

Payment and Settlement Systems
Oversight Framework



Payment and Settlement Systems Department

Royal Monetary Authority of Bhutan

Classification: Internal Document

The Royal Monetary Authority of Bhutan, in exercise of the powers conferred by Sections 9(c) of the Royal Monetary Act of Bhutan 2010 and of all the powers enabling it in this behalf, hereby has formulated and promulgated these Oversight Frameworks.

Contents

INTRODUCTION	3
1. SHORT TITLE, COMMENCEMENT AND APPLICATION	3
2. INTERPRETATION & AMENDMENTS:	3
3. DEFINITIONS	3
4. OBJECTIVES	5
5. SCOPE OF OVERSIGHT	6
6. METHODOLOGY OF OVERSIGHT	7
7. OVERSIGHT ACTIVITIES	9
a) Collection of Off-site Data	9
b) On-site Inspections	12
c) Ad-hoc Activities.....	13
d) Activities towards Policy Changes	14
e) Designation of Payment Systems	15
Annexure- I: Principles for Financial Market Infrastructure	15
Annexure- II: Key Concerns for Oversight of Different Payment Segment	18

INTRODUCTION

Payment System Oversight is an important central bank function aimed to promote the safety and efficiency of payment and settlement systems through effective monitoring, proper assessments and inducing change, whenever necessary. Oversight is performed across various financial systems, its member participants and payment instruments to ensure the systems are effectively protected against risks that may arise during exchange of money between individuals, businesses and the financial market place.

The duties of oversight are empowered by the Royal Monetary Authority Act 2010, Section 8 (c) “promote, supervise and, if necessary, operate national and international payment and settlement system including electronic transfer of funds by financial institutions, other entities and individuals”.

An unreliable payment and settlement system may stifle the stability and potential of an economy; its failure can result in inefficient use of financial systems, operational disruption, actual financial loss for participants and for obvious reasons deter the confidence in financial systems thereby jeopardizing the credibility and stability. Therefore, to facilitate the oversight function, the Department of Payment and Settlement Systems has proposed to establish an oversight division to oversee and supervise the financial systems in the country. Implementing the Oversight Framework for payment systems will prevent systemic risk; promote efficiency of payment systems and means of payment; ensure security and public trust in, the currency.

1. SHORT TITLE, COMMENCEMENT AND APPLICATION

- a) These Frameworks shall be called “Oversight Framework for Payment and Settlement Systems 2019”;
- b) These Frameworks shall come into force with effect from 1st January 2020;
and

2. INTERPRETATION & AMENDMENTS:

If any issue arises in the interpretation of the provisions of these Frameworks, the matter shall be referred to the Authority, and the decision of the Authority thereon shall be final and binding.

3. DEFINITIONS

- a) “Payment system” shall mean a system that enables payments to be effected between a payer and a beneficiary, involving a clearing, payment or settlement service, on a gross settlement – real time transfer or a net - deferred settlement

basis; Payment service providers (PSSR 2018) “Payment Services Provider” shall mean a payment institution, a bank and a DMFI; “Payment institution” shall mean an entity licensed by the Authority under these rules and regulations to provide payment services;

- b) Payment participants: “Participant” shall mean the system provider and any institution or party authorized by the Authority to participate in a system in the Kingdom of Bhutan;
- c) Large-value funds transfer system is a funds transfer system through which large-value and high priority funds transfers are made between participants in the system on behalf of their customers. Although, as a rule, no minimum value is set for the payments they carry, the average size of payments passed through such systems is usually relatively large. Large-value funds transfer systems are sometimes known as wholesale funds transfer systems.
- d) Retail funds transfer system is a funds transfer system which handles a large volume of payments of relatively low value in such forms as Cheques, credit transfers, direct debits, ATM and EFTPOS transactions.

Table 1: Payment systems operated in Bhutan.

Sl no.	Payment Segment	System	Operated by	Participants	Regulated by	Settlement Timeline
1	Retail Payment Segment (Interbank)	BFS ATM	RMA	RMA & all banks	RMA	T+0 (for customer) T+1 (for banks)
		BFS PoS	RMA	RMA & all banks	RMA	T+0 (for customer) T+1 (for banks)
		BIPS	RMA	RMA & all banks	RMA	T+0 (for customer) T+1 (for banks)
		RMA PG	RMA	RMA & all banks	RMA	T+0 (for customer) T+1 (for banks)
		GIFT BITS	RMA	RMA & all banks	RMA	T+0 (for customer) T+0 (for banks)
2	Retail Payment Segment (Standalone)	MBOB	BOBL	BOBL	RMA	T+0
		Mpay	BNBL	BNBL	RMA	T+0
		Tpay	Tbank Ltd.	Tbank Ltd.	RMA	T+0
		Epay	BDBL	BDBL	RMA	T+0
		Druk PNB	DPNBL	DPNBL	RMA	T+0
		Charo	BOBL	BOBL	RMA	T+0
		Bngul	Bhutan Telecom	Bhutan Telecom	RMA	T+0

		Bwallet	Bhutan Telecom	Bhutan Telecom	RMA	T+0
3	Large Value Fund Transfer System	GIFT RTGS	RMA & Banks	RMA & Banks	RMA	T+0
		GIFT Bulk	RMA & Banks	RMA & Banks	RMA	T+0

4. OBJECTIVES

The objectives of payment system oversight are to ensure the smooth and efficient functioning of the payment systems, clearing and settlement and to further maintain the objectives listed hereunder:

- a) To ensure smooth and efficient functioning of the payment and settlement systems with a view to achieving financial stability;
- b) To ensure safety and efficiency of all the payment, clearing and settlement systems (in terms of reliability and robustness, human capacity and efficiency of processes to ensure efficient, smooth, transparent and fair operation of all the payment systems);
- c) To identify potential risks (such as settlement, liquidity, credit, legal, operational, fraud and systemic risks) along with possible cyber security threats of payment, clearing and settlement systems, instruments and process;
- d) To have strong control on all the risks by ensuring these are well understood and well managed by the banks, system operators and participants. Besides, making sure that all system operators and participants have their own BCP to enable ongoing operations before and during execution of disaster recovery in case of major disruptions;
- e) To ensure sound legal basis for payment, clearing and settlement systems including taking steps to ensure compliance of banks, system operators, service providers and participants with the existing applicable laws, rules and regulations, guidelines and policies of RMA, by implementing effective oversight;
- f) To set standards for the payment, clearing and settlement systems, services, instruments and processes, and to assess them effectively against these standards;
- g) To protect consumer rights by ensuring that the banks, payment clearing and settlement systems, service providers, participants and instruments, conserve the customer interest as per the prevailing rules and regulations;

- h) To promote modernization of the payment, clearing and settlement infrastructure through the development of efficient, reliable and safe payment clearing and settlement systems, with special emphasis on electronic modes of payment, and on integration and interoperability across different payment systems; and
- i) To ensure fair access to payment clearing and settlement systems for all rules-compliant participants and to maintain competitive market conditions by preventing all types of market abuses such as unfair market practices, loopholes encouraging fraudulent activities, and reluctance to provide electronic payment services.

5. SCOPE OF OVERSIGHT

The scope of oversight will cover the entire payment and clearing settlement system infrastructure and its underlying legal framework. The scope of oversight is subject to change over time with the adoption of new policies, amendments of existing laws and the introduction of new ones.

a) Payment Systems Infrastructure

i. Retail Payment System

All the retail payment systems operated by the RMA, such as BFS (ATM/PoS/BIPS and PG) and BITS & BULK under GIFT will fall under the purview of oversight. These systems will be assessed using a sub-set of principles (stated in Annexure- I) to take into account and the Key Concerns (listed in Annexure –II) on the basis of their applicability. Apart from these, the scope of oversight will also encompass other retail payment systems operated by entities authorized/licensed by RMA such as e-Money issuers, E-Commerce aggregator’s system and their technical infrastructures and any new retail payment initiatives to be adopted;

ii. Large Value Payment System (LVPS)

GIFT RTGS, the real time large value payment system of the country will come under the scope of oversight. The RTGS as a FMI will be subject to the PFMI Core Principles (set by CPSS-IOSCO) stipulated in Annexure I along with the key concerns listed in Annexure II as applicable;

iii. Any Other Financial Infrastructure

Since MFI and RemitBhutan is operated and monitored by separate department of RMA it does not fall under the jurisdiction of payment systems oversight directly. Still as a part of its oversight role, Oversight unit (with the approval of the Top Management) may request the concerned department to adopt the PFMI Core

Principles as the basis for conducting oversight. The said department may also be requested to share their findings of such oversight assessments with Oversight unit from time to time as a part of internal cooperation.

b) Payment System Participants

All banks and non-bank entities having/availing d any payment systems or payment services shall mean payment system participants. Therefore, all banks or non-bank entities that are authorized for delivering payment services or that have obtained license from RMA as Payment Systems Operator (PSO), Payment Systems Provider (PSP) or payment systems aggregator will come under the jurisdiction of oversight.

c) Payment Services

All payment services stated in table 1 in section 2 will come under oversight jurisdiction. Including any upcoming payment services to be introduced for the betterment of payment clearing and settlement systems and for the best interest of customers will be under the purview of oversight.

d) Payment Instruments

Paper-based instruments (i.e., MICR Cheques/clearing instruments), Cards, funds transfer instructions (both credit and debit), E-money based instruments, etc., will be subject to oversight.

e) Policy, Operating Rules and Guidelines

Policies, Operating Rules and Guidelines issued focusing any payment systems, participants, instruments, or process will come under the purview of oversight.

f) Others

Any new initiatives, systems, instruments, participants, entities, process, rules and policies closely linked with payment systems/ approved by DPSS will come under the scope of oversight.

6. METHODOLOGY OF OVERSIGHT

a) Collection of Information for monitoring

i. Collection of Off-site Data

There are requirements for the operator's/service providers of the payment systems to prepare reports according to forms, frequency, and time periods as prescribed by the RMA.

- ii. **Collection of System Data**
System generated reports will be collected periodically from banks and payment systems operators regardless of whether these are operated by private or public entities (including RMA).
- iii. **Market Intelligence**
Mystery shopping, Newspaper clippings, news delivered in different electronic, print and social media, publications regarding payment systems issues could be a good source of information for Oversight unit.
- iv. **Reports collected from other Departments of RMA**
Reports relevant to payment systems issues published by other departments of RMA will be treated as a source of oversight information.
- v. **Other Reports**
Reports from international agencies (such as WB, IMF, ADB etc.), research institutes inside the country and payment systems related survey reports can also be an important source of oversight information.

b) Assessment

Assessment of systems, participants and instruments can be done by using the following:

- vi. **Assessment from Data Analysis:**
Carry out assessments of systems soundness, efficiency, transparency, governance, and financial viability through the analysis of collected information.
- vii. **Assessment against Standards Set by RMA:**
Assess payment systems, processes, participants, providers and instruments using appropriate standards and principles set by RMA.
- viii. **Assessment against International Standards:**
Adopt the international standards (stated in Annexure I) set by CPSS. RMA will adopt these standards for assessing FMIs, and use a sub-set of the Principles for assessing retail payment systems.
- ix. **Facilitating Self-Assessment:**
Implement first layer assessment activities by instructing the system operators and participants to conduct self-assessment as per the considerations specified in the Self-Assessment Matrix developed by Oversight unit.

The second layer assessment activities may simply be the validation of the self-assessment reports of the system operators and participants by Oversight unit itself.

c) Inducing Changes

The Oversight unit may either submit its findings and recommendations (resulted from the use of tools stated in 6.1) to banks, payment system operators and participants or use the following tools to ensure enforcement of remedial measures:

a) Exercising Statutory Power:

With the statutory powers laid in the current legal framework (as stated in RMA ACT 2010, Section 8(b) and 8(c)) Oversight unit may take initiatives to ensure efficient implementation of its recommendations.

b) Moral Suasion

The following instruments for moral suasion may be adopted:

- Reports
- Meetings with stakeholders

c) Discussion with Different Agencies

The Oversight may facilitate/participate in discussions with other agencies especially (Government, other regulatory authorities, stakeholders, etc.) to get their feedback on payment system operations and services.

d) Formation of National Payment Council

The National Payment Council (hereafter Council) shall be the professional forum for consultation, designed to facilitate the efficient and stable functioning of the payment system in Bhutan. In the presence of the RMA and other regulatory body from Government, the Council may serve as a common platform that provides avenue for representatives from the payment service market to meet and coordinate their interests, set priorities and resolve any misunderstandings.

The Council shall essentially be a strategic, consultative, and communications body whose motive would be to inculcate the development of partnership amongst various stakeholders and PSP's for technological innovations in the payment systems arena.

7. OVERSIGHT ACTIVITIES

a) Collection of Off-site Data

The monitoring and assessment of payment systems activities will involve off-site data collection and their analysis. These will include:

- i. System Monitoring and Analysis related:

Instruct all the entities engaged in payment systems operation or providing payment services (both banks and non-banks licensed as PSO, PSP) to set up their own internal audit and compliance units to ensure good governance of their systems, processes, instruments. In addition, the unit will be responsible for observance of regulatory obligations and compliance with information and data reporting requirements. These reports must be submitted to Oversight unit at the prescribed time period;

- a. May take initiatives to arrange real-time access to system information in order to be able to monitor system operations as and when required;
 - b. Set reporting obligations (on monthly, quarterly, half yearly or yearly basis, as needed) for the systems, schemes, participants, and providers;
 - c. Analyze weaknesses of systems, schemes, participants and providers by monitoring their activities and identify areas for policy intervention; and
 - d. Evaluate statistical indicators of payment system operations and identify abnormal trends or performances.
- ii. Reducing Risk and ensuring safety related:
- a. Collect transaction data of payment platforms on a periodic basis, analyze market share of the systems, risk exposures and potential consequences for end users;
 - b. Collect periodic data from system operators and participants on different risks to detect vulnerabilities and issues of potential systemic consequences;
 - c. Evaluate system's operational performance by monitoring financial flows and transaction patterns, activities and significant incidents;
 - d. Collect incident logs of all major payment platforms along with resumption time and action plans in order to assess the frequency of disruptions, the impact of disruptions on systems and the payments systems more broadly. Oversight unit may evaluate the effectiveness of the action plan submitted by system operators to resume normal activity and to prevent the re-occurrence of similar incidents in future;
 - e. Collect information to check whether system operators and participants have deployed adequate BCPs and standard-compliant DR installations, and whether DR operations are tested at regular intervals, connectivity back-up facilities are in place, and gaps of existing business continuity procedures are identified; and
 - f. Collect information on risk management procedures of system operators and participants and evaluate their effectiveness by setting standard quantitative

indicators, especially regarding liquidity management, fraud and operational risk.

iii. Compliance with Applicable Rules and Regulations related:

- a. Collect off-site data for monitoring compliance of RMA circulars and other rules by the systems operator, participants, instruments and related parties;
- b. Collect follow-up status information on recommendations or instructions issued to system operators and participants through letters, circulars or meeting minutes on earlier oversight findings; and
- c. Collect information on follow-up actions from the internal units of RMA against oversight recommendations or instructions;

iv. Self -Assessment of Payment Platforms and Participants:

- a. Initiate assessments of specific payment systems/participants against oversight policy requirements and standards (both local and international);
- b. Develop Self-Assessment Matrix for system operators and participants based on national and international recognized standards, rules and on RMA's policy regulations;
- c. Collect self-assessment reports (prepared according to the Self-Assessment Matrix developed by Oversight unit) from system operators and participants on yearly basis and check for important gaps;
- d. Validate self-assessment reports and verify whether specific risk issues have been identified or customer rights have been protected;
- e. Prepare oversight assessment reports with policy recommendations; and
- f. Provide regular follow-up reports to monitor progress in the implementation of oversight recommendations.

v. Others

- a. Analyze trends (of transactions data, overall performance etc.) of payment systems on quarterly basis and yearly basis along with their contributions in the whole payment segment. This will help to identify the amount of market share

each platform is holding for prioritizing monitoring of that platform on the basis of its market share; and

- b. Analyze customer complaints and response from system operators, service providers and other relevant parties to identify the reasons motivating the complaints and the responsibilities of the parties involved.

a) On-site Inspections

Off-site monitoring will be supplemented by on-site inspections to be undertaken by Oversight unit. Oversight unit will perform on-site inspections of system operators and individual participants to examine and validate the information provided off line and for further examinations. On-site oversight activities will include:

a) Planning of Periodic On-site Inspection:

- i. Develop an annual on-site inspection plan to organize periodic on-site oversight activities within specific time frames; and
- ii. Define the activities to be carried out, the number and duration of the inspection/visit, the human resources needed for the said on-site visits.

b) Pre –Requisites for On-site Inspections:

- i. The development of input templates such as questionnaires, assessment templates, systems' operational flow charts, which may be shared with system operators and participants prior to the inspection, depending on the nature of the inspection;
- ii. Issuance of a directive/a request letter, prior to the inspection, indicating the objectives of the inspection and the authority given to the inspection team. The request letter will be either submitted to the system operator/ participant prior to the inspection, in case of a regular inspection, or it will be carried along by the inspection team in the event of ad-hoc inspection and submitted to the operator/participant at the inception of the inspection;
- iii. Formation of on-site inspection teams by selecting personnel from relevant operational sections of DPSS and other departments within RMA such as FID, DIT and DFI and other if necessary, with prior approval of the management. Oversight unit will ensure that inspection team members are well informed of the objectives of inspection, their areas of responsibilities and other related matters; and

- iv. The information regarding risk exposures, irregularities, identified gap of off-site reports and financial statements, and findings of other departments of RMA regarding the said entities are well reviewed by the team.

c) Analytical Review of the findings

Review the following areas concerning systems, participants, providers and instruments and therefore, instruct them to implement remedial measures including changes to internal rules and operating guidelines:

- i. Internal controls
- ii. Information security procedures
- iii. BCP
- iv. Risk exposures
- v. Transparency
- vi. Fairness
- vii. Dispute resolution management
- viii. Customer protection
- ix. Issue recommendations for remedial measures, if necessary.

d) Preparation of Oversight Report

Prepare comprehensive reports on every on-site inspection. These will include findings and recommendations/ remedial measures to address the identified critical issues. The reports (or selected parts of them) will be shared with inspected entities.

e) Follow up

Initiate necessary follow-ups of its recommendations of previous inspection either by using off-site tools or by further onsite inspections in order to monitor implementation progress of the said recommendations.

b) Ad-hoc Activities

These will include:

- i. Surprise Visits

Conduct surprise visits to any payment system entity on its own initiative or based on customer complaints, irregularities, abnormal activities identified from off-site data or findings from other departments.

Oversight unit can also conduct some Survey/Reporting/Data Collection on payment systems/services issues or on specific issues on ad-hoc basis as and when required.

ii. Reviewing existing regulatory framework and system rules

Review the existing regulatory framework, system rules or guidelines to see whether they adequately address payment system risks and payment systems evolution over time.

iii. Policy dialogue with stakeholders

Arrange policy dialogue with the payment system stakeholders on various payment systems issues. The dialogue will provide a two-way communication channel that RMA will use to improve its own knowledge of payment system issues, to inform stakeholders of its policy orientation, and to induce change through moral suasion. The Oversight section may also hold meetings with the senior management of systems and participants to discuss developments concerning payments infrastructure, oversight concerns and expectations.

iv. Designing and Reviewing Existing Matrix/Templates

Design, review and revise the Matrix/ Templates for collecting payment systems related information. Oversight unit is the sole authority with the power to amend these Matrix/Templates as it deems necessary, and will amend them by adding, extending or deleting any items contained therein. Oversight unit will allow sufficient time to the regulated entities to prepare and adapt for the implementation of the revised Matrix/Templates.

c) Activities towards Policy Changes

Oversight unit will identify if any policy changes are required in the following areas:

i. Legal Framework

Identify payment system-related laws and regulations that require adaptations and submit suggested changes.

ii. System Rules and Guidelines

If and when deemed necessary, Oversight unit will suggest changes to system rules and guidelines.

iii. Issuance of Circulars

Issue circulars or policy directives regarding payment systems, participants, instruments and payment systems related entities.

d) Designation of Payment Systems

Oversight may designate systems, PSPs and instruments for the purpose of oversight. The intensity of oversight of the designated systems, PSPs and instruments will depend on their risk profiles including the systemic risks they may pose to others. Systems with greater risk exposures or higher likelihood to cause systemic risks will require more intensive oversight, while those dealing with low-value transactions (typically, retail payment systems) will require less intensive oversight and stronger focus on the protection of consumer interests. Oversight unit will follow the criteria stated in Annexure- I for designating payment systems, PSPs and instruments.

Annexure- I: Principles for Financial Market Infrastructure

Principals	Explanation
1. Legal Basis	An FMI should have a well-founded, clear, transparent, and enforceable legal basis for each material aspect of its activities in all relevant jurisdictions.
2. Governance	An FMI should have governance arrangements that are clear and transparent, promote the safety and efficiency of the FMI, and support the stability of the broader financial system, other relevant public interest considerations, and the objectives of relevant stakeholders.
3. Framework for the comprehensive management of risk	An FMI should have a sound risk-management framework for comprehensively managing legal, credit, liquidity, operational, and other risks.
4. Credit Risk	An FMI should effectively measure, monitor, and manage its credit exposures to participants and those arising from its payment, clearing, and settlement processes. An FMI should maintain sufficient financial resources to cover its credit exposure to each participant fully with a high degree of confidence. In addition, a CCP that is involved in activities with a more complex risk profile or that is systemically important in multiple jurisdictions should maintain additional financial resources sufficient to cover a wide range of potential stress scenarios that should include, but not be limited to, the default of the two participants and their affiliates that would potentially cause the largest aggregate credit exposure to the CCP in extreme but plausible market conditions. All other CCPs should maintain additional financial resources sufficient to cover a wide range of potential stress scenarios that should include, but not be

	limited to, the default of the participant and its affiliates that would potentially cause the largest aggregate credit exposure to the CCP in extreme but plausible market conditions.
5. Collateral	An FMI that requires collateral to manage its or its participants' credit exposure should accept collateral with low credit, liquidity, and market risks. An FMI should also set and enforce appropriately conservative haircuts and concentration limits.
6. Margin	A CCP should cover its credit exposures to its participants for all products through an effective margin system that is risk-based and regularly reviewed.
7. Liquidity Risk	An FMI should effectively measure, monitor, and manage its liquidity risk. An FMI should maintain sufficient liquid resources in all relevant currencies to effect same day and, where appropriate, intraday and multiday settlement of payment obligations with a high degree of confidence under a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would generate the largest aggregate liquidity obligation for the FMI in extreme but plausible market conditions.
8. Settlement Finality	An FMI should provide clear and certain final settlement, at a minimum by the end of the value date. Where necessary or preferable, an FMI should provide final settlement intraday or in real time.
9. Money Settlement	An FMI should conduct its money settlements in central bank money where practical and available. If central bank money is not used, an FMI should minimize and strictly control the credit and liquidity risk arising from the use of commercial bank money.
10. Physical Deliveries	An FMI should clearly state its obligations with respect to the delivery of physical instruments or commodities and should identify, monitor, and manage the risks associated with such physical deliveries.
11. Central Securities Depositories	A CSD should have appropriate rules and procedures to help ensure the integrity of securities issues and minimize and manage the risks associated with the safekeeping and transfer of securities. A CSD should maintain securities in an

	immobilized or dematerialized form for their transfer by book entry.
12. Exchange of Values Settlement System	If an FMI settles transaction that involve the settlement of two linked obligations (for example, securities or foreign exchange transactions), it should eliminate principal risk by conditioning the final settlement of one obligation upon the final settlement of the other.
13. Participants default rules and procedures	An FMI should have effective and clearly defined rules and procedures to manage a participant default. These rules and procedures should be designed to ensure that the FMI can take timely action to contain losses and liquidity pressures and continue to meet its obligations.
14. Segregation and portability	A CCP should have rules and procedures that enable the segregation and portability of positions of a participant's customers and the collateral provided to the CCP with respect to those positions.
15. General Business Risk	An FMI should identify, monitor, and manage its general business risk and hold sufficient liquid net assets funded by equity to cover potential general business losses so that it can continue operations and services as a going concern if those losses materialize. Further, liquid net assets should at all times be sufficient to ensure a recovery or orderly wind-down of critical operations and services.
16. Custody and Investment Risk	An FMI should safeguard its own and its participants' assets and minimize the risk of loss on and delay in access to these assets. An FMI's investments should be in instruments with minimal credit, market, and liquidity risks.
17. Operational Risk	An FMI should identify the plausible sources of operational risk, both internal and external, and mitigate their impact through the use of appropriate systems, policies, procedures, and controls. Systems should be designed to ensure a high degree of security and operational reliability and should have adequate, scalable capacity. Business continuity management should aim for timely recovery of operations and fulfillment of the FMI's obligations, including in the event of a wide-scale or major disruption.
18. Access and Participation Requirement	An FMI should have objective, risk-based, and publicly disclosed criteria for participation, which permit fair and

	open access.
19. Tiered Participation Arrangement	An FMI should identify, monitor, and manage the material risks to the FMI arising from tiered participation arrangements.
20. FMI links	An FMI that establishes a link with one or more FMIs should identify, monitor, and manage link-related risks.
21. Efficiency and Effectiveness	An FMI should be efficient and effective in meeting the requirements of its participants and the markets it serves.
22. Communication Procedures and Standards	An FMI should use, or at a minimum accommodate, relevant internationally accepted communication procedures and standards in order to facilitate efficient payment, clearing, settlement, and recording.
23. Disclosure of Rules Key Procedures and Market Data	An FMI should have clear and comprehensive rules and procedures and should provide sufficient information to enable participants to have an accurate understanding of the risks, fees, and other material costs they incur by participating in the FMI. All relevant rules and key procedures should be publicly disclosed.
24. Disclosure of Market data by trade repository	A TR should provide timely and accurate data to relevant authorities and the public in line with their respective needs.

Annexure- II: Key Concerns for Oversight of Different Payment Segment

Payment Service	Key concerns
Large Value Fund Transfer System	<p>GIFT RTGS is considered as Large Value Fund Transfer System of the country and seeks intensive care for detecting unusual situations to avoid occurrences of systemic risk. For this Oversight will consider the following key issues for oversight of GIFT RTGS:</p> <ol style="list-style-type: none"> 1. Monitoring of the transaction flow, type of transactions, values of transaction for trend analysis; 2. Monitoring of SOD & EOD of everyday operation and identifying whether there is any deviation with the approved schedule; 3. Collection of transaction schedule/pattern of transactions (peak /off peak transaction volume) to identify the liquidity pressure at certain point of time

	<p>of the settlement cycle and taking measures for reducing risk;</p> <ol style="list-style-type: none"> 4. Concentration of transaction from the point of view of a single participant to determine how much risk each participant is representing in the system; 5. System performance and its availability; 6. Collection of information regarding operational disruptions, its duration, resumption time, and frequency of occurrences and to give risk alert; 7. Calculation of participant requirement for intraday liquidity by analyzing the ratio of actual amount settled to available balance (blocked for RTGS settlement); 8. Monitoring of no of returns send by the receiving bank and analyzing the root causes; 9. Collection of information regarding disputed transactions, fraudulent activities and type of customer complaints; and 10. Monitoring of routine procedures for periodical data back up and operability of its secondary processing site.
<p>Retail Payment Segment /Deferred Net Settlement System (DNS)</p>	<p>BFS- ATM, PoS, BIPS and PG</p> <ol style="list-style-type: none"> 1. Monitoring of transactions processed and settled through BFS- ATM, PoS, BIPS and PG along with value for trend analysis; 2. Analysis of returns or rejected/Chargeback transaction with reason for identifying associated risk and financial strength of the participant; 3. Concentration of value and volume of operation of each participant; 4. Analysis of fraudulent activities and suggest remedial actions; 5. Disruption of operation, frequency of disruption, resumption time and preventive measures; and 6. Dispute management procedures of participants.