p>

3.0 Pacs.008.001.08 Requirements

3.1 Ordering Party:

Applicable fields are available for Participants to indicate the ordering party details:

Field	Information
FIToFICstmrCdtTrf/CdtTrfTxInf/DbtrAcct/Id/Othr/Id	Ordering party account number
FIToFICstmrCdtTrf/CdtTrfTxInf/Dbtr/Nm	Ordering party name.
FIToFICstmrCdtTrf/CdtTrfTxInf/Dbtr/PstlAdr/Adr Line	Ordering party address

3.2 Participants are required to fill in the correct address of the ordering party. P.O Box is not acceptable information for address as per the requirement by Anti-Money Laundering and Anti-Terrorism Financing Act 2001 (AMLA).

3.3 Beneficiary Customer

Applicable fields are available for Participants to indicate the beneficiary customer details:

Field	Information
FIToFICstmrCdtTrf/CdtTrfTxInf/CdtrAcct/Id/Othr/Id	Beneficiary account number
FIToFICstmrCdtTrf/CdtTrfTxInf/Cdtr/Nm	Beneficiary name
FIToFICstmrCdtTrf/CdtTrfTxInf/Cdtr/Id/PrvtId/Othr/Id	Customer ID - To choose either one of these: NI – New IC Number OI – Old IC Number BR – Business Registration Number OT – Other types of IDs (Police/Army ID/Passport Number)

- i. In MX, there is no requirement to provide qualifier code of N1 and I1. However, sub-qualifier codes for I1 such as NI, OI, BR and OT remain applicable.
- ii. Information required under clause 3.2 and clause 3.2.2 are mandatory and MUST be provided. However, if Customer ID is not available, Participants shall indicate 'NONE' in the field e.g NI/NONE
- iii. Receiving Banks shall validate incoming transactions as follows prior to of crediting funds to beneficiary accounts:

Field	Mandatory for Receiving Banks to Validate	Receiving Bank's Action if Validation Passes	Receiving Bank's Action if Validation Fails
Beneficiary Account Number	Yes	Validate Beneficiary Name	Return transaction
Beneficiary Name	Yes	Accept transaction and credit beneficiary account	Validate Beneficiary ID

Beneficiary ID (e.g. NRIC or business registration number)	No (validate only if Beneficiary Name validation fails)	Accept transaction and credit beneficiary account	Return transaction OR request credit notification from Sending Bank to amend beneficiary information
--	---	---	--

- iv. The Receiving bank may return the incoming funds if they do not receive the Credit notification with amended beneficiary information from the Sending bank by 4:30 pm on the same day.

3.4 Remittance Information

- i. There are two options to indicate remittance information in the following field:

FIToFICstmrCdtTrf/CdtTrfTxInf/RmtInf/Strd/AddtlRmtInf

- i. With /ROC/ - Participants can provide maximum four (4) lines with 35 characters each line (total 140 characters of all four (4) lines). Each line can have up to 35 characters and line break is required. Each line break counts as two characters.
 - ii. Without /ROC/ - Max. of 140 characters. Line break is not required.
- ii. Under the e-Payment Incentive Fund (ePIF) framework requirement¹⁰, the payment reference information must be provided by the ordering customer or the sending bank, and the sending bank shall present the payment reference by indicating code ROC at line 1 at field indicated at **clause 3.3.1** above. i.e /ROC/30x.

3.5 Member to Member Information:

Applicable fields are available for Participants to indicate the member to member information:

Field	Information
FIToFICstmrCdtTrf/CdtTrfTxInf/RmtInf/Strd/AddtlRmtInf	Stock code. Must start with /STCD/. This information is optional to provide.
FIToFICstmrCdtTrf/CdtTrfTxInf/PmtTpInf/CtgyPurp/Prtry	TRN code. Participants to provide the value of TRN code without /TRN/

FIToFICstmrCdtTrf/CdtTrfTxInf/InstrForNxtAgt/InstrInf	At occurrence 1 to provide details of /PAYO/[OSIBIC]/PAYB/[Payer's BIC]
FIToFICstmrCdtTrf/CdtTrfTxInf/InstrForNxtAgt/InstrInf	At occurrence 2 to provide details of /CPRO/[OSIBIC]/CPRB/[Receiver's BIC]
FIToFICstmrCdtTrf/CdtTrfTxInf/InstrForNxtAgt/InstrInf	At occurrence 3 and 4 to provide any additional information (free text) – optional.

3.6 Participants shall ensure that :

- i. the Beneficiary's statement displays the Ordering Party's Name and Payment References;
- ii. the Ordering Party's statement displays the Beneficiary's Name and Payment Reference.

3.7 Participants shall state the return reason, if they are returning the payment, in any free lines of field
FICdtTrf/CdtTrfTxInf/InstrForNxtAgt/InstrInf.

3.8 For Government agencies' accounts, Participants shall adhere to the instructions for the payment details issued by the Government and reflect accordingly in any free lines of field
FIToFICstmrCdtTrf/CdtTrfTxInf/InstrForNxtAgt/InstrInf above.

3.9 Regulatory Reporting

- i. For the FEA requirements on payment to Non-Resident, Participants may use the RgltryRptg sections to indicate the required information in the following fields:

Field	Information
RgltryRptg/Dtls/Ctry	Country
RgltryRptg/Dtls/Cd	BENEFRES or ORDERRES
RgltryRptg/Dtls/Inf ¹⁰	Purpose code
RgltryRptg/Dtls/Inf	Purpose code Description

3.10 Handling of cross-border transaction by intermediary banks

¹⁰ Repetitive fields

- i. Upon receiving cross-border transactions, intermediary bank may use PrvsInstgAgt section to indicate information of the Agent immediately prior to the instructing agent. Below are the available field to indicate respective information of previous instructing agent:

Field	Information
PrvsInstgAgt1/FinInstnId/BICFI	BIC previous instructing agent
PrvsInstgAgt1/FinInstnId/LEI	LEI of the previous instructing agent
PrvsInstgAgt1/FinInstnId/Nm	Name of the previous instructing agent
PrvsInstgAgt1Acct/Id/Other/Id	Identification of the account of the previous instructing agent

- ii. PrvsInstgAgt is repetitive up to 3 occurrence and is represented by PrvsInstgAgt1, PrvsInstgAgt2 and PrvsInstgAgt3.

Guideline II - Guidelines on Handling Invalid Characters in RENTAS

1.0 Introduction

1.1 These guidelines are intended to standardise the replacement of invalid special characters in RENTAS.

2.0 Valid Special Characters in RENTAS

2.1 The following special characters are the only valid characters to be used in RENTAS:

Swift Character Set
<i>Alphabetical Characters</i> <ul style="list-style-type: none">• A to Z (upper case)• a to z (lower case)
<i>Numeric Characters</i> <ul style="list-style-type: none">• 0 to 9
<i>Special Characters</i> <ul style="list-style-type: none">• / - ? : () . , ' + SPACE CrLf
<i>Extended Special Characters</i><ul style="list-style-type: none"> • !#\$%&*^_`{|}~";<>@[]

2.2 Participants shall map and replace other characters that are not valid in RENTAS with the question mark symbol "?".

Guideline III - Guidelines on Compensation on Inter-Bank Failed Settlements

1.0 Principle and Scope

- 1.1 In the event of delayed payment or Settlement failures for MYR transactions, a mechanism for computing compensation is provided in this Guideline. The mechanism works on a compensation basis to cover losses. The mechanism is not intended to be punitive as no Participant shall benefit from the errors or Settlement failures of other Participants. Participants shall resolve and settle any compensation claim within thirty (30) working days from the date of the claim.
- 1.2 The paying Participant shall compensate the receiving Participants for loss of interest income arising from the errors made by the paying Participant. While it is the responsibility of the paying Participant to make payments, the receiving Participant may also advise the paying Participant if any payments expected are not paid in due time.
- 1.3 MYR Inter-bank Settlements are normally made for the following reasons:
 - 1.3.1 From the paying Participant's own account and such payments are made for the credit of the receiving Participant as beneficiary (e.g. Settlement of Foreign Exchange or Money Market transactions);
 - 1.3.2 On behalf of the paying Participant's customer and such payments are made for the credit of the receiving Participant as beneficiary (e.g. overdraft or loan repayment / financing payment);
 - 1.3.3 From the paying Participant's own account and such payments are made for the credit of the receiving Participant's customer; and
 - 1.3.4 On behalf of the paying Participant's customer and such payments are made for the credit of the receiving Participant's customer.
- 1.4 MYR Inter-bank failed Settlements are defined as:
 - 1.4.1 Payments that do not meet the MYR Settlement Cut-off time for payments and settlements set out in the MYR Settlement Business hours stated in **Clause 8.2** in the main section of this Operational Procedure;
 - 1.4.2 Mis-sent payments; and
 - 1.4.3 Non-payment.

2.0 Compensation on MYR Inter-bank Failed Payments

Participants shall be guided by the following procedures with regards to the compensation on failed MYR inter-bank payments:

2.1 Compensation Coverage

- 2.1.1 If, for any reason, a payment error causes the receiving Participant to breach any of BNM's regulatory requirements or RENTAS Operational Procedures, and the receiving Participant is able to show proof that such non-compliance was a direct result of the error from the paying Participant, the interest or profit compensation shall include the payment of any penalty imposed by BNM over and above the interest / profit compensation computed based on the prescribed formula under **Clause 2.2** of this Guideline.
- 2.1.2 The paying Participant shall pay an administrative cost of RM200.00 to the receiving Participants to compensate for back valuation work or compensation work undertaken in rectifying payments.
- 2.1.3 The administrative cost of RM200.00 shall not be charged by the receiving Participants for the act of merely returning a payment that could not be posted to the beneficiary account.
- 2.1.4 The applicable interest rate termed as "Overnight Rate" in the prescribed formula under **Clause 2.2** of this Guideline shall be the "overnight policy rate" as published by BNM.
- 2.1.5 Other costs and charges, such as forex cover, cable charges etc. shall be excluded when computing compensation for MYR inter-bank payment errors.
- 2.1.6 The compensation rules are also applicable to Participants and customers, which appoint the Participants as agents to handle their inter-bank payments. The Participants are reminded to advise their customers of the application of the administrative cost of RM200.00.

2.2 Compensation Computation Formula

2.2.1 The paying Participants making any requests should inform the receiving Participants of the details of the payment to which such request relates and the particulars of the account to which it should be credited.

2.2.2 Late Intra-day Money Market Transaction

2.2.2.1 When payment is not effected within thirty (30) minutes of the transaction, the borrowing Participant / Investee will be entitled to compensation according to the compensation formula below:

$$\frac{\text{Amount} \times (\text{OPR} + R) \times \text{Day}}{36500}$$

where,

- Amount = Amount due for the Settlement of the MYR transaction
- OPR = Overnight Policy Rate as published by BNM
- R = Comprise of Reserve Cost, Administration Cost and Penalty. The rate is currently set at 0.5% and subject to change
- Day = Delay will be deemed as one day for interest calculation

2.2.2.2 When payment for an intraday money market transaction has not been effected on value date by the Lending Bank / Investor by 5:00pm, the Intraday money market transaction would be deemed as a failed trade and no Settlement will take place. Under such circumstances, the Borrowing Participants / Investee will be entitled to claim compensation according to the following compensation formula:

$$\frac{\text{Amount} \times (\text{OPR} + R) \times \text{Day}}{36500}$$

Where,

- Amount = Amount due for the Settlement of the MYR transaction

OPR	=	Overnight Policy Rate as published by BNM
R	=	Comprise of Reserve Cost, Administration Cost and Penalty. The rate is currently set at 0.5% and subject to change
Day	=	Delay will be deemed as one day for interest calculation

2.2.3 Value Date Adjustment / Use of Funds Compensation Claim Formula

2.2.3.1 For value date adjustment of the payment and the use of funds, the compensation claim will be paid according to the following formula:

$$\frac{\text{Amount} \times (\text{OPR} + R) \times \text{Day}}{36500}$$

where,

Amount	=	Amount due for the Settlement of the MYR transaction
OPR	=	Overnight Policy Rate as published by BNM
R	=	Comprise of Reserve Cost, Administration Cost and Penalty. The rate is currently set at 0.5% and subject to change
Day	=	Delay will be deemed as one day for interest calculation

2.2.4 Mis-sent Payment

2.2.4.1 A paying Participant may request the receiving Participant to return funds under the following circumstances:

- i. If the payment should not have been sent;
- ii. The payment was directed to a wrong Participant; and
- iii. A duplicate payment / overpayment has been effected.

2.2.4.2 If the paying Participants notifies the receiving Participants of a mis-sent payment, the principal sum shall be returned by the receiving Participants under the following conditions:

- i. The paying Participant shall confirm details of the mis-sent payment by transmitting a RENTAS credit notification (CRN) to the receiving Participants;

- ii. The paying Participant shall include date and details of the mis-sent payment in their CRN;
- iii. The paying Participant shall forward to the receiving Participants copies of the RENTAS completion advices or its equivalent, for all the mis-sent payment via facsimile, e-mail or any other means;
- iv. The paying Participant shall provide an indemnity to the receiving Participants;
- v. The receiving participant may return the funds without beneficiary's consent if the sum has not been credited to the beneficiary's account;
- vi. If the sum has been credited, the receiving Participants shall only return if:
 - Both the receiving Participant and the paying Participant are fully satisfied that the beneficiary's account had been credited erroneously; and
 - The funds are still in the beneficiary's account;
- vii. The receiving Participants shall notify the beneficiary on the erroneous credit prior to debiting the account; and
- viii. The refund is executed by initiating a new transaction since the mis-sent transaction's settlement is already final and irrevocable.

The receiving Participants making the refunds to the paying Participants shall be entitled to an indemnity from the paying Participants. The nature of indemnity is intended to protect the receiving Participants from any risk, loss or cost as a result of the paying Participants having entertained a request by its customers to "cancel" a prior payment to the account of the receiving Participants' customers. As such, paying Participants are advised to execute the indemnity only for their own payment errors and to be cautious in executing their customers' request to recall payments which may be under the guise of mis-sent payments.

- 2.2.4.3 For a wrong payment made, if the Credit Notification (CRN) to recall the fund is received before or at 4:00 pm, the receiving Participants will, on a best effort basis, return the

funds by 4:30 pm on the same day at no cost to either party. However, if the funds are returned before 4:30 pm on the next Business Day, the paying Participants is entitled to the use of funds from Day 1 onwards, i.e. the day the CRN was made.

2.2.4.4 If the CRN is received after 4:00 pm, the receiving Participants have up to 4:30 pm the next Business Day to return the payment at no cost to either party. However, if the funds are not returned by 4:30 pm the next Business Day, the paying Participants will be entitled to use of funds from Day 2 onwards. (Please refer to **Clause 2.2** of this Guideline for the “use of funds” compensation claim formula).

2.2.5 Late Payments / Repayments

2.2.5.1 Funds received after the scheduled MYR Settlement Cut-off time will be considered as next day value. Therefore, the receiving Participants shall be entitled to compensation based on the “Value Date Adjustment” formula as per **Clause 2.2.3** of this Guideline.

2.2.5.2 The receiving Participants need not return the funds in order to claim the compensation.

2.2.6 Unable to Apply Funds Received

2.2.6.1 When the receiving Participants receives a payment and is unable to apply the funds due to discrepancies or insufficient details in the payment instruction, the procedure would be as follows:

- i. The receiving Participants shall return the funds to the paying Bank immediately;
- ii. The paying Participants may, however, request the receiving Participants to hold back the funds pending rectification;
- iii. The receiving Participants may entertain this request at its discretion and retain the funds provided the paying Participants send a Credit Notification (CRN)

immediately to the receiving Participants with the notation as stated in **Clause 3.0** of this Guidelines;

- iv. To rectify the payment instructions, the paying Participants must send another CRN to the receiving Participants with the notation as stated in **Clause 3.0** of this Guidelines.

3.0 Indemnity

3.1 In all cases where the receiving Participants return, rectify or withhold payments to or to the order of the paying Participants pursuant to the request of the paying Participants under **Clauses 2.2.4.2** and **2.2.6** of this Guideline, the paying Participants shall indemnify the receiving Participants according to the terms set forth in this section.

3.2 The indemnity Clause below is automatically binding on the paying Participants regardless whether it is stated or not in the camt.087.001.06 CRN messages.

“We indemnify you pursuant to paragraph 3 of the Guidelines on Compensation on Inter-bank Failed Settlements for returning payment / rectifying payment / withholding payment instructions.”

3.3 The paying Participants shall return, on demand by the receiving Participants, all payment amounts returned or refunded by the receiving Participants pursuant to the request of the paying Participants. The paying Participants shall further indemnify the receiving Participants, its employees and agents against and all claims, liabilities, losses, expenses (including all legal fees and disbursements), suits or damages arising from the breach of this undertaking.

3.4 This Indemnity shall apply and be enforceable even if the receiving Participants effect a Settlement or compromise with regard to any claim for losses, damages and expenses without recourse to litigation if the receiving Participants deems fit. The paying Participants shall also pay to the receiving Participants all costs and expenses incurred in enforcing this Indemnity obligation and in taking legal advice in connection with this (including all legal fees and disbursements).

4.0 Validity of Compensation Claims

- 4.1 A compensation claim is deemed valid only if it is initiated within sixty (60) calendar days from the value of the transaction.

Guideline IV - Procedures for Activation of RENTAS Portal at BNM's Premises

1.0 Introduction

1.1 BNM offered RENTAS Portal facility at its premises to ensure that risk arising from the failure Participant's terminal is adequately addressed. This facility is intended as a last resort of a back-up system for affected Participants.

2.0 Location

2.1 The location of the RENTAS Portal facility is as follows:

Bank Negara Malaysia
Financial Market Infrastructure Department
Level 14, Block C
Jalan Dato Onn
50480 Kuala Lumpur

3.0 Activation Procedure

3.1 Activity by Participants

- 3.1.1 Participants shall submit an official request (form as per [Appendix XI](#)) for the activation of RENTAS Portal facility signed by the authorised signatories.
- 3.1.2 Participants have two (2) options of inputting transactions, either by using the file upload or manual data entry.
- 3.1.3 Participants should reach BNM's premises within one (1) hour from the approval time to activate the RENTAS Portal facility at BNM's premise.
- 3.1.4 Participants are required to bring all relevant documents as stated in [Appendix XIII](#) – Checklist of Activation of RENTAS Portal facility at BNM.

Guideline V - Guideline to Create Clients' RENTAS Segregated Securities Account via RENTAS Portal

1.0 Introduction

- 1.1 With the implementation of segregated securities account structure in RENTAS, segregated securities accounts are to be opened for each resident and non-resident client by Participants with custodian bank status.
- 1.2 The creation of the accounts has to be performed via RENTAS Portal.
- 1.3 For the requirements on the segregated securities accounts, Participants shall refer to BNM's Information Note and FAQ on RENTAS Segregated Securities Account, which is publicly available at BNM's website.

2.0 Creation of RENTAS Segregated Securities Account Procedures

- 2.1 For further details on the guidelines to create the RENTAS segregated securities account, Participants may refer to RENTAS Portal User Guide under Member Account Maintenance screen.
- 2.2 In the RENTAS Portal Member Account Maintenance screen, the following additional information are required to be provided correctly:
 - 2.2.1 Client Legal Name as per registered LEI
 - 2.2.2 Client LEI
 - 2.2.3 Client Investor Type
- 2.3 LEI is a unique code identifier that enables identification of legal entities participating in financial transactions. LEI does not have any impact to securities settlement in RENTAS.

Appendix I RENTAS – Contact Details

BNM's Financial Market Infrastructure Department

(Application of Membership, Opening of Securities Account and Customer Services):

Office Addresses and Contact Details:

	Primary Site	Back-up / Recovery Site
Address	Bank Negara Malaysia Financial Market Infrastructure Department Level 14, Block C Jalan Dato Onn 50480 Kuala Lumpur	BNM Recovery Centre Lot 1064, Subang Hi-Tech Industrial Park Off Jalan Delima 1/1 40150 Batu Tiga Selangor
Telephone Number	03-2784 9922	03-2784 9922 03-5637 8575 03-5637 8446 03-5637 8227
Fax Number	03-2604 0239	03-5635 7944
E-mail address	rentas@bnm.gov.my	

BNM's RENTAS Operations at Jabatan Pengurusan dan Operasi Matawang

(Opening of MYR Settlement Accounts, BNM's Payment and Securities Settlement Operations):

	Contact Details
Telephone Number	03-26907414 03-26907416
E-mail address	rbqbnm@bnm.gov.my

Appendix II Fees and Charges for RENTAS MYR Services

No.	Description	Amount (MYR)
1.0	Annual Membership Fee¹¹: Type I Licensed financial institutions regulated or co-regulated by BNM and institutions under BNM's purview II Development Financial Institutions and entities admitted for market development purposes III ICSDs and CSDs IV Central banks V Qualified foreign entities and multi-lateral institutions VI Clearing houses, RPSOs and Qualified local Corporates	15,000.00
2.0	Inter-bank Funds Transfer (IFTS) a. Amongst Participants b. For third party	2.50 1.50
3.0	Credit/Debit Notification a. Amongst participants b. For third party	2.00 FOC
4.0	PvP fee	7.00
5.0	Scriptless Securities Sale, Free of Payment and House Transfer Transactions (payable by both buyer and seller)	1.00
6.0	Scriptless Securities REPO and SBBA Transaction (payable by both buyer and seller)	1.00
7.0	Securities Borrowing and Lending Transaction	2.00
8.0	Administrative Message	2.00
9.0	Transaction fee for use of intraday credit (per tranche of RM5 million)	12.00
10.0	Request for report after cut-off time (per page)	50.00
11.0	Non-compliance charges due to failure to settle intraday credit by the designated system cut-off time* Note: RENTAS cut-off extension shall be applicable	5,000 per event
12.0	Charges for the use of participant's contingency terminal at BNM*: a. Activation of RBG terminal - per activation b. Utilisation charges (RENTAS Portal and/or RBG): • First day	10,000.00 1,000.00

¹¹ The annual membership fee is charged by Participant and not by currencies. By default, the MYR charges would be applicable unless the Participant does not participate in the MYR Settlement.

No.	Description	Amount (MYR)
	<ul style="list-style-type: none"> • Second day • Third Party • Every subsequent day 	2,000.00 3,000.00 5,000.00
13.0	Non-compliance charges for late payment of redemption (early / full / partial) or coupon payment*	5,000 per incident
14.0	Use of RENTAS Testing Environment <ul style="list-style-type: none"> a. Planned b. Unplanned 	200.00 per day 400.00 per day
15.0	Non-compliance charges for causing delays to the net settlement of clearing positions for eSPICK, MyDebit, Shared ATM Network (SAN), Interbank GIRO, FPX or Direct Debit clearing positions: * For purposes of determining the number of delays, the incidents of delays would be calculated separately for each type of clearing.	5,000.00 per incident
16.0	Cut-off extension charges:* <ul style="list-style-type: none"> a. 1st request every half hour, or part thereof b. 2nd request onwards within a year* - every half hour, or part thereof (*Note- 12 months calendar year)	5,000.00 10,000.00
17.0	Onsite Consultancy Fee - Includes training and other relevant support and services	Minimum 600 per visit and RM300/hour for subsequent beyond 2 hours
18.0	Non-compliance charges for settlement after 6.00 pm without BNM's approval - chargeable per incident*: <ul style="list-style-type: none"> a. Transaction submitted from 6.00 pm - 6.30 pm b. Transaction submitted from 6.30 pm - 7.00 pm c. Transaction submitted from 7.00 pm onwards 	10,000.00 15,000.00 20,000.00
19.0	FRPS+ Utilisation*	To be exempted until 31 December 2025
20.0	FRPS+ Overnight Charges	
21.0	Non-compliance charge related to NRTS ¹²	
22.0	"General Non-Compliance" charges as defined in Glossary of Terms*	Up to 5,000

* Charges collected shall be channelled to the RENTAS and FAST Development Fund

Note:

- a. A Participant who participates in both MYR Settlement and CNY Settlement will pay a single annual membership fee of RM15,000.00 only, as well as other fees denoted in the MYR column.

¹² While this is exempted, BNM reserves the right to impose non-compliance charges related to NRTS in the event of deliberate misuse of the FRPS+ facilities, and any other requirements related to NRTS.

- b. Billing for Participants that are incorporated in Malaysia shall be in MYR. Foreign Participants could opt for:
- i. billing in the currency of the settlement service in which they are participating; or
 - ii. billing in MYR

No.	Description	Amount (EUR)
20.0	<p>Swift Messaging Fees</p> <ul style="list-style-type: none"> a. Non-reporting fees - Participant initiated instruction message (pacs 008, pacs 009, camt 056, camt 087, MT540, MT541, MT542, MT543 etc.). Charged to Participant initiating. b. Reporting fees - Swift-generated statement of holdings, listing of transactions, and allegement (MT535, 536, 548, 578, camt 052, camt 053, etc.). Charged to Participant requesting report. <p>Reverse billing would be adopted where all Swift messaging fees payable when RENTAS sends messages to Participants would be charged to the receiving Participant.</p> <p>The fees are in accordance with Swift pricing and may be revised if Swift revises its fees.</p>	As charged by Swift

Appendix III (a) Request For Extension of RENTAS PvP Link Cut-off Time

(Please use institution's letterhead)

Date:

To : Head
Financial Market Infrastructure Department
Bank Negara Malaysia
Level 14, Block C
Jalan Dato Onn
50480 Kuala Lumpur

From :
(RENTAS BIC)

Subject : **Request for Extension of RENTAS PvP Link Cut-off Time**

Tuan,

Kindly extend the RENTAS PvP Link Cut-off time for todayfrom
(ddmmyyy)
..... p.m. to p.m. We hereby agree to pay the charges applicable for the extension.

The reason(s) for our request for extension is/are as follows:

.....
.....
.....

Thank you.

.....
(Authorised Signatory)

.....
(Authorised Signatory)

Official Stamp:

For BNM Use Only

Message received by:	.....
Request allowed/disallowed by:	.....
Time :	.....
Fees Payable :	.....

Appendix III (b) Request For Extension of RENTAS MYR Settlement Cut-off Time

(Please use institution's letterhead)

Date:

To : Head
Financial Market Infrastructure Department
Bank Negara Malaysia
Level 14, Block C
Jalan Dato Onn
50480 Kuala Lumpur

From :
(RENTAS BIC)

Subject : **Request for Extension of RENTAS MYR Settlement Cut-off Time**

Tuan,

Kindly extend the RENTAS MYR Settlement Cut-off time for today from
(ddmmyyy)
..... p.m. to p.m. We hereby agree to pay the charges applicable for the extension.

The reason(s) for our request for extension is/are as follows:

.....
.....
.....

Thank you.

.....
(Authorised Signatory)

.....
(Authorised Signatory)

Official Stamp:

For BNM Use Only

Message received by:	.....
Request allowed/disallowed by:	.....
Time :	.....
Fees Payable :	.....

Appendix IV Incident Report From Participants

(Please use institution's letterhead)

Date:

To : Head
 Financial Market Infrastructure Department
 Bank Negara Malaysia
 Level 14, Block C
 Jalan Dato Onn
 50480 Kuala Lumpur

From :

(RENTAS BIC)

Subject : **Incident Report From Participants**

Tuan,

Attached herewith the Incident Report for your attention and / or further action:

System Affected	RENTAS
From	
Date of Report	<i>(to send latest one day after the incident)</i>
Date and Time of Incident	
Chronology of Incident	
Causes	
Action Taken	
Preventive Measures	

Information Required:

Total No of Transactions Pending	Total Value of Transactions Pending (in RM)	Amount of Settlement Failure (in RM)	No of Counterparties affected

.....
(Authorised Signatory)

.....
(Authorised Signatory)

Official Stamp:

Appendix V Request To Re-sequence or Cancel Payment Instruction(s) In Priority Queue

(Please use institution's letterhead)

Date:

To : Head
Financial Market Infrastructure Department
Bank Negara Malaysia
Level 14, Block C
Jalan Dato Onn
50480 Kuala Lumpur

From :

(RENTAS BIC)

Subject : **Request to Re-sequence or Cancel Payment Instruction(s) in Priority Queue**

Tuan,

Kindly re-sequence / cancel* the following transactions in our Priority today:

<u>Queue No</u>	<u>Currency Code</u>	<u>Amount</u>	<u>TRN</u>	<u>New Queue No.</u>
.....
.....
.....

The reason(s) for our request is / are as follows:

.....
.....

Thank you.

.....
(Authorised Signatory)
Official Stamp:

.....
(Authorised Signatory)

For BNM Use Only

Message received by:	.....
Request allowed / disallowed by:	.....
Time :	.....
Fees Payable :	.....

*To remove whichever not applicable

Appendix VI Form A: New Participant

(Please use institution's letterhead)

Date:

To: Head
Financial Market Infrastructure Department
Bank Negara Malaysia
Level 14, Block C
Jalan Dato Onn
50480 Kuala Lumpur

From:

(RENTAS BIC)

Subject : **Confirmation of Participation**

We refer to the application on the above.

1. We confirm our participation in the RENTAS system for (indicate all that are applicable)

- | | |
|--------------------------|--|
| <input type="checkbox"/> | MYR Payments Services only; |
| <input type="checkbox"/> | Settlement Services, both payments and securities; |
| <input type="checkbox"/> | Foreign Currency Payment Services only (specify currencies : _____); |
| <input type="checkbox"/> | Foreign Currency Settlement Services, both payments and securities (specify currencies : _____); |
| <input type="checkbox"/> | Securities Services only. We appoint the following institution as the authorised agent to manage and operate our daily operation for both securities transactions and the corresponding payment transactions in the RENTAS system. |

Name of Agent	Currency

2. As the owner of the stipulated account(s) in RENTAS, we hereby agree to abide by all rules, operational procedures and guidelines issued by Bank Negara Malaysia from time to time.

3. We hereby authorise BNM to disclose information pertaining to my organisation's debt securities holdings under all custody codes in RENTAS to facility agents for the specific purpose of administering the debt securities.

Yours sincerely,

.....
(Signature of Chief Executive Officer)

Name:

For and on behalf of:

Official stamp:

Appendix VI Form B: Existing RENTAS Participant Extends Membership to MYR Settlement Service

(Please use institution's letterhead)

Date:

To : Head
Financial Market Infrastructure Department
Bank Negara Malaysia
Level 14, Block C
Jalan Dato Onn
50480 Kuala Lumpur

From :
(RENTAS BIC)

Subject : Confirmation of Participation in Additional Services

We refer to the application on the above.

1. We wish to extend our participation in RENTAS to:

- MYR Payments Services only;
- MYR Settlement Services, both payments and securities;
- Foreign Currency Payment Services only (specify currencies: _____);
- Foreign Currency Settlement Services, both payments and securities
(specify currencies: _____);
- Securities Services only. We appoint the following institution as the authorised agent to manage and operate our daily operation for both securities transactions and the corresponding payment transactions in the RENTAS system.

Name of Agent	Currency

3. As the owner of the stipulated account(s) in RENTAS, we hereby agree to abide by all rules, operational procedures and guidelines issued by Bank Negara Malaysia from time to time.
4. We hereby authorise Bank Negara Malaysia to disclose information pertaining to my organisation's debt securities holdings under all custody codes in RENTAS to facility agents for the specific purpose of administering the debt securities.

Yours sincerely,

.....
(Signature of Chief Executive Officer)

Name:

For and on behalf of:

Official stamp:

Appendix VI Form C: Confirmation of Participants Terminal for MYR Settlement in RENTAS

(Please use institution's letterhead)

Date:

To : Head
Financial Market Infrastructure Department
Bank Negara Malaysia
Level 14, Block C
Jalan Dato Onn
50480 Kuala Lumpur

From :
(RENTAS BIC)

Subject : **Confirmation on Access Channel for MYR Settlement in RENTAS**

With reference to the above, we would like to confirm that the following terminal will be used by our institution for MYR Settlement in RENTAS:

- RENTAS Bank Gateway (RBG)
- Swift Alliance Access (SAA)
- Swift Alliance Lite2 (SAL2)
- Swift Alliance Cloud (SAC)

If more than one access channel is chosen, please specify the primary access channel:

Other Messaging Software via SwiftNet. Please specify:

Thank you.
Yours sincerely,

.....
(Authorised Signature and Institution Official Stamp)
Name:
Designation:

Appendix VII Contact Person for Daily Operation of RENTAS

(Please use institution's letterhead)

Date:

To : Head
Financial Market Infrastructure Department
Bank Negara Malaysia
Level 14, Block C
Jalan Dato Onn
50480 Kuala Lumpur

From:
(RENTAS BIC)

Subject: Contact Person for the Daily Operation of RENTAS

Tuan,

Please be informed that the following is our contact person of RENTAS system and the details are given as follow:

Institution Name:

Name of the contact person:

Specimen signature of contact person:

Designation:

Department:

Contact address:

Contact telephone number:

Email address:

Yours sincerely,

(Signature and Institution Official Stamp)

Name:

Designation:

Appendix VIII RENTAS – Authorised Signatories List

(Please use institution's letterhead)

Date:

To : Head
Financial Market Infrastructure Department
Bank Negara Malaysia
Level 14, Block C
Jalan Dato Onn
50480 Kuala Lumpur

From:

(RENTAS BIC)

.....

(RENTAS Digit Code)

Subject : **RENTAS – Authorised Signatories List**

Tuan,

We submit herewith our Authorised Signatories List for all RENTAS matters referring to the member institution. This list shall take effect on

Name	Designation	Specimen Signature

Yours sincerely,

.....

(Signature and institution stamp)

Name:

Designation:

This signatories list must be authorised by the person who has the Power of Attorney (PA) or based on the Board of Directors' resolution.

Appendix IX Example of RBG pacs.008 Construct Screen

🏠 Fund Transfer
☰ Extended

pacs.008.001.08 - FI to FI Customer Credit Transfer - New

Basic Information

Payer Option *	Receiver Option *
Pay by Bank	Pay by Bank
Payer OSI *	Receiver OSI *
-- Please Select --	-- Please Select --
Payer *	Receiver *
-- Please Select --	-- Please Select --
TRN *	Branch Code *
-- Please Select --	-- Please Select --
Message Identification	Creation Date Time *
System Generated	📅 18/09/2025 11:29 AM
Number of Transaction *	Clearing System Code
1	RTG - Real Time Gross Settlement

Settlement Method *

CLRG - Clearing System

Settlement Priority

-- Please Select --

Business Service

bnm.rts.01

FI to FI Customer Credit Transfer - Credit Transfer Transaction Information - New

Payment Identification

Instruction Identification *

System Generated

End to End Identification *

NOTPROVIDED

Transaction Identification *

System Generated

UETR

Payment Type Information

Service Level Code

-- Please Select --

Proprietary *

Interbank Settlement

Value Date *

📅 18/09/2025

Currency *

MYR - MALAYSIAN RINGGIT

<p>Charge Bearer Information</p> <p>Charge Bearer *</p> <p>DEBT - Debtor</p>	<p>MYR - MALAYSIAN RINGGIT</p> <p>Amount *</p>
<p>Debtor</p> <p>Account ID (AID)</p> <p>Enter to Search</p> <p>Account Identification</p> <p>Account Type</p> <p>-- Please Select --</p> <p>Currency</p> <p>-- Please Select --</p> <p>Name *</p>	<p>Creditor</p> <p>Account ID (AID)</p> <p>Enter to Search</p> <p>Account Identification</p> <p>Account Type</p> <p>-- Please Select --</p> <p>Currency</p> <p>-- Please Select --</p> <p>Name *</p>
<p>Postal Address</p> <p>Unstructured</p> <p>Address *</p> <p>Date and Place of Birth *</p> <p>No</p>	<p>Postal Address</p> <p>Unstructured</p> <p>Address *</p> <p>Creditor Private ID</p> <p>-- Please Select --</p>
<p>Debtor - Other</p> <p>Private Scheme Code</p> <p>-- Please Select --</p> <p>Private Identification</p> <p>Issuer ID</p>	<p>OT/NONE</p> <p>Country of Residence</p> <p>-- Please Select --</p> <p>Phone Number</p> <p>Mobile Number</p>

Issuer <input type="text"/> Country of Residence -- Please Select -- Phone Number <input type="text"/> Mobile Number <input type="text"/> Email Address <input type="text"/>	Email Address <input type="text"/>
Debtor Agent Account Identification MY09BNMA1547010015 Business Identifier Code Enter to Search Legal Entity Identifier <input type="text"/> Name <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> Postal Address -- Please Select --	Creditor Agent Account Identification Enter to Search Business Identifier Code Enter to Search Legal Entity Identifier <input type="text"/> Name <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> Postal Address -- Please Select -- Clearing System Code -- Please Select --
Intermediary Agent Account Identification <input type="text"/> Business Identifier Code <input type="text"/> Name <input type="text"/>	Regulatory Reporting Residence Code -- Please Select --

Name <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
Postal Address <input type="text" value="-- Please Select --"/>	
Instruction for Next Agent	Additional Remittance
Instruction Information * <input type="text" value="/PAYO//PAYB/"/> <input type="text" value="/CPRO//CPRB/"/>	Stock Code <input type="text" value="/STCD/"/>
Member to Member Information <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	Payment Details <input type="text" value="/ROC/"/> <input type="text"/> <input type="text"/> <input type="text"/>
	Additional Remittance Information <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
Remarks	
<input type="text"/> 0 / 210	
Fund Transfer Extended	
<input type="button" value="Submit"/> <input type="button" value="Save"/> <input type="button" value="Cancel"/>	

Appendix X Example of Swift Access pacs.008 Construct Screen

Swift Alliance Access/Entry 7.7.50
 Home Message Management Relationship Management Configuration Monitoring

MX Message: New - 08 - pacs.008.001.08 - DP for BNM for Testing_27062019_FIToFICustomerCreditTransferV08_pacs.008.001.08

Header Application Header Body Network Comments

Header

Unit	None
Requestor DN	
Responder DN	
Service Name	bnm.rtgs
Identifier	pacs.008.001.08
User Ref	
Priority	Normal
Signed	
Non-Repudiation	
Delivery Mode	Store-and-forward
Possible Duplicate	No
Notification Required	
<input type="checkbox"/> Overdue Warning	
<input type="checkbox"/> SnF Copy	

Swift Alliance Access/Entry 7.7.50
 Home Message Management Relationship Management Configuration Monitoring

MX Message: New - 08 - pacs.008.001.08 - DP for BNM for Testing_27062019_FIToFICustomerCreditTransferV08_pacs.008.001.08

Header Application Header Body Network Comments

Body

FIToFICustomerCreditTransferV08

GroupHeader

MessageIdentification	
CreationDateTime	
BatchBooking	
NumberOfTransactions	
ControlSum	
TotalInterbankSettlementAmount	
ActiveCurrencyCode	
InterbankSettlementDate	

SettlementInformation

SettlementMethod	
<input type="checkbox"/> SettlementAccount	
<input type="checkbox"/> ClearingSystem	
<input type="checkbox"/> InstructingReimbursementAgent	
<input type="checkbox"/> InstructingReimbursementAgentAccount	
<input type="checkbox"/> InstructedReimbursementAgent	
<input type="checkbox"/> InstructedReimbursementAgentAccount	
<input type="checkbox"/> ThirdReimbursementAgent	
<input type="checkbox"/> ThirdReimbursementAgentAccount	
<input type="checkbox"/> PaymentTypeInformation	
<input type="checkbox"/> InstructingAgent	
<input type="checkbox"/> InstructedAgent	

Swift Alliance Access/Entry 7.7.50
 Home Message Management Relationship Management Configuration Monitoring

MX Message: New - 08 - pacs.008.001.08 - DP for BNM for Testing_27062019_FIToFICustomerCreditTransferV08_pacs.008.001.08

Header Application Header **Body** Network Comments

InstructedAgent ?

Credit Transfer Transaction Information ? Count: 1 MinOcc: 1 MaxOcc: -

Payment Identification ?

InstructionIdentification ?

EndToEndIdentification ?

TransactionIdentification ?

LIETR ?

ClearingSystemReference ?

Payment Type Information ?

InterbankSettlementAmount ?

ActiveCurrencyCode ? ?...

InterbankSettlementDate ? ?...

SettlementPriority ?

Settlement Time Indication ?

Settlement Time Request ?

AcceptanceDateTime ? ?...

PoolingAdjustmentDate ? ?...

InstructedAmount ?

ActiveOrHistoricCurrencyCode ? ?...

ExchangeRate ?

ChargeBearer ?

Charges Information ? Count: 0 MinOcc: 0 MaxOcc: -

PreviousInstructingAgent1 ?

PreviousInstructingAgent1 Account ?

PreviousInstructingAgent2 ?

Swift Alliance Access/Entry 7.7.50
 Home Message Management Relationship Management Configuration Monitoring

MX Message: New - 08 - pacs.008.001.08 - DP for BNM for Testing_27062019_FIToFICustomerCreditTransferV08_pacs.008.001.08

Header Application Header **Body** Network Comments

PreviousInstructingAgent1 Account ?

PreviousInstructingAgent2 ?

PreviousInstructingAgent2 Account ?

PreviousInstructingAgent3 ?

PreviousInstructingAgent3 Account ?

InstructingAgent ?

InstructedAgent ?

IntermediaryAgent1 ?

IntermediaryAgent1 Account ?

IntermediaryAgent2 ?

IntermediaryAgent2 Account ?

IntermediaryAgent3 ?

IntermediaryAgent3 Account ?

UltimateDebtor ?

InitiatingParty ?

Debtor ?

Name ? 1

PostalAddress ?

Identification ?

CountryOfResidence ? ?...

ContactDetails ?

Swift Alliance Access/Entry 7.7.50
 Home Message Management Relationship Management Configuration Monitoring

MX Message: New - 08 - pacs.008.001.08 - DP for BNM for Testing_27062019_FIToFICustomerCreditTransferV08_pacs.008.001.08

Header Application Header Body Network Comments

- UltimateDebtor
- InitiatingParty
- Debtor
- DebtorAccount
- DebtorAgent
- DebtorAgentAccount
- CreditorAgent
- FinancialInstitutionIdentification
 - BICFI
 - ClearingSystemMemberIdentification
 - LEI
 - Name
 - PostalAddress
 - Other
 - BranchIdentification
- CreditorAgentAccount
- Creditor
 - Name
 - PostalAddress

Swift Alliance Access/Entry 7.7.50
 Home Message Management Relationship Management Configuration Monitoring

MX Message: New - 08 - pacs.008.001.08 - DP for BNM for Testing_27062019_FIToFICustomerCreditTransferV08_pacs.008.001.08

Header Application Header Body Network Comments

- PostalAddress
- Other
- BranchIdentification
- CreditorAgentAccount
- Creditor
 - Name
 - PostalAddress
 - Identification
 - CountryOfResidence
 - ContactDetails
- CreditorAccount
- UltimateCreditor
- InstructionForCreditorAgent
- InstructionForNextAgent
- Purpose
- RegulatoryReporting
- Tax
- RelatedRemittanceInformation
- RemittanceInformation
- SupplementaryData

Appendix XI Activation of RENTAS Portal Facility at BNM

(Please use institution's letterhead)

Date:

To : Head
Financial Market Infrastructure Department
Bank Negara Malaysia
Level 14, Block C
Jalan Dato Onn
50480 Kuala Lumpur

From:
(RENTAS BIC)

Subject : Activation of RENTAS Portal facility at BNM

Tuan,

With reference to the above, we would like to request for activation of RENTAS Portal facility at BNM's on

.....
(dd/mm/yyyy)

The reason(s) for our request of activation is / are as follows:

.....
.....
.....

Thank you.

.....
(Authorised Signatory)

.....
(Authorised Signatory)

Official Stamp:

For BNM Use Only

Message received by:	.....
Request allowed/disallowed by:	.....
Time :	.....
Fees Payable :	.....

Note:

Affected Participants must arrive at BNM's premises within one (1) hour after the request of activation has been granted by BNM.

Appendix XII Supported Foreign Currency

Foreign Currency Settlement supported in RENTAS:

No	Currency	Currency Code	Appointed On-shore Settlement Institution
1	Chinese Renminbi	CNY	Bank of China (Malaysia) Berhad

Appendix XIII Activation of RENTAS Portal Facility at BNM's Checklist

- 1.0 Participants shall inform BNM via email regarding the activation.
- 2.0 Participants must ensure they bring along the following:
 - 2.1 ePKI tokens as requirement in **Clause 20.0**
 - 2.2 Source files or documents of the outstanding transactions
- 3.0 Participants to login to RENTAS Portal and upload/key in transactions.

Appendix XIV Request Form for RENTAS Test Environment

1. Requester's Information	
Name:	Bank Name:
Date:	Digit Code:
Department:	BIC Code:
Contact No.:	Participants Terminal: <input type="checkbox"/> Swift <input type="checkbox"/> RBG <input type="checkbox"/> RENTAS Portal
E-mail:	
2. Specify date(s) needed (please tick):	
Month: <input type="checkbox"/> January <input type="checkbox"/> February <input type="checkbox"/> March <input type="checkbox"/> April <input type="checkbox"/> May <input type="checkbox"/> June <input type="checkbox"/> July <input type="checkbox"/> August <input type="checkbox"/> September <input type="checkbox"/> October <input type="checkbox"/> November <input type="checkbox"/> December	Day: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/> 10 <input type="checkbox"/> 11 <input type="checkbox"/> 12 <input type="checkbox"/> 13 <input type="checkbox"/> 14 <input type="checkbox"/> 15 <input type="checkbox"/> 16 <input type="checkbox"/> 17 <input type="checkbox"/> 18 <input type="checkbox"/> 19 <input type="checkbox"/> 20 <input type="checkbox"/> 21 <input type="checkbox"/> 22 <input type="checkbox"/> 23 <input type="checkbox"/> 24 <input type="checkbox"/> 25 <input type="checkbox"/> 26 <input type="checkbox"/> 27 <input type="checkbox"/> 28 <input type="checkbox"/> 29 <input type="checkbox"/> 30 <input type="checkbox"/> 31
3. Services:	
<input type="checkbox"/> MYR <input type="checkbox"/> CNY	<input type="checkbox"/> PV (On Shore PVP MYR-CNY) <input type="checkbox"/> DV <input type="checkbox"/> HK (Off Shore PVP MYR-USD)
Remarks: <i>[Test purposes / additional request]</i>	
Management Approval (must be an Authorised Signature) Signature: Name: Position: Date: Institution Stamp:	
3. For BNM Internal Use Only	
Date Received: Approved by: Charge Amount:	Remarks:

Note:

Participants are required to adhere to Testing Procedure as stipulated in Operational Procedures for MYR Settlement in RENTAS. Participants are not allowed to use the RENTAS testing environment during weekends, Holidays and after office hours.

Appendix XV User Access Request Form

Note: 1. All fields are compulsory		2. Please write legibly & <input checked="" type="checkbox"/> where applicable		3. Date format: dd/mm/yyyy	
Section 1 (to be completed by requestor)		<input type="checkbox"/> Bank Negara Malaysia user		<input type="checkbox"/> External user	
Name:					
Employee No:					
Identity Card No.:					
Designation/Department:					
Bank / Organisation Name:					
Bank / Organisation Address:					
	City:	Postcode:			
	State:	Country:			
Contact No. :				Email Address:	
Status:	<input type="checkbox"/> Permanent	<input type="checkbox"/> Temporary (Date), From:		To:	
Request to:					
<input type="checkbox"/> Create ID <input type="checkbox"/> Delete/Revoke ID* <input type="checkbox"/> Suspend/Disable ID* <input type="checkbox"/> Activate/Enable/Unlock ID*					
<input type="checkbox"/> Reset Password* <input type="checkbox"/> Modify ID* <input type="checkbox"/> Task Assignment*					
<input type="checkbox"/> Token Registration*					
Subject Key Identifier (SKI) No: _____					
*please specify User ID: _____ *modify ID, specify the new profile: _____					
Reason for request:					
System/Application:					
<input type="checkbox"/> RENTAS Swift <input type="checkbox"/> RENTAS PORTAL <input type="checkbox"/> FAST <input type="checkbox"/> eSSDS					
Others					
Please specify: _____					
Environment:					
<input type="checkbox"/> UAT <input type="checkbox"/> Production					
Signature:				Date:	
Approval (by Participant's Authorised Signatories)					
Request:	<input type="checkbox"/> Approved		<input type="checkbox"/> Not Approved (Please indicate in remarks column below)		
	Remarks:				
Name:					
Designation/Department:					
Contact No.:				Email Address:	
Signature:				Date:	

Part A – For Business / System Owner Approval	
Request:	<input type="checkbox"/> Approved <input type="checkbox"/> Not Approved
Signature:	
Name:	
Date:	

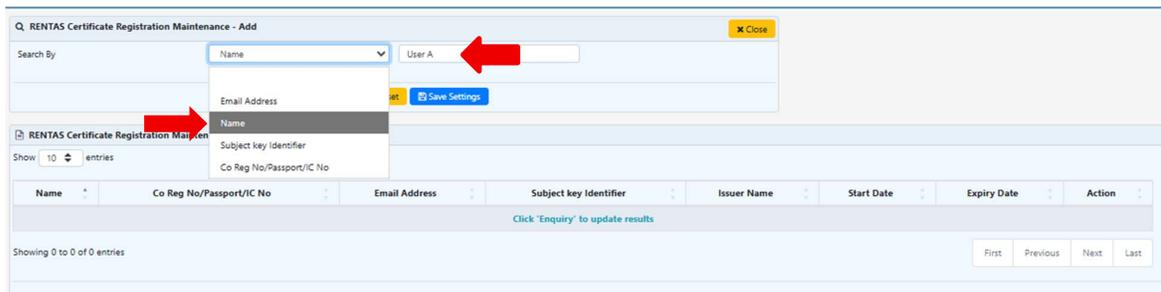
Appendix XVI Guideline for Registration of New Digital Certificate in RENTAS Portal

1.0 Introduction

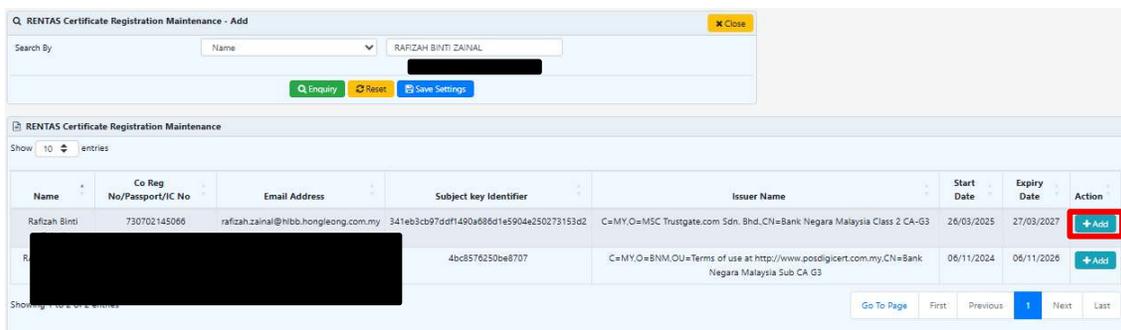
- 1.1 This guideline is to provide proper steps for the purpose of registering new digital certificate via RENTAS Portal.
- 1.2 RENTAS Participants required to have two (2) users to register new digital certificate in RENTAS Portal. Details are as follows:
 - i. User 1 – To validate and add new certificate for registration. User 1 is required to have function to add new certificate in RENTAS Portal.
 - ii. User 2 – To approve the registration of new certificate. User 2 is required to have the approval function and active certificate in RENTAS Portal.

2.0 Steps to Register New Certificate via RENTAS Portal

- 2.1 Log-in RENTAS Portal as User 1 and complete the following actions:
 - i. Go to Admin > Certificate Registration Maintenance;
 - ii. Click button 'Add Certificate';
 - iii. At the 'Search By' field, user may select any of the preferable option to search the new certificate. Select the preferable option and provide the details at the key search. Then click button 'Enquiry'. Example as follow:



- iv. Select the certificate and click button 'Add'. Example as follow:



- v. Details of new certificate will be prompted and click the button 'Submit'. Example as follow:

RENTAS Certificate Registration Maintenance - Add

Name	
Co Reg No/Passport/IC No	
Email Address	
Subject Key Identifier	341eb3cb97ddf1490a086d1e5904e250273153d2
Issuer Name	C=MY,O=MSC Trustgate.com Sdn. Bhd.,CN=Bank Negara Malaysia Class 2 CA-G3
Start Date (dd/mm/yyyy)	26/03/2025
Expiry Date (dd/mm/yyyy)	27/03/2027
Status	
Action	

Add RENTAS Certificate - RENTAS Certificate Registration Maintenance Request

Remarks

2.2 Log-in RENTAS Portal as User 2 and complete the following actions:

- Go to Home > To do List;
- Click button 'Go';
- Details certificate will be prompted on the screen and User 2 to validate the details such as name, IC number, email address, subject key identifier etc. Then click button 'Approve Request';

RENTAS Certificate Registration Maintenance - Approve

Name	
Co Reg No/Passport/IC No	
Email Address	
Subject Key Identifier	4bc8576250be8707
Issuer Name	C=MY,O=BNM,OU=Terms of use at http://www.posdigicert.com.my,CN=Bank Negara Malaysia Sub CA G3
Start Date (dd/mm/yyyy)	06/11/2024
Expiry Date (dd/mm/yyyy)	06/11/2026
Status	
Action	PENDING NEW

Add New Certificate Registration Maintenance Request - Pending Approver

Requested by

Request Timestamp: 12-Sep-2025 15:54:30

History

- [12/09/2025 15:54:30] Add New Certificate Registration Maintenance Request
- [12/09/2025 15:54:30] Submit Add New Certificate Registration Maintenance Request / Remarks :

Remarks

- User 2 to ensure to run the Portal Signer.
- Screen will prompt message to remind user to plug-in token and require user to insert the PIN number (password) of the token. Next system will proceed and approve the certificate accordingly. Status of the certificate will display as 'Active'.

Appendix XVII Standardised Format in pacs.009 for Interbank Money Market Transactions

1. In line with global financial benchmark reforms, an Alternative Reference Rate (ARR) is to be introduced for the Malaysian financial market, known as the Malaysia Overnight Rate (MYOR). Similar to other jurisdictions, MYOR will be based on overnight transactions in the interbank market. To facilitate the calculation of MYOR by BNM, additional information in RENTAS transaction is required to identify eligible transactions.
2. Lenders/investors (which comprise of approved interbank institutions¹) in the interbank money market shall include additional information with the appropriate code at field FICdtTrf/CdtTrfTxInf/InstrForNxtAgt/InstrInf (equivalent to member-to-member information field) of their pacs.009.001.08 settlement instructions as specified below:

Category	Details	Code
Market	Conventional	C
	Islamic	I
*Method	Brokered AFFIN	AF
	Brokered ICAP (MALAYSIA)	IM
	Brokered HARLOWS	HA
	Direct Trade	DT
*Product	Unsecured Deposits	DEP
	Qard	QRD
	Murabahah	MUR
*Rate	For products where rate is known on the deal date	x.xx ³
	For products where rate is only known on maturity date	TBD
*Maturity Date	MMM format: JAN, FEB, MAR, APR, MAY, JUN, JUL, AUG, SEP, OCT, NOV, DEC	DDMMYY

Note:

¹Refers to institutions which are approved by BNM to deal in the interbank market, whether acting as principals or agents in the wholesale financial markets

²Field FICdtTrf/CdtTrfTxInf/InstrForNxtAgt/InstrInf contains 35 characters and sufficient to provide the required interbank money market information.

³ Rate is up to 2 decimal places (% not allowed; PCT not required)

* To use slash (/) as the separator between categories, except for the last category (i.e Maturity Date)

Example - Bank A lends to Bank B:

1. Conventional overnight deposit at 1.74%, brokered through Affin, value 22 June 2021 and maturing on 23 June 2021:

C/AF/DEP/1.74/23JUN21

2. Conventional overnight deposit 1.75%, direct trade value 18 June 2021 maturing 21 June 2021 (Overnight – cross weekend):

C/DT/DEP/1.75/21JUN21

3. Islamic overnight deposit (Qard) with rate only known on maturity date, direct trade value 22 June 2021 maturing on 23 June 2021:

I/DT/QRD/TBD/23JUN21

Note:

In MX, the prefix of double slash (i.e //) at the beginning of the line is not required.

Appendix XVIII: Confirmation of Subscription to Funding Facility for Retail Payments Settlement (FRPS)

Date:

To: Head
Financial Market Infrastructure Department
Bank Negara Malaysia
Level 14, Block C
Jalan Dato Onn
50480 Kuala Lumpur

From:
(RENTAS BIC)

Subject : Confirmation of Subscription to Funding Facility For Retail Payments Settlement (FRPS)

We refer to the subject above.

- We hereby agree to subscribe FRPS.
- We do not agree to subscribe to FRPS. By not agreeing to subscribe to FRPS, we shall ensure sufficient balance in MYR Settlement Account at all times to facilitate:
- i. Unpaid MYR Intraday Credit during Retail Payments Business Hours and MYR Evening Settlement (only applicable to Conventional Banks); and
 - ii. Settlement during Retail Payments Settlement Business Hour and MYR Evening Settlement Window (only applicable to Islamic Banks).

1. By providing the confirmation of subscription, we acknowledge and agree with the FRPS requirements as specified in this Operational Procedures.
2. We shall remain to comply and abide to all rules, operational procedures and guidelines issued by Bank Negara Malaysia related to FRPS and Retail Payments Settlements.

Yours sincerely,

.....
(Signature of Chief Executive Officer)
Name:
For and on behalf of:
Official stamp:

Appendix XIX: Business Services ID for MX

1.0 Business Services IDs for MX:

1.1 RENTAS MX Participants are required to provide the following business services ID in the respective MX transactions:

No	MX Transaction	Business Services ID
1.	camt.056.001.08 (Financial Institution to Financial Institution Payment Cancellation Request)	bnm.rts.pb.01
2.	camt.057.001.06 (Notification to Receive)	bnm.rts.pb.01
3.	camt.058.001.06 (Notification to Receive Cancellation Advice)	bnm.rts.pb.01
4.	camt.060.001.05 (Account Reporting Request)	bnm.rts.01
5.	camt.087.001.06 (Request to Modify Payment)	bnm.rts.01
6.	camt.998.001.03 (Cash Management Proprietary Message)	bnm.rts.pb.prtry.01
7.	camt.998.001.03 (Cash Management Proprietary Message)	bnm.rts.pb.dn.01
8.	fxtr.014.001.04 (Foreign Exchange Trade Instruction)	bnm.rts.01
9.	pacs.002.001.10 (Financial Institution to Financial Institution Payment Status Update)	bnm.rts.ctt.01
10.	pacs.008.001.08 (Financial Institution to Financial Institution Customer Credit Transfer)	bnm.rts.01
11.	pacs.009.001.08 (Financial Institution Credit Transfer)	bnm.rts.pb.01
12.	pacs.010.001.03 (Financial Institution Direct Debit)	bnm.rts.01

Appendix XX: List of Retail Payments offered in NRTS module

1. Real Time Payments Platform (RPP)

Appendix XXI: Authorisation for BNM to manage NRTS Account on behalf of Retail Payments Participants

Date:

To: Head
Financial Market Infrastructure Department
Bank Negara Malaysia
Level 14, Block C
Jalan Dato Onn
50480 Kuala Lumpur

From:
(RENTAS BIC)

Subject : Authorisation for BNM to manage NRTS Account on behalf of Retail Payments Participants

We refer to the subject above.

1. We hereby authorise BNM to open and manage the NRTS account maintained with BNM for the purpose of NRTS of Retail Payments Transactions.
2. We hereby authorise BNM to transfer cash to and from the NRTS Account and the MYR Settlement Account in the event of insufficient funds to facilitate NRTS
3. We hereby authorise BNM to manage the NRTS account threshold, i.e., maximum, optimum, and minimum balance
4. The above authorisation is to ensure the continuity of Near Real Time Settlement of Retail Payments Transactions.

Yours sincerely,

.....
(Signature of RENTAS Authorised Signatory)

Name:
For and on behalf of:
Official stamp:

Appendix XXII: Confirmation of Subscription to Funding Facility for Retail Payments Settlement+ (FRPS+)

Date:

To: Head
Financial Market Infrastructure Department
Bank Negara Malaysia
Level 14, Block C
Jalan Dato Onn
50480 Kuala Lumpur

From:
(RENTAS BIC)

Subject : Confirmation of Subscription to Funding Facility For Retail Payments Settlement (FRPS+)

We refer to the subject above.

We hereby agree to subscribe FRPS+.

We do not agree to subscribe to FRPS+. By not agreeing to subscribe to FRPS+, we shall ensure sufficient balance in NRTS Account and MYR Settlement Account at all times to facilitate the settlement of Retail Payments via NRTS.

1. By providing the confirmation of subscription, we acknowledge and agree with the FRPS+ requirements as specified in this Operational Procedures.
2. We shall remain to comply and abide to all rules, operational procedures and guidelines issued by Bank Negara Malaysia related to FRPS+, NRTS and Retail Payments.

Yours sincerely,

.....
(Signature of RENTAS Authorised Signatory)
Name:
For and on behalf of:
Official stamp:

Glossary of Terms

1. “**Allegation**” refers to a message that RENTAS transmits to inform a Participant’s counterparty that a foreign currency securities transaction that the Participant transmitted cannot be matched.
2. “**BNM**” means Bank Negara Malaysia established under the Central Bank of Malaysia Act 2009.
3. “**BNM’s Systems**” refer to all systems and technology employed by BNM for the purpose of facilitating the Payments and Securities Services.
4. “**Bridge Institutions**” refers to a subsidiary of PIDM designated as a bridge institution under paragraph 99(1)(f) of PIDM Act 2011. BIs are incorporated in advance for the purpose of BI implementation. BIs shall remain dormant and will be activated by PIDM in a resolution scenario that requires BI.
5. “**Business Continuity**” means the continued delivery of services and continued operational viability in response to a disruptive event.
6. “**Business Continuity Management (BCM)**” means a holistic management process that identifies risks, threats and vulnerabilities that could impact an organisation’s business operations and which ensures organisational resilience and Business Continuity.
7. “**Business Continuity Plan (BCP)**” refers to a comprehensive documented action plan that outlines the procedures, processes and systems necessary to resume or restore the business operations of a Participant in the event of a disruption.
8. “**Business Day**”, unless otherwise specified in these Operational Procedures, means any calendar day from Monday to Friday, excluding a Holiday or Unexpected Holiday observed in the Federal Territory of Kuala Lumpur.
9. “**Business hours**” means the duration of time, from the opening time to the closing time, when BNM provides Payments and Securities Services, which may differ for each of the Payments and Securities Services.

10. “**Ceiling Rate**” is the upper limit of the Corridor at which BNM will lend to Interbank Institutions under the lending/funding facility.
11. “**Clearing**” means the process of exchanging and reconciling payment items that result in the establishment of final positions for Settlement.
12. “**Clearing house**” means the organisation that collects, sorts, classifies and distributes information on cheque clearing among its Participants.
13. “**Conventional Banks**” refers to Participants regulated under Financial Services Act (FSA).
14. “**Credit Notification**” refers to a notice sent by Participant to another Participant informing them of impending RENTAS payment.
15. “**Cut-off time**” refers to the stipulated time, fixed by BNM; beyond which the receipt of any item will be deemed to occur at the opening of the next working day.
16. “**Custodian Bank**” refers to an authorised Financial Institution responsible for safeguarding a firm’s or individual’s financial asset.
17. “**Debit Notification**” refers to notification sent by RENTAS to the FA on the coupon or redemption payment date for Debt Securities informing the FA on the total interest or redemption proceeds that the FA has to pay to BNM on behalf of the issuer.
18. “**DFI**” means Development Financial Institutions that are governed under the Development Financial Institutions Act 2002.
19. “**Digital signature**” means the cryptographic process where Messages are signed with the sender’s private key so that the recipient of the Message, by using the public key to decrypt, can accurately determine the authenticity and validity of the Message.
20. “**DNS**” refers to deferred net settlement, a settlement mechanism that is used in the banking system where payments and any other financial obligation are netted and deferred to be settled during a scheduled settlement window.

21. **“DNS Collateral Account”** refers to either cash account maintained by the Participant or safekeeping account for Scripless Securities in the RENTAS system held with BNM for the purposes of DNS collateral.
22. **“DvP”** means delivery-versus-payment in which transfer for securities and funds is settled on a trade-by-trade basis, with final transfer of the securities from the seller to the buyer (delivery) occurring at the same time as final transfer of the funds from the buyer to the seller (payment).
23. **“Eligible Securities”** means:
 - a. Specified RENTAS Securities issued by the Government and BNM; and
 - b. Non-specified RENTAS Securities with minimum credit rating of AAA and above.
24. **“e-Payment Incentive Fund Framework”** or ePIF is a framework established by BNM to drive improvements in the e-payment infrastructure and services.
25. **“Final or Finality”** means irrevocable and unconditional.
26. **“FRPS Outright Sale”** refers to Execution of Outright Sale by BNM on behalf of Retail Payments Participants:
 - i. On Retail Payment Settlement Business Day and MYR Evening Settlement window to obtain liquidity to facilitate settlement for Islamic Banks; and
 - ii. To manage unpaid MYR Intraday Credit for Conventional Banks.
27. **“FRPS Outright Purchase”** refers to Execution of Outright Purchase by BNM on behalf of Retail Payments Participants:
 - i. On the next Retail Payment Settlement Business Day and/or RENTAS Business Day (whichever earlier) for Conventional Banks; and
 - ii. In the same day or on the next RENTAS Business Day for Islamic Banks.
28. **“FRPS+ Activation”** refers to the automatic execution of the first leg REPO/SBBA of FRPS+, where BNM is the buyer of the securities, and the Retail Payments Participant is the seller of the securities.

29. **“FRPS+ Repayment”** refers to the automatic execution of the second leg REPO/SBBA of FRPS+, where the Retail Payments Participant is the buyer of the securities, and BNM is the seller of the securities.
30. **“Foreign Currency Settlement Account”** means a cash account maintained by the Participant with OSIs for the purposes of foreign currency Settlement.
31. **“Foreign-Currency Settlement Cut-off”** means the cut-off time of a Business Day when the Host System ceases processing foreign currency transactions for value on the same day, including any extension of time for the processing of transactions on that day which BNM may grant under these Participation Rules.
32. **“FSA”** means the Financial Services Act 2013.
33. **“FX”** means foreign exchange transactions.
34. **“General Non-Compliance”** refers to any non-compliance without pre-specified non-compliance charges in the Participation Rules for Payments and Securities Services, and the Operational Procedures for MYR Settlement in RENTAS, Foreign-Currency Settlement in RENTAS and FAST.
35. **“Gridlock Resolution”** refers to a module that is built to resolve the settlement gridlock amongst participants.
36. **“HKICL”** means Hong Kong Interbank Clearing Limited.
37. **“Host System”** means the Central Host Computer System that provides the Payments and Securities Services which is located at production site and / or back-up site including any other back-up systems / sites.
38. **“Holiday”** refers to:
 - i. Public holiday as provided under or appointed pursuant to section 3, 8 or 9 of the Holidays Act 1951 and observed in the Federal Territory of Kuala Lumpur.
 - ii. Unexpected Holiday.

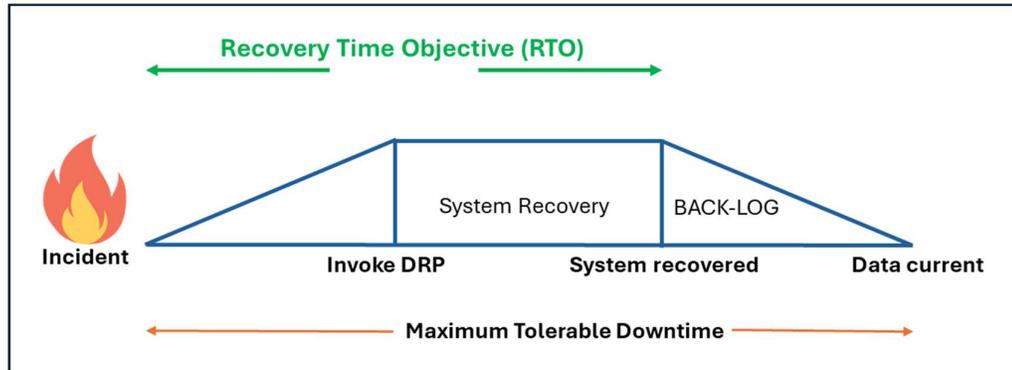
39. **"Identified Securities"** means Eligible Securities tagged and identified in the Participants' K account.
40. **"IFSA"** means the Islamic Financial Services Act 2013.
41. **"Intraday credit"** refers to funds extended either by BNM for MYR Settlement or by OSIs for Foreign-Currency Settlement to eligible RENTAS Participants for a period of less than one (1) Business Day.
42. **"Intraday credit cut-off"** means the deadline after which Participants will not be able to drawdown on their intraday credit line with BNM.
43. **"Intraday credit cut-off warning"** means the notification provided to Participants thirty (30) minutes prior to the intraday credit cut-off.
44. **"Islamic Banks"** refers to Participants regulated under Islamic Financial Services Act (IFSA).
45. **"K account"** means collateral account for Scripless Securities in the RENTAS system held with BNM.
46. **"Last Resort Contingency Strategy (LaRCS)"** is BNM's strategy to ensure settlement can be reflected in the book of BNM at the end of the day in the event of unavailability of RENTAS Host at both production and recovery centre, and Mini RENTAS.
47. **"Legal Entity Identifier (LEI)"** is a unique code developed by the International Organisation for Standardization (ISO). It connects to key reference information that enables clear and unique identification of legal entities participating in financial transactions. Each LEI contains information about an entity's ownership structure. The publicly available LEI data pool can be regarded as a global directory, which greatly enhances transparency in the global marketplace.
48. **"Licensed Financial Institutions"** means commercial banks and investment banks licensed under section 212 (3) of the Financial Services Act 2013 (FSA) and Islamic banking licensed under Section 223 (3) of the Islamic Financial Services Act 2013 (IFSA).

49. **“Liquidity Optimisation Settlement Facility”** or LOSF is a process of combining incoming or outgoing MYR payments in order to achieve a reduced net obligation.
50. **“Live Run”** refers to the process of operating on an actual basis using actual data on IT recovery sites. Where necessary, business operations are shifted to the recovery site in accordance with the Disaster Recovery Plan.
51. **“Maximum Tolerable Downtime (MTD)”** means the timeframe during which a recovery must become effective before an outage compromises the ability of a Participant to achieve its business objectives.
52. **“MCT SAS”**, or Foreign-Currency Transfer Settlement Account System, is a real-time settlement module that effects the transfer of funds through Foreign Currency Settlement Accounts that are maintained with Onshore Settlement Institutions (OSI) appointed by BNM.
53. **“MX Participants”** refers to RENTAS Participants that have onboarded to ISO20022 (MX)
54. **“MYR”** refers to Malaysian Ringgit.
55. **“MYR Evening Settlement”** refers to IBG and Direct Debit Settlement for window 4 and window 5.
56. **“MYR SAS”**, or MYR Settlement Account System, is a real-time accounting module that posts debits and credits to MYR cash accounts across the books of BNM. All MYR Settlement Accounts are maintained with BNM.
57. **“MYR Settlement Account”** means a cash account maintained by the Participant with BNM for the purposes of MYR Settlement.
58. **“MYR Settlement Cut-off”** means the cut-off time of a Business Day when the Host System ceases processing MYR transactions for value on the same day, including any extension of time for the processing of transactions on that day which BNM may grant under these Rules.

59. **“Near Real Time Settlement (NRTS)”** refers to the process where interbank settlement of retail payments is completed on gross normally within seconds after the retail payment transactions between customers are completed.
60. **“NRTS Account”** refers to a cash account maintained by the Participant with BNM for the purposes of NRTS.
61. **“NWI”** means the New WAN Infrastructure, a secure private high bandwidth managed by Time Telekom Bhd, which is used to connect BNM’s systems to all Participants.
62. **“OSI”**, or Onshore Settlement Institution, refers to an organisation appointed by BNM to provide Settlement services for a particular foreign currency in RENTAS.
63. **“Participant”** means any financial institution or entity who has applied and has been accepted by BNM to participate in Payments and Securities Services and subject to and in consideration of such acceptance the Participant shall observe and comply with the Participation Rules.
64. **“Participant Terminals”** refers to all software and hardware installed at the Participants’ premises, or that of its outsourcing service provider, which is linked to the Host Systems for purpose of accessing Payments and Securities Services. For RENTAS, the Participant Terminals would encompass the hardware and software for the Participants’ access channels to the Host System (namely RENTAS Bank Gateway, Swift Access and/or RENTAS Portal).
65. **“Paying bank”** means the financial institutions licensed under the FSA or the IFSA, on whom the funds are drawn.
66. **“Payments and Securities Services”** means the payment, Settlement, securities issuance, depository, paying agency and corporate actions processing services offered by BNM to Participants through the RENTAS and FAST systems.
67. **“PayNet”** means Payments Network Malaysia Sdn Bhd, a company incorporated under the Companies Act 1965.

68. **“PIDM”** means Perbadanan Insurans Deposit Malaysia. It is an integrated financial consumer protection authority for depositors and takaful or policy owners, and resolution authority for its member institutions.
69. **“PIDM Member Institution”** refers to all commercial banks licensed under the Financial Services Act 2013 and all Islamic banks licensed under the Islamic Financial Services Act 2013, including locally incorporated subsidiaries of foreign banks operating in Malaysia. Membership in PIDM is compulsory as provided under the PIDM Act.
70. **“Private Key”** means the secret key in a key pair, which is known only to the Participant who generated it. In asymmetric cryptographic systems such as E-PKI, private keys are used to create digital signatures that uniquely identify the Participant.
71. **“Public key”** means the publicly disclosed key in an asymmetric cryptographic key pair that is made known to everyone, and is used to verify the authenticity and validity of Messages.
72. **“PvP”** means Payment-versus-Payment, a mechanism in a foreign exchange Settlement system which ensures that a final transfer of one currency occurs if and only if a final transfer of other currency takes place.
73. **“Queue”** means an arrangement where Settlement transactions are held by the RENTAS System until sufficient balances are available in the paying Participant’s account to fund the Settlement.
74. **“Recovery site”** means a recovery (back-up) site for IT infrastructure, systems and business processes to be recovered and operationally ready to support business functions after an outage.
75. **“Recovery Time Objective (RTO)”** refers to the timeframe required for IT infrastructure, systems, applications, and business processes to be recovered and operationally ready after a disruption. A recovery time objective has the following two components:
 - i. the duration of time from the disruption to the activation of the BCP/DRP;
 - and

- ii. the duration of time from the activation of the BCP/DRP to the recovery of the business operations.



76. “**RENTAS**” refers to the Real-time Electronic Transfer of Funds and Securities System, is a multi-currency real time gross settlement system for inter-bank funds transfer, near real time gross settlement for Retail Payments, a securities settlement system and a scripless securities depository for all unlisted debt instruments.
77. “**RENTAS and FAST Development Fund**” means a fund consisting of non-compliance charges collected from Participants, which was established and is managed by BNM, and is dispersed for initiatives that are beneficial to a broad segment of Participants.
78. “**RENTAS Bank Gateway**” or RBG refers to RENTAS’ proprietary Participant access channel with Straight-through processing (STP) capabilities, which act as a Participant Terminal.
79. “**RENTAS Host**” means the RENTAS Central Host Computer System located at BNM, including any back-up systems.
80. “**RENTAS opening**” means the time of that Business Day from which the Host System is ready and able to process transactions for the Business Day.
81. “**Repo Transaction / Tender**” includes repo and reverse repo transaction / Tender; it means a contract to sell and subsequently repurchase securities at a specified date and price. Also known as an RP or buyback arrangement.

82. **“Real-time Retail Payments Platform (RPP)”** means the Shared payment infrastructure developed and established by PayNet which facilitates instant payments and collections addressed using easily remembered proxies or by account numbers.
83. **“Retail Payments”** refers to the transaction services offered by the Retail Payments Service Operator. The services, include but is not limited to, the Retail Payment Platform (RPP), FPX, Shared ATM Network (SAN) and MyDebit.
84. **“Retail Payments transactions”** refers to transactions of Retail Payments.
85. **“Retail Payments Service Operator (RPSO)”** refers to an approved operator of a Retail Payment system and accepted as RENTAS Participant. A RPSO performs the role of processing and clearing of payment transactions. It facilitates public and private entities, as well as consumers to transfer funds either directly from one account to another, or through the use of a payment instrument.
86. **“Retail Payments Service Operator’s transactions”** refers to cheque clearing positions and retail clearing positions such as Financial Process Exchange (FPX) clearing positions, Electronic Debit (MyDebit) clearing positions, Interbank GIRO (IBG) clearing positions, ATM clearing positions and other retail instruments introduced by the RPSOs from time to time. Also refers to Retail Payments transactions services that are streamed on gross basis for settlement in RENTAS.
87. **“Net Settlement for Retail Payments Business Day”** refers to Saturday, Sunday and any Holidays.
88. **“Retail Payments Participant”** refers to Participant who is subscribing to Retail Payments.
89. **“Retail Payments Settlement”** refers to settlement for Retail Payment systems operated by PayNet. The systems, include but is not limited to the FPX, Shared ATM Network (SAN) and MyDebit.

90. **“Net Settlement for Retail Payments Business Hours”** refers to the business hours for Net Settlement of Retail Payments on weekend and Holiday in RENTAS which is from 8.00 am to 6.00 pm.
91. **“Securities Account”** means the scripless Securities Account held with BNM and maintained in the RENTAS system.
92. **“Sell and Buy Back Agreement (SBBA)”** is an Islamic repurchase agreement (Repo-i) transaction whereby a party (SBBA Seller) sell Islamic securities at an agreed price to the other party (SBBA Buyer) and subsequently the SBBA buyer and SBBA seller enter into another agreement thereon whereby the former promises to sell and the latter to buyback the securities on a specified future date at an agreed price.
93. **“Service Provider”** means a person or company engaged by a Participant to provide services in connection with the Payments and Securities Services.
94. **“Settlement”** or **“Settle”** refers to the process of adjusting financial positions of Participants to reflect the amounts due to and from them as a result of the exchange of clearing items, payment transactions and securities transactions. It refers to the final and irrevocable discharge of an obligation of one Participant in favour of another Participant, in central bank money for MYR transactions, or in commercial bank money for foreign currency transactions.
95. **“Specified RENTAS Securities”** refers to Islamic / conventional short term and long term scripless securities issued by the Government, BNM, BNM Sukuk Berhad and any other issuer that may be specified by BNM.
96. **“SRR”**, or Statutory Reserve Requirement, is a monetary policy instrument available to BNM for purposes of liquidity management.
97. **“SRR Cash Account”** refers to Cash account for Statutory Reserve Requirement maintained with BNM.
98. **“SSDS”** means Scripless Securities Depository System.

99. **“Straight Through Processing (STP)”** means the online transmission of Messages directly from Participants’ internal systems and complete automated processing of Messages without the need for data entry or manual intervention.
100. **“Suspended”** membership will result in the following:
 - a. The Participant can only receive incoming IFTS transactions. Outgoing IFTS transactions will be rejected;
 - b. All SSDS transactions and transfers initiated by or due to the member will also be rejected;
 - c. Incoming funds will not be used to clear Participants' queues;
 - d. Outgoing IFTS queued transactions and SSDS transactions pending due to insufficient securities will be cancelled at RENTAS Cut-off; and
 - e. Future-dated IFTS and SSDS transactions will be retained. Should the Participant’s membership remains “suspended” when the future-dated transaction is due for settlement, any incoming IFTS will be accepted for settlement, while any outgoing IFTS or SSDS transactions will be rejected.
101. **“Swift”** refers to Society for Worldwide Interbank Financial Telecommunication.
102. **“SwiftNet”** refers to the IP network infrastructure provided by Swift that facilitates efficient messaging with Swift standards between its participants worldwide.
103. **“Swift Access”** refers to Swift Alliance Access (SAA) or other Swift-certified systems as approved by BNM that act as a Participant Terminal.
104. **“Systemic risk”** means the risk that the failure of one Participant to meet its required obligations will cause other Participants to be unable to meet their obligations when due, thereby potentially causing significant liquidity dislocations or credit problems and threatening the stability of the financial markets.
105. **“USD CHATS”** means the US Dollar Clearing House Automated Transfer System, a real-time gross settlement system for USD transactions in Hong Kong operated by HKICL.

106. **“Unexpected Holiday”** refers to a holiday declared at the eleventh hour by the Minister pursuant to:

- i. [section 8] OR [any provision] of the Holidays Act 1951 [which is observed in the Federal Territory of Kuala Lumpur]; where “Minister” means the Minister charged with the responsibility for public and bank holidays; or
- ii. section 217(1) of the Financial Services Act 2013 or section 228(1) of the Islamic Financial Services Act 2013; where “Minister” means the Minister for the time being charged with the responsibility for finance.